Autokinetics: a group intervention to mitigate at-risk behaviors in adolescents

Christine Abrahams

Follow this and additional works at: https://rdw.rowan.edu/etd

Part of the Elementary and Middle and Secondary Education Administration Commons

Let us know how access to this document benefits you - share your thoughts on our feedback form.

Recommended Citation
https://rdw.rowan.edu/etd/175

This Dissertation is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact LibraryTheses@rowan.edu.
AUTOKINETICS: A GROUP INTERVENTION TO MITIGATE AT-RISK BEHAVIORS IN ADOLESCENTS

by
Christine Abrahams

A Dissertation

Submitted to the
Department of Educational Leadership
College of Education
In partial fulfillment of the requirements
For the degree of
Doctor of Education
at
Rowan University
December 2010

Dissertation Chair: Theresa Purcell-Cone, Ph.D.
ABSTRACT

Christine Abrahams
AUTOKINETICS: A GROUP INTERVENTION TO MITIGATE AT-RISK BEHAVIORS IN ADOLESCENTS
2010/2011
Theresa Purcell-Cone, Ph.D.
Educational Leadership

This study explores whether introducing autokinetics (self-movement) to at-risk sophomore and junior high school students would increase their self-concept, school connectedness, perception of their academic performance, and GPA. In this study, “at-risk” students are defined as students who have possible drug and alcohol problems, come from single parent households, have social issues at school, and/or come from difficult family situations.

The research was conducted in small groups of eight to ten students over a six-month period. The two experimental and two control groups were randomly selected. All four groups attended a forty-minute weekly group session while autokinesis was used only in the experimental groups. The format of the control groups was as follows: the group started with a version of the Native American Talking Stick which was used as a check-in device. After check-in, the remainder of the forty-minute session was a regular group session where students discussed topics that were on their minds. The experimental groups followed the same format, but during the last five to ten minutes of group work, they engaged in autokinesis (self-movement) to music. The experimental groups were provided a CD of music and asked to perform autokinesis daily for 10
minutes and to log their results. They were required to list the music they used other than
the music I provided them. There was no penalty for not engaging in daily autokinesis.
The results of the surveys indicated there was no statistically significant difference
between the groups; however, the means of the experimental groups showed a slight
increase in grade point average (GPA) and although both the control and experimental
groups had an increase in discipline referrals, the experimental groups’ referrals increased
less than half of the control groups’. Additionally, there was a 50% increase in the
students’ overall self-concept score in the experimental groups as compared to a 33%
increase in the control groups’ overall self-concept score.
ACKNOWLEDGMENTS

First, I want to thank all of the students who participated in my study. They showed unbelievable courage for taking a chance with this “crazy lady” who made them do that “shaking” thing. They were honest, sincere and opened their hearts and minds to the process. They transformed and taught me, as I did them. Additionally, I owe the district, my principal, Michael Daher and superintendent, Dr. Thomas Smith a huge debt of gratitude for supporting me in this endeavor even though it was well outside of the box. They encouraged me every step of the way and supported and continue to support my work with the students in the district. Thank you both from the bottom of my heart for accepting my crazy creativity.

I want to acknowledge Mr. Adam Shrager and his AP statistics students who helped me analyze and present the results of the quantitative section of this study. The students eagerly embraced my project and contributed to how I could improve my next study. The students who worked on the analysis are: Chad Rew, Ryan Rew, Scott Nicholson, Scott Kling, Hajung Yoo, Madeline Corneli, Emily Wasserman, Daniel MacGuigan, Aaron Tobert, Karl Schwing, Matt Skic, Steve Carpenter, Craig Manley, Alex Simonian, Anu Sadhu and Lizzy Neary.

Next, I want to thank my chair, Dr. Theresa Purcell Cone for her tireless effort in helping me shape my dissertation, for encouraging me to paint a picture for the reader that would come alive, and for helping me to move forward in a timely manner. She came to understand me and to embrace my work. She continually emphasized that what I was doing with children was important and would add to the body of literature already
written. And a very big thank you to my committee members Dr. Thomas Smith and Dr. Mark Raivetz who supported and encouraged me to persevere. I want to thank Dr. Robert Campbell, who was also part of my committee, for teaching me to “pound the rock” and for being there with his encouragement from the very beginning of the program. He helped to nurture me and to be my grounding rod when Bolman and Deal’s Political Frame became too much like Alice in Wonderland. All of my committee members believed in my work and challenged me in ways that brought depth and much self-reflection to what I was doing. I could not have completed this without them. I was blessed to have such a dedicated group with whom to work.

None of this work would have materialized if I hadn’t met Dr. Bradford Keeney, who changed my life in many significant ways, particularly by helping me embrace my authenticity as a woman, leader, therapist, and educator and for giving me the “shake,” which I often and gladly share with whomever crosses my path.

Finally, I must thank my dear husband, Bruce, for putting up with all my late nights at the computer and for all his encouragement throughout this journey. He and my close friends were my cheerleaders, helping me cross the finish line.
TABLE OF CONTENTS

Acknowledgments iii
List of Tables vii
List of Figures viii

CHAPTER PAGE

I. QUESTIONS, LIMITATIONS, CONTEXT, SIGNIFICANCE 1
   Setting 4
   Goals 5
   Rationale 5
   Context 6
   Challenges and Obstacles 14
   Problem Statement and Research Questions 15
   Data Collection and Methodology 16

II. LITERATURE REVIEW 19
   At-Risk Students 19
   Group Work 21
   The Importance of Movement and Vibration 24
   Dance 28
   Ecstatic Movement as a Form of Autokinesis 29
   Conclusion 34

III. METHODOLOGY 36
   Description of the Research Implementation 37
   Data Sources and Data Collection 45
   Data Analysis 46

IV. FINDINGS 50
   Planning Research and the Interview Process 50
   Initial Meetings and Key Moments in Group 53
   Key Moments in Group 62
   Data Analysis and Student Aftermath 70
      Quantitative Data Analysis 70
      Results: Discipline Events and GPA 72
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Change in Discipline Events from 2008-2009 to 2009-2010</td>
<td>72</td>
</tr>
<tr>
<td>2. Change in GPA from September 2009 to May 2010</td>
<td>73</td>
</tr>
<tr>
<td>3. t-Test for Change in Discipline Events</td>
<td>74</td>
</tr>
<tr>
<td>4. t-Test for Change in GPA</td>
<td>75</td>
</tr>
<tr>
<td>5. Pre- and Post- Test Averages for the Experimental and Control Groups</td>
<td>77</td>
</tr>
<tr>
<td>Over the Six MSCS Contexts</td>
<td></td>
</tr>
<tr>
<td>6. Observed differences in experimental and control groups on MSCS</td>
<td>78</td>
</tr>
<tr>
<td>context scales</td>
<td></td>
</tr>
<tr>
<td>7. Statistical significance of the observed differences in experimental and control groups on MSCS context scales</td>
<td>79</td>
</tr>
<tr>
<td>8. Differences in Means for Q1-Q3 Between Pre- and Post- Tests of the Experimental and Control Groups</td>
<td>82</td>
</tr>
<tr>
<td>9. Differences in Means for Q15-Q23 Between Pre-and Post-Tests of the Experimental and Control Groups</td>
<td>83</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.  Quantum Leadership Theory Diagram</td>
<td>118</td>
</tr>
</tbody>
</table>

CHAPTER I

QUESTIONS, LIMITATIONS, CONTEXT, SIGNIFICANCE

At-risk school students are prevalent in today’s high schools. Students who are labeled “at-risk” include students who are in danger of dropping out of high school, not working to their potential, are chemically dependent, are the victims of physical and sexual abuse, and who may have emotional and or physical disabilities which do not qualify them for special education (Capuzzi & Gross, 2008). At-risk behaviors from a school perspective include behaviors that will negatively affect students’ academic success such as lateness, absenteeism, aggression, violence, poor grades, and defiance; in addition, at-risk behaviors outside of school include drug and alcohol use, dysfunctional families, divorce and physical and mental abuse as factors. (Capuzzi & Gross, 2008; McWhirter, McWhirter, McWhirter, & McWhirter, 2004).

However, research identifies resilience as a potential protective factor for “at-risk” youth (Capuzzi & Gross, 2008; McWhirter et. al., 2004). The literature shows that group work with this population tends to increase connectedness to each other and resiliency within themselves (Bemak, Chung, & Siroskey-Sabdo, 2005), both protective factors (Search Institute, 2006). Although this may be true, once a group ends, adolescents may tend to regress to previous behaviors. The key is to give them the tools to use throughout their lives. One way to do this is to encourage their natural desire for spontaneous movement, which is often lost by the time they reach adolescence. This spontaneity is often squelched by adults within a rigid school system. Keeney (1998)
writes that by suppressing the tendency to move in children, we are forcing them to be
out of balance with the life force and are teaching them to not rely on their innate ability
to bring equilibrium into their lives.

Given what the literature says about at-risk children and how both group work
and movement can restore their balance, the purpose of this study was to examine
whether the introduction of autokinetics (spontaneous self-motion) to at-risk
sophomore and junior high school students within a group setting at Happy High School
would increase their feelings of school connectedness and self-esteem.

My role in the research was as participant-observer. I observed the actions and
conversations in the groups, but also participated as the group facilitator. According to
Glense (2006), “Participant observation provides the opportunity for acquiring the status
of ‘trusted person’” (p. 49). I expected the learning to be reciprocal – I would learn as
much from my students as they would learn from me and each other. Although I am
using a mixed-method for analysis, I am challenging myself as a leader by using
quantitative analysis as the primary approach to my data. It is important for school
leaders to be well versed in data collection and analysis. I see both approaches as valid,
and will use qualitative data to explain and inform the results of the quantitative data.
Using a quantitative approach will help me stretch and grow. I want to become proficient
at this type of analysis because I see a place for it in education and in my school
counseling services department. The emphasis in education today is on data-based
decision making. The emphasis in school counseling is on quantifiable results. Although
my research study had a zero cost impact on the district, in situations where there is a cost
involved or concern about the impact of counseling services on students (particularly in
an economic downturn where all ancillary services are in question), it is necessary to have quantitative data to support a new initiative and to validate that the services provided are effective. I feel that having qualitative data alone would not make a strong enough case to continue my work with autokinetics; therefore, the mixed-method approach seemed to best fit my study.

I have included an overview of the literature as it pertains to movement, group theory, Native American talking sticks, and how they are used with adolescents. Autokinetics is discussed within the context of the Kalahari Bushmen’s use of shaking, and the Japanese and other cultures that use this form of movement. For the purposes of this study, the word autokinetics will be used interchangeably with the words autokinesis, movement, and shaking. In the literature review on this topic, I did not find any information on using autokinesis with adolescents in the public schools, and as a result, I have drawn on studies in movement and vibration that have been successful in the classroom environment, specifically at the elementary level.

Finally, I will discuss the methodology used in the research, which I have briefly outlined at the end of the introduction, the findings, results, and conclusions. I will also describe what worked as planned and what did not, because when working with human subjects there are always surprises and plans are often disrupted. In the last chapter I will present my leadership platform which provides the foundation for my study in two ways: 1) by believing that a leader can shift an individual’s or group’s performance on a vibratory or energetic level, and 2) as a reflection of ISSLC Standard 2:

An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to
student learning and staff professional growth, specifically, the function of creating a personalized and motivating learning environment for students.

(Council of Chief State School Officers, 2007)

Wheatly’s (1999) central thesis of affecting change on a quantum level is the core of my leadership style and informs not only the research but how this research will affect my department, the school, and the district. I will also discuss conclusions and suggestions for further research in the final chapter.

Setting

I have changed the names of the school district and the high school to preserve the anonymity of the students involved in my research. Happy School District is located in the northwestern part of Mercer County and is approximately eight miles north of Trenton and ten miles west of Princeton. It includes three municipalities. The land area comprises approximately 60 square miles. The two boroughs are almost entirely residential communities, and the township is residential with some remaining farms. District residents are primarily business, professional, and educational services people holding managerial, professional, and executive positions in Trenton, Princeton, New York, Philadelphia, and surrounding areas. Happy High School has approximately 1200 students. The school is not ethnically diverse, but does have some economic diversity. Although it is a comprehensive high school, which offers shop classes (auto shop and wood working), 94% of the senior students go on to two- and four- year colleges. The student body is highly academic and much emphasis is put on students getting into, and achieving in, Advanced Placement (AP) courses. There is a small population of general education students who have been labeled “at-risk” and who have an alternative English
class where they receive extra support during different periods of the day. There are, however, many more “at-risk” students in the school because of the long history of multi-generational drug and alcohol abuse.

Goals

The goals of my study are to see if the addition of autokinesis will increase the effectiveness of a group of at-risk students by increasing their positive feelings of school connectedness, academic self-perception, and self-esteem. Another goal is to see if an increase in self-esteem and school connectedness will reduce the participants’ at-risk behaviors in school, such as discipline referrals.

In addition to producing change in a certain group of students, another goal is to create change within my counseling services department. By modeling risk-taking (using autokinetics with students) and conducting groups, I am hoping that my counselors will feel free to take risks in their counseling techniques and begin to conduct groups within the department.

Rationale

This study is important because it examines how using autokinesis in counseling groups has the potential to reduce students’ at-risk behaviors evidenced by a decrease in discipline referrals and absenteeism, an increase in academic performance and positive academic self-perception, and the movement of the students’ locus of control from external to internal, which builds resilience. The results of this study will help the school administration create non-traditional programs outside of the Counseling Services department that use movement as an approach to help students manage their at-risk behaviors. It is important that the school district try to explore non-traditional approaches
to help this population be successful in school which will lead to better life opportunities once the students graduate. Although it is difficult to erase an entire lifetime of factors that have led students to this point, the school has an obligation to try to develop innovative ways to help them overcome their challenges.

Context

Although a small number of at-risk students have been identified in middle school and placed in the Reaching Individual Success through Encouragement (RISE) program, at the high school, there are many students who could be labeled at-risk. The RISE program is an English class that has a distinct design to help better meet the needs of capable students who are otherwise not doing well or engaging in their classes. It includes: ongoing monitoring of student’s progress in all classes, a small class size for English which allows for individualized instruction time and close attention to each student’s needs, teaching methods that ensure positive teacher-student relations, high expectations for success in both the academic and affective aspects, and a clear connection between the home and school to develop the necessary support and rapport for this success. This type of support is important because the township has had drug and alcohol issues that are multi-generational, and although the high school students do very well academically (even the RISE students), there is much familial dysfunction. I am currently the supervisor of counseling services and my role is to create academic and emotional/social support programs to help our students succeed. As the literature points out, participating in a group will help these students with the issues and challenges they face (Corey & Corey, 2002; McWhirter et.al., 2004; Osofsky, 1997; Yalom, 1995). Adding autokinetic movement may help students learn how to self regulate when group is
not in session, thereby moving the locus of control from an external source (group) to an internal one (resiliency). This study is significant to the school, because it has the potential to broaden the opportunities for at-risk students to succeed academically and socially.

I chose to study this issue for several reasons. I have always had an interest in at-risk students, having been one myself. I was the type that managed to do very well in school and comply so as not to raise any suspicions about what my life was really like. My first job in education was teaching English and English-as-a-Second Language to at-risk students at a vocational school in New York City, where I was raised. I became disillusioned with teaching and took a 15-year career detour in financial services only to come back to education, but this time as a counselor where I felt I could have more of an impact on students.

I began to work with elementary and middle school students who had emotional disabilities as part of my counseling internship at a school in Pennsylvania where I implemented a program of individual, family, and group therapy within the context of a non-contact, non-competitive martial arts program. The martial arts portion of the program relied on poomses (choreographed movements called “forms”) to help students deal with structure and success within a structure. At that point in my career I did not know how movement could help students regulate their behavior, especially students with attention deficit hyperactivity disorder (ADHD). My goal for the program called InSpire: Integrating Self-control, Perseverance, Integrity, Responsibility and Excellence was to give these students with emotional disabilities an opportunity to get past their challenges
and return to a mainstream educational program, which some did by the end of the 26-week program.

I chose to use autokinetics for my study because of its life-changing impact on me. In 2004, I attended an American Counseling Association (ACA) national conference, which focused on spirituality. I attended several workshops including one in which I took a shamanic journey and met my spirit guide who happened to be a very old Native American. Another workshop that I attended Headlined three very prominent psychologists, two of whom I had heard, Dr. Jon Carlson and Dr. Jeffrey Kottler, and one of whom I had not, Dr. Bradford Keeney. The focus of the workshop was a recounting of their visit to the Kalahari Desert to participate in the Kung Bushmen healing dance. Dr. Keeney led the expedition. Both Carlson and Corey showed PowerPoint slides of the Bushmen dancing and provided an analysis of their own experiences. When they finished, it was Dr. Keeney’s turn and he immediately said, “F**k this Powerpoint stuff. Let’s move!” He asked the audience to stand, put on an African drum music CD, and began to vibrate and shake. I could see his stomach quivering and his arms and hands vibrating. He began to stamp his feet and talked about letting the spirit move through our bodies just like the Bushmen do. He started to clap his hands and began to touch audience members on the tops of their heads. Those touched began to jerk as if a puppet master was pulling their strings. Their arms shot out to their sides; their eyes rolled up into their sockets. Some laughed and some cried. At this point, the audience was going wild. Everyone was clapping and swaying and moving. Some people were yelping and others were moaning, but all eyes were on Dr. Keeney.
As this mass movement continued, Dr. Keeney explained, in a country preacher’s cadence, that the spirit was on us and was bringing us to ecstasy. He explained that according to the Bushmen, sometimes when you are in this ecstatic fervor, you can climb the ropes to heaven, visit with your ancestors, or visit other schools that give you visions and teach you lessons. At some point I lost track of what he was saying because I was feeling such ecstasy that words did not matter.

At the end of the session, I felt compelled to touch him, hoping I would get the vibration he had. I raced to him and he turned, looking deeply into my eyes and grabbed my shoulder. He was actually vibrating. I felt it in my bones. For some reason I put my hand on his belly and it was vibrating too. I must have looked astonished because he laughed, gave me a little shake to bring me out of my reverie and moved to the next person. I floated out of the room vowing to get for myself the vibration I felt in him.

It was not until 2007 that I was reintroduced to Dr. Keeney’s work again, by accident. After the conference, I was in bliss as a result of this encounter, but soon my rational, analytical mind took over and convinced me that my feelings of bliss and ecstasy were a result of mass hysteria combined with a charismatic and gifted speaker and nothing more. I forgot about him and the encounter. However, that experience sent me on a very intense study of self-exploration and spirituality to help myself, but to also help the students who were on my counseling caseload at the time. I was studying with Michael Brown, the author of *The Presence Process* (2005), who was taking me through a process that combined connected breathing, immersion in water, and self-exavation to bring to consciousness old wounds that get in the way of experiencing the present moment. While I was visiting him, he related a story to me about a priest who lived
above him. The priest, he told me, could not stop walking in circles all day and it
disturbed Michael because he needed silence to write. Michael visited the priest to ask
that he stop circling and the priest, embarrassed, said that he could not stop -- that this
was a spontaneous movement that he could not control.

At first Michael was mystified by the comment; however, after reading *Bushman
Shaman: Awakening the Spirit through Ecstatic Dance* (Keeney, 2005), given to him by a
student, he ran upstairs to the priest and apologized for asking him to stop circling,
relating that he now understood why he was compelled to circle. The priest looked at
him, puzzled, and Michael told him that he circled because he is a shaman and that this
is what a shaman does in the Kalahari. According to Michael, the priest moved out.
While relating the story to me, Michael mentioned that he could not remember the
book’s author, yet it sounded familiar to me. After hearing the story and the book’s
title, I immediately knew it was one of Dr. Keeney’s books. I had not thought about him
for years.

I went to Dr. Keeney’s website and ordered the CD set *The Original Mysteries of
Spirit* (Keeney, 2007) and began to explore this vibration, what Keeney calls “Shaking
Medicine,” on my own. I listened to his stories and followed his instructions to shake
and to my mother-in-law, who observed me from her balcony, it looked like I was having
a seizure. She observed me with my CD player strapped to my back and my headphones
on. I was waving my arms, shaking my head and stomping around the deck. I was also
vocalizing deep moans and howls, which I am sure were not in tune with the music and
vocals I was listening to, all of which added to the odd scene to which she was subjected.
But doing the shaking on my own was not enough. I could not capture the same feeling that I had at the ACA conference in 2004, although I was not convinced that feeling was authentic. After several years of much self-exploration and excavation, I finally grasped that what I felt in 2004 was real and would later learn that different cultural groups, both within and outside of the United States, have experienced this feeling of ecstasy also. In the United States, the Shakers, Quakers, Methodists, and Native Americans would shake to bring on ecstasy. I came to learn that this feeling was prevalent during Japanese Seiki Jutsu, Buddhist Tantra, and also prevalent on the Island of St. Vincent where the St. Vincent Shakers lived.

My next step was to contact Dr. Keeney to see about a private tutorial, which he offered to people who had worked through the *The Original Mysteries of Spirit* (Keeney, 2007). Through e-mail we agreed that I would have one phone consultation with him. Then we would have eight e-mail correspondences. During the first conversation, he asked what I wanted, and I told him that I wanted the “shake.” He laughed and asked about my work. I explained that I worked with teenaged students, but that I was feeling stagnant in my approach to dealing with those at-risk. I told him that all I studied as a counseling student seemed dead, rote, and unimaginative. He agreed, which stunned me.

Dr. Keeney asked me if I had ever (metaphorically) shaken anyone up by playing a joke on someone or shocking a person. After thinking about it, I realized that I had shaken up my counseling intern that week, whom I had been supervising for six months. The intern was trying to get a portable spell checker to work for a student but was having trouble. I suggested that he clean the battery contacts. He asked how I knew about that, and I told him that my husband had taught me many practical things including cleaning
battery contacts. I said that if my husband were to die, I think I would probably be able to build a house by myself, because I absorbed so much from living with him. The intern solemnly asked if my husband was sick. With a straight face I said that he was just fine but that we kept trying to kill each other -- he by putting unidentified spices in my food and me by rubbing the cat across his pillow (he is allergic), but somehow, neither of us had succumbed. With that, I told the intern to get to cleaning those battery contacts. My intern turned ashen and left.

After hearing that story, Dr. Keeney suggested that I ask both students and staff what they thought “Remember to Clean the Battery Contacts” meant. Dr. Keeney felt that they would turn the phrase into a personal metaphor, which would help them understand an aspect of themselves and also would give me insights about who they were. He wanted me to transcribe what they said and hang it from a handmade tree. From there I was to string the phrases from the tree into sentences and ask students and staff what those phrases meant, creating an endless loop of insights. He also suggested that I use “Remember to Clean the Battery Contacts” on my business cards to get people thinking and to engage them in meaningful conversation. These sessions with Dr. Keeney went on for a full eight weeks where each week included a different assignment including building a theater within which a koan was placed behind a closed curtain. The task was to see who would ask to peek behind the curtain. He referred to this as “crazy wisdom” exercises. Magic began to happen in my office with the students and staff. Students became more open and playful. One student would come down every morning to chant, “Remember to clean the battery contacts.” He said that doing this “charged” his day. Staff members would bring other staff members to see my “Tree of Sayings” and argue
about what some of the phrases meant. Dr. Keeney turned my e-mail correspondence with him into a chapter in his book *The Creative Therapist* (2009).

Although I became a much better counselor, I still did not have the shake. In the final correspondence, he answered my question, “How do I get the shake?” and wrote that there was going to be a two-year “shaking medicine” program in Toronto. I signed up and began a two-year journey into my soul and creativity and did recover the ecstasy and bliss that I had previously felt in 2004. The movement, vibration, and the ability to share and receive it helped me let go of some of the lingering issues that 20 years of therapy and other self-healing modalities could not. The “shake” opened up my creative portals so that I was able to use this in my personal and professional life. It enabled me to become a witness to my thoughts and feelings while in the midst of the shaking activity. This is not unusual as there is much written in dance education literature about somatic practices that get the dancer in touch with his or her feelings, which are expressed through movement (Eddy 2006, Fortin 2002). This was my experience as well. I was hyper-aware of my emotions, and evidently this was clear in my movement for when I was sad, several other shakers would embrace me, helping to move the sadness through my body, which was replaced with pure bliss. Although often times deep into the shake, I was still connected to temporal reality, which allowed me to be an observer of the event as well as a participant.

This experience has led me to the leadership style that I embrace which is quantum leadership based on the work of Wheatley (1999) and Goleman et. al. (2002) and had inspired me to try to experiment with a variation of this process with at-risk students, with the hope that they would begin to embrace their authenticity and love
themselves more fully. In a personal correspondence to me, Michael Brown encouraged my exploration of any type of “heart work” that would cleanse the emotional body, which is an important step in becoming whole (Brown, 2005).

Challenges and Obstacles

There were many challenges in constructing and executing this research study. Although I had a large population of “at-risk” students from which to select, many of the students interviewed for my research control and experimental groups chose not to participate because they had previous negative group experiences or they perceived the group as being for “stupid” or “bad” kids. The girls seemed more willing to try the experience than the boys. I was pleased that all the students I invited to participate in the study did show up for the initial interview. They could have ignored my invitation because they were not familiar with me as a counselor and they might have perceived that the invitation to meet with me meant they were being disciplined for an infraction. I had anticipated that getting parental consent would be challenging, but just the opposite happened. The parents were excited that their children were getting extra support and attention. Because of the “at-risk” nature of the population I was working with, another challenge was getting the students to come to group sessions especially when the group met during first period, which began at 7:55 a.m. Finally, I requested that the students practice autokinesis for ten minutes every night and document it. Only one student said that he practiced every night, but he never documented it. This may have been because this population is adverse to homework and might have perceived this as “homework” making follow through less likely.
Problem Statement and Research Questions

The research questions evolved from my experience with incorporating movement within the context of a therapeutic setting, and as a result of my own experience with autokinesis. I wanted to explore if teaching at-risk students how to access spontaneous movement would help mitigate their at-risk behaviors. Unlike the structured, memorized format of martial arts poomses, and different forms of dance, autokinetics leads to spontaneous movement which is unstructured and not memorized. It requires no ritual, unlike Martial Arts, and can be practiced anywhere at anytime.

Because Happy High School has a number of students who could be classified as “at-risk,” I felt that it was important to explore the autokinetic intervention within a group setting to ascertain if it was a counseling approach that could reduce their academic and social at-risk behaviors. Many of the students I have counseled at Happy High School appear to be well-adjusted students. However, I have learned that many of these students share social “at-risk” factors. Several come from dysfunctional families, are living in single parent households and are using drugs and/or alcohol. Although these students are not labeled as “at-risk” by staff, they could be considered “at-risk.”

As a result of my work as a counselor and counseling supervisor, I identified a need for a broader menu of intervention approaches for students who are at-risk academically, socially, and emotionally. In addition, the high school administration wants to increase the at-risk students’ academic, social and emotional success, their feeling of being connected to the high school culture, their positive attitude toward achieving academically and their self-esteem, all which contribute to their resilience in eliminating at-risk behavior choices.
The problem: The high school would like to increase the academic and social/emotional success of at-risk students, have them feel more connected to the high school, increase the way they feel about their academics and increase their self-esteem, all of which help them become more resilient.

Research Questions:

1. Does the students’ practice of autokinetics improve their academic self-perception?
2. Does the students’ practice of autokinetics improve their school-connectedness?
3. Does the students’ practice of autokinetics improve their self-concept overall?
4. Does the students’ practice of autokinetics improve their self-concept in the following domains?
   - Social
   - Competence
   - Affect
   - Academic
   - Family
   - Physical

Data Collection and Methodology

My study used a mixed-method approach utilizing both quantitative and qualitative methods. The population was at-risk sophomore and junior high school students of Happy High School. For the purpose of this study, I used Capuzzi and Gross’
(2008) broad definition of “at-risk” as students who are in danger of dropping out of high school, not working to their potential, are chemically dependent, are the victims of physical and sexual abuse, and who may have emotional and or physical disabilities. Additionally, because of the unique population of Happy High School, I included students from single-parent households, students who participated in the RISE program, and students who had any discipline infractions during the 2008-2009 school year. Students classified as special education students and a select mix of males and females were included.

Additionally, the principal, vice principals, and the school counselors recommended students whom they believed should be considered to participate in this research study. Once I had the list, I removed duplicates and worked with the AP statistics teacher to create a random, stratified sample, which included gender, special education/general education, and grade level. Four groups were randomly selected: two control groups and two experimental groups. However, because of the nature of the population and challenges that this at-risk group presented, several of the students from the randomized sample could not or chose not to participate. Additionally, during the third week of the research study, several students from both the control and experimental groups moved out of the school district. In order to fill the groups I took another random sample from the students left in the original list of students who were not randomized into the control and experimental groups. Although my statistical analysis is based on a random sample, there is clearly voluntary selection bias, which has not been accounted for in the analysis.
The instruments I used to collect data for the study were two surveys: a school-connectedness survey which I designed (Appendix A) and the Multi-Dimensional Self-Concept Scale (MSCS) (Bracken, 1992). The six domains assessed by the MSCS include the following areas: Social, Competence, Affect, Academic, Family, and Physical. According to Bracken (1992), each MSCS subscale evidences very high reliability (coefficient alpha > .90), and the Total Scale Score reliability exceeds .97 for the total sample. The MSCS correlates very strongly with other measures of self-concept and self-esteem and has been shown empirically to identify adolescents previously identified as being low in self-concept (Bracken, 1992). Several concurrent validity studies were conducted during the MSCS development. Additionally, I looked at discipline referrals from the 2008-2009 school year and compared them to the 2009-2010 school year, as well as the students’ grade point averages (GPAs) from the 2008-2009 school year and compared them to the 2009-2010 school year. Students were asked to log their autokinetics practice as well. I compared and contrasted the results of the control and experimental groups and used two sample t-tests to see if the results were statistically significant.

Finally, I asked students to write a short paragraph evaluating how both the group and the autokinesis experiences affected them. I coded their responses into positive and negative responses.
CHAPTER II
LITERATURE REVIEW

In this chapter, I discuss the primary topics that inform group work and autokinetics. I have drawn on topics ranging from dance to using exercise balls within elementary school classrooms to demonstrate the positive effect movement has on students in a school setting. Additionally, it was important to explore and cite the history of autokinetics, which has its roots in the healing dance of the Kalahari Bushmen, and is demonstrated in other cultures both here and abroad.

At-Risk Students

In any school system there are always “at-risk” students at the high school level. These students are identified as students who are in danger of dropping out of high school, not working to their potential, are chemically dependent, are the victims of physical and sexual abuse, and who may have emotional and/or physical disabilities (Capuzzi & Gross, 2008). At-risk behaviors from a school perspective include “tardiness, absenteeism, poor grades, truancy, low math and reading scores, failing one or more grades, rebellious attitudes toward school authority, verbal and language deficiency, inability to tolerate structured activities, dropping out of school, and aggressive behaviors or violence” (Capuzzi & Gross, 2008, p. 10). From a mental health perspective, an at-risk adolescent might engage in drugs and alcohol, be sexually promiscuous, show aggression, have low self-esteem, experience depression and isolation, have an eating disorder, seek gang membership, or become pregnant. This student is more than likely living in a difficult
familial situation where he or she is not getting needed emotional support (Capuzzi & Gross, 2008). Schools often focus primarily on the academic development of these students, ignoring their emotional disabilities. This leads to deficits in the students’ self-esteem, character, and their ability to form lasting and satisfying human relationships (Bruce & Cockreham, 2004).

The Search Institute (2006) includes school bonding (connectedness), high self-esteem, and resiliency as protective factors that help at-risk youth cope with negative circumstances. Capuzzi and Gross (2008) summarize resilience as:

- Approaching life’s problems in an active way;
- Constructively perceiving pain, frustration, and negative experiences;
- Gaining positive attention from others;
- Having a view of life as both positive and meaningful;
- Possessing positive self-esteem;
- Comprehending, appreciating, and producing humor;
- Willing to risk and accept responsibility;
- Being proactive;
- Being adaptable;
- Being competent in the school, social and cognitive dimensions. (p.14)

One characteristic stands out and that is “gaining positive attention from others.” In many cases, at-risk youth seek this attention from gangs; however, the school or key individuals within a school can become a substitute family for these children. Becoming part of a unique group within the school will provide connection to other peers and the group leader (Abrahams, 2004).
Group Work

For the purposes of this study, group work is defined as a gathering of people who meet weekly to discuss personal issues with each other and to provide support to each other. Group work is a way to connect people and has been shown to be effective in working with at-risk students, especially in the areas of self-awareness and responsible behavior (Bemak et. al., 2005). More importantly, if the group is unique in that it is able to present to students an unusual approach for building resilience, perhaps by infusing different cultural rituals and healing practices, the positive results in mitigating at-risk behaviors may increase. An example of this was demonstrated in a New York school, which adopted the tribal traditions of the Yoruba to create an establishment of families within the school, building a stronger school community (Shockley, 2008). Abrahams (2004) combined group work with martial arts to increase self-control, self-esteem, and reduce depression among elementary and middle school special education students who were classified as emotionally disturbed.

Native Americans have relied on group work to heal members of their communities. Different tribes of Native Americans have used the power of the group to conduct healing ceremonies in order to “restore participants to harmony and balance through focus on healing and wellness of self, family, clan, community, nation and surroundings” (Garrett, Brubaker, Rivera, Olantunji & Convill, 2008, p. 179). Garrett et. al. (2008) discuss the importance of the group to centering, and cite that the African Ring Shout, a method of song, prayer, and dance, was instrumental in centering the tribe and building and maintaining connections among the tribe members. They also state that the
African and Native American group traditions can be modified and applied to American group work to promote healing and wellness.

Although spirituality is rarely discussed in public schools, this discussion or focus could be beneficial to at-risk students within the context of a group, as they are yearning for a positive connection to others and to meaning in their lives. Spiritually-themed group work is not uncommon outside of a school setting and does not have to “focus directly on spiritual issues or discussions for the group to foster the spirituality of its members” (Page & Berkow. 1998). Page and Berkow discuss the power of spiritual group work with drug and alcohol abusers. They argue that:

If the spiritual well-being of drug and alcohol abusers is related to their rehabilitation, as many experts in the field believe, then it is important for counselors, psychologists, and other professionals involved in drug and alcohol treatment to address how group work can enhance the spiritual development of its members. (p. 286-287)

Bruce & Cockreham (2004) cite Benner (1989) as defining spirituality “as a deep and mysterious human yearning for self-transcendence and surrender, a yearning to find meaning and a place in the world” (p. 334). This seems to be the human condition; however, at-risk students often seek meaning and transcendence in self-destructive ways.

Page and Berkow (1998) argue that any group could be considered spiritual if it focuses on teaching the principles of developing more positive self-concepts, helping others to self-actualize, caring more for other people, and developing more responsible interpersonal relationships. These are often the characteristics lacking in at-risk youth.
To help build the spiritual characteristics that Page and Berkow (1998) refer to, a “talking stick” can be used in group work, which gives each member the opportunity to talk without responses from the other members (Garrett, n.d). The group decorates a stick that is then passed from member to member. When the member has the stick, he or she is the only one allowed to talk. The rest of the group is not allowed to comment. When the stick is passed to the next member, that person can comment on anything he or she has heard, or talk about something else. Garrett feels that this builds listening skills and relationships as a result. The use of the “talking stick” ensures that sharing information is done respectfully by giving each member the opportunity to talk without interruption or feedback. I blended Seiki Jutsu and the practice of the Kalahari healing ritual within a group structure that utilizes the Native American practice of the “talking stick” to reduce certain behaviors that are defined as “at-risk,” from both a school and mental health perspective. The Native American tradition of the “talking stick,” which the literature shows is beneficial in helping members connect and process (Garrett, n.d.), has been shown to help group members build community and connection to the oneness of life.

Hunter (2005) states that:

Our children and adolescents of today often feel disconnected from themselves, their family, their peers, the school system, and society. They often have no sense of their place in society and feel lost, not only geographically but also emotionally. In order to reach these disconnected children, counselors must help them develop a sense of oneness with all beings. (p.133)
The characteristics that Hunter discusses are indicators for at-risk youth. Group sessions are one way to help these children connect to themselves and each other. However, this practice alone may not be enough to effect long-term change. In addition, at-risk students need to be taught to develop an internal locus of control and should be given the tools to effectively build resilience and maintain it without consistently relying on a group situation.

The Importance of Movement and Vibration

Our current education system relies on student compliance, passivity, and immobility, which goes against children’s natural inclination toward movement. According to Keeney (1998):

If you go into the classroom of children, you will see that no matter what the teacher says to them, they will not sit still. Children are naturally compelled to move their bodies. If they are sitting in a chair, you may see their legs and bodies swinging and swaying to a natural rhythm. Perhaps you can recall how you once sat in the classroom with your legs crossed while one leg and foot bounced in a steady rhythm, or how your body rocked forward and backward in a hypnotic pulse as the teacher talked about some subject that just didn’t quite grab your attention. Or maybe your fingertips always had to drum the top of your desk, or both of your feet bounced on the floor as if they were attached to springs. (p. 39)

Keeney (1998) argues that, “as children our bodies had an innate wisdom that moved us to fall into the natural rhythms that brought us into harmony with the life force around us” (p. 39). He is referring to resonance, which when positive, creates an internal,
energetic balance. Goleman, Boyatzis, and McKee (2002) talk about resonance being generated between two people:

The human analog of synchronous vibration occurs when two people are on the same wavelength emotionally – when they feel ‘in synch’. And true to the original meaning of resonance, that synchrony ‘resounds’, prolonging the positive emotional pitch. (p. 20)

Goleman et al. (2002) also describe the opposite of resonance as dissonance, when the people and environment around one are toxic.

Such disturbing encounters wreak havoc emotionally, as demonstrated in studies in which physiological responses were monitored during arguments. Such attacks – which send the painful emotional messages of disgust or contempt – emotionally hijack the person targeted, particularly when the attacker is a spouse or boss, whose opinions carry much weight (p. 22).

Although Goleman et al. (2002) talk about the attackers as being spouses or bosses, one can generalize this to any significant other such as parents, teachers, friends, and siblings.

As Capuzzi and Gross (2008) point out, at-risk youth often live in dysfunctional family situations; therefore, they are subject to a constant barrage of dissonance in the form of emotional negativity and socio-economic pressures. This can also be the case in school because of their poor academic performance and a teacher’s negative attitude towards them in class.

Medina (2008) describes this constant negativity as creating and sustaining a ‘fight or flight’ response within a person, which creates confused thinking, lack of focus, and loss of productivity because of the stress hormones flooding the body. The body has
no time to recuperate, as we have been hard-wired to have this response in short, sporadic bursts instead of experiencing it constantly. This translates into at-risk students being unable to work or concentrate in school, setting up a cycle of failure for them.

Although Capuzzi and Gross (2008) outline a number of early prevention methods for at-risk youth, the overall literature does not discuss increasing students’ positive resonance and vibration levels as a means to increase resilience factors. There are techniques which involve movement that can be helpful to at-risk students (Abrahams, 2004; Chek, n.d.; Illi, 1994; Schilling, Washington, Billingsley, & Deitz, 2003). The literature discusses various techniques of movement that can heal people emotionally, spiritually, and physically. In psychology, the most recent technique is Eye Movement Desensitization and Reprocessing (EMDR), which uses eye movements to release past trauma in patients, thereby linking movement with both emotional and behavioral improvements (Shapiro, 2001).

Additionally, studies have shown that physical activities such as moving, stretching, walking, and dancing can enhance a student’s learning process, well being, confidence, self-esteem, and cognitive abilities (Abrahams, 2004; Hulsmans, 2007; Medina, 2008; Privec, 2008). Movement enhances circulation which increases oxygen to the brain, creating more focus on tasks (Harris, 2008; Jensen, 2000; Medina, 2008). If movement breaks are strategically placed throughout the day, as Japanese and Taiwanese schools do, then students may perform better (Jensen, 2000).

In Europe, Canada, and the United States, some schools have been incorporating movement into their classrooms with exercise balls (Schencker, 2010; Shilling et al., 2003; Witt, 2001). Some of the general results have been that students “enjoy sitting on
them; their concentration improves; their excess energy is burned off; they become more physically fit; they become less noisy” (Pytel, 2007, p. 1). In addition, the exercise ball “has a reduced base of support, moves easily underneath you and requires both the activation of your postural muscles and your balance mechanism” (Chek, n.d., p 4). The use of the ball may be the closest experience to acceptable spontaneous movement that children have in school. According to Urs Illi (1994):

The rhythmical back and forth and up and down, the regular reversal between gravity and the lack of gravity at the end points, the shift of the center of gravity with corresponding contraction and relaxation of the involved muscles, as well as the pumping mechanism required for this kind of energy expenditure, effect the essential nutrition of the disks and other organ systems, especially the oxygen supply of the brain, so essential for learning. The rhythmical movement causes not only a balance between tension and relaxation in the muscles, but also a feeling of well being with a concentrated readiness for learning. (p. 1)

There is evidence that using the exercise ball with students who have ADHD may help them control their in-seat behavior and time on-task behavior (Hulsmans, 2007). In this case, hyper-aroused children became relaxed from the rocking movements of the ball. Schilling et al. (2003) used the ball as an intervention with a small number of ADHD children and their results showed that the students made progress in in-seat behavior. They found that students self-modulated their personal sensory needs “in order to maintain an optimal state of arousal” (p. 44). They give an example of this behavior:

An example of an individual student’s variation in movement pattern was observed in Mike who, at the beginning of a session, gently rocked on the therapy
ball and vigorously bounced toward the conclusion of the same session. This variation in movement patterns may reflect responses to changing sensory needs, possibly explained by the theory that a person’s sensory needs continually change as they are affected by interactions with tasks, environments, and people.  
(Schilling et al., 2003, p. 44)

It is not unusual for men and women who practice ecstatic movement, which is discussed later in this chapter, to vibrate at different intensities to create homeostasis between themselves and their environment. Movement also helps the body to heal itself (Fulford, 1996; Osumi & Richie, 1988) and “heal the earth” (Fortin, 2002, p. 130).

Dance

Dance has a long history of being taught within an educational setting. Incorporating dance into schools and specific academic areas has also shown academic promise. Dance has been shown to enhance cognitive skills through the multiple intelligences, which it calls upon when used in an educational setting: linguistic, interpersonal, and intrapersonal intelligence (Keinanen, Hetland, & Winner, 2000; Oreck, 2007). In addition, when dance was integrated into a math classroom it was shown to help math students be better engaged with math, and students were better able to “make connections among diverse subjects and pieces of knowledge than they were before the project, which made math more interesting and applicable to everyday life” (Werner, 2001).

Dance contributes to kinesthetic learning and “skilled teachers use other sensory modalities along with visual-verbal cues to meet the needs of diverse learners” (Eddy, 2006, p. 90). Given the current emphasis on diverse learners and differentiated
instruction in the classroom, movement of any kind in a variety of settings (including outdoors) might contribute to an increase in a student’s academic success.

Although autokinetics is not considered dance as it is practiced by the Japanese, it provides a similar state of hyper-arousal followed by rest, during which a person engaged in this movement often falls into a deep state of meditation. According to Bateson and Schwartz (2007):

> Virtually every somatic practice has embedded within its methods a balance between activity and rest. Sweigard’s ‘Constructive Rest,’ F. M. Alexander’s (semi-supine) Lying-Down work, the high rest-to-activity ratio in Feldenkrais Awareness Through Movement (ATM), the open awareness frames of Continuum work, and in Body-Mind Centering, the periods of ‘yielding’ both to gravity and to sensation, all speak to the importance of allowing the motor nervous system to be less dominant in our attention. (p. 49)

Movement opens up a person to their own inherent wisdom and knowledge (Bateson & Schwartz, 2007; Brodie & Lobel, 2004), which is one of the lessons educators and counselors try to impart to students. Any type of movement, be it dance or autokinetics, has the potential to help students achieve a connection to their inner guidance system. Whether it is dance, sitting on an exercise ball, walking, or stretching, movement has a positive impact on students’ academics and enhances positive feelings.

**Ecstatic Movement as a Form of Autokinesis**

Keeney (1996, 1998) describes movement in young children as natural and spontaneous. The term he uses for these spontaneous movements is autokinesis. He defines autokinesis as "referring to the practice of making automatic, effortless body
movements that bring forth the life force” (Keeney, 1998, p. 9). The life force can be excited by engaging in different forms of movement, particularly the movements connected to the Japanese healing practice of Seiki Jutsu and the Kalahari Bushmen’s healing practice of shaking.

“Shaking Medicine,” as Keeney (1994, 1996, 2005, 2007) refers to it, has its origins in the healing practices of the world’s oldest living culture, the Kalahari Bushmen. The Bushmen have weekly shakes where they come together as a community to heal physical and psychological illnesses and even to repair relationship rifts within the community. The main purpose of the shake is to inspire and affirm unconditional love. They do this by holding a healing dance where the members grasp each other and shake to the rhythms of drumming (Keeney 2005, 2007). Keeney (1994) states that:

These people regularly perform healing dances around a fire, which helps arouse an energy in them they call ‘Num.’ Healers experience this energy boiling in their guts and then moving up into their head, resulting in body shaking and trance experience. They then hold and vibrate other community members as part of the healing process. (p. 41)

Page and Berkow (1998) use the same definition for spirituality as the Kalahari Bushmen use for their dance, which is “love.”

Spiritual growth generally includes intellectual understanding, clarification of values, and strengthening of a sense of identity and meaning. . . . Spiritual growth is a movement of the self toward its own ground in love. . . . The centrality of love as a foundation for relationships in different cultures reflects a universality to love
that cannot be ultimately defined by any one culture but that can be seen as active within a variety of cultural contexts. (p. 289)

“Active within a variety of cultural contexts” is the key phrase here which can help to explain why there are remnants of “shaking” in various cultures. In theory, humans originated in Africa and,

most paleoanthropologists believe that our ancestors first left Africa about 2 million years ago and moved into Asia and Europe. This theory is known as ‘Out of Africa’ and is strongly supported by fossil evidence. They probably left Africa in a gradual expansion, following food in small groups, rather than in a ‘mass migration.’ (Maropeng, n.d., para. 51)

It would follow that traditional spiritual and healing practices would be dispersed among the lands in which our ancestors settled, and throughout time these practices, such as shaking, would be transformed and adapted within the ever-evolving cultures. This explains why shaking, or ecstatic dance, appears in almost every culture and/or religion including Baptist, Methodist, Judaism, Hinduism, Shinto, Buddhism, and others (Keeney, 2007).

Keeney (2005, 2007) describes the different cultures that use this type of communion with spirit for healing purposes, especially the Kung Bushmen of the Kalahari Desert. Ikuko Osumi Sensei, a Japanese healer, also uses the tradition of Seiki Jutsu for healing. Ecstatic dance which brings on uncontrollable shaking has also been documented in our country as well. The United States has a long history of groups of people falling into ecstatic dance or shaking medicine (Keeney, 1994, 1998, 2007).

Andrews (1953) wrote about both the Quakers and Shakers of America using shaking as
a way of worship, and quotes a passage from Chauncy’s work, entitled “Seasonable thoughts on the state of religion in New England, 1743,” to illustrate the state of ecstasy that was achieved through this worship.

The early Quakers sang and danced: the Devil roared in these deceived souls [one witness recalls] in a most strange and dreadful Manner, some howling, some shrieking, yelling, roaring, and some had a strange confused kind of humming, singing Noise . . . about the one Half of these miserable Creatures were terribly shaken with violent Motions. (Andrews, 1953, p. 137)

The Quakers and Shakers were not the only ecstatic dancers in our nation. In the Pacific Northwest the American Indian Shakers practiced shaking and ecstatic dance as a form of divine connection and as a healing practice called the Slocum Tum-Tum. Reportedly, Mary Slocum was able to revive her dying husband by transmitting the shake to him. He healed completely (Keeney, 2007).

In modern America, the ecstatic shaking and speaking in tongues of various Christian religions has been well documented. These groups embrace the shake within the context of their religious principals. However, the shake is becoming more mainstream through a number of groups who offer workshops in trance dance, which is described as:

. . . a unique blend of healing sounds, dynamic percussive rhythms, transformational breathing techniques and the innovative use of a blindfold or bandana -- together stimulating a trance state that promotes spiritual awakenings, mental clarity, physical stamina and emotional well-being. (TranceDance, n.d., para. 3).
The many cultures that have indigenous healing practices often practice these rituals within the context of a group (Garrett et al., 2008, Williams, Frame, & Green, 1999). For example, the Bushman healing dance is practiced to drumming in large groups. However, Seiki Jutsu, once transmitted to a recipient, is practiced in private without music. Interestingly, in all the literature about Seiki Jutsu and the Kalahari Bushmen’s shaking medicine, the life force is transmitted to the recipient (Keeney, 1999, 2005; Osumi & Richie, 1998), except in Keeney’s 1998 book, *The Energy Break: Recharge Your Life with Autokinetics* in which he demonstrates that one can induce autokinesis without having it transmitted. When asked about this contradiction, Keeney stated the following:

. . . In typical Japanese fashion, the answer is not clear nor is it intended to be clear. There is truth to saying yes and truth to saying no. Transmission means that in the presence and interaction with another person who has great familiarity and expertise with seiki, it helps awaken your relationship to seiki, so much so that it may seem that it is directly transmitted from one person to another. The exercise of automatic movement helps open you to seiki AND makes it easier for transmission while also making it possible to receive seiki without transmission. In other words a good teacher helps one learn, but you can learn without a teacher. A good counselor helps, but is not absolutely required. (personal communication, January 17, 2009)

Keeney (2005) describes how the hyper-arousal of the body paradoxically creates a relaxed, more receptive state along with a feeling of well-being. Sitting on the ball seems to mimic some of the physical movements that result from ecstatic shaking; the
downside, however, is that the student is unable to become deeply engaged with the movements on the ball, because one of the main purposes of introducing such a device in a classroom is to have the student become more attentive to the learning environment.

The literature shows that movement, group work, and autokinesis can individually have an impact on reducing at-risk behaviors in youth. However, none of the literature combines these practices together. Autokinetics as defined by Keeney (1998) is a much older practice used in almost all cultures as a healing method. For the purpose of this study, I used the term “autokinesis” to describe what the students were doing, as this term generically describes the automatic movements that the students were engaged in and would elicit no prejudices on the part of the students, parents, and readers as might any spiritually-related terms.

Conclusion

The literature review highlights the ways in which movement incorporated within the school day can positively impact the academic, social, and emotional success of students. The dance literature, in particular, connects movement to emotional awareness and expression and the literature shows that exercise balls can play a role in allowing students to spontaneously move throughout the day which helps them discharge excess energy.

The literature also shows that spirituality can be incorporated into group counseling, even in a public school setting, thereby giving at-risk students a more visceral and deep connection to each other. However, nothing in the literature discusses combining spontaneous movement with group counseling to help at-risk adolescents.
Although much has been written by Dr. Keeney about the use of autokinetics in different cultures and by individuals to mitigate emotional issues, I have not been able to locate in the literature research which uses autokinetics as a component of group counseling with at-risk adolescents within a school setting.
CHAPTER III

METHODOLOGY

This study, which uses autokinetics to mitigate at-risk factors in sophomore and junior high school students, is a mixed-methodology study using both quantitative and qualitative data. To collect quantitative data, the students completed pre-surveys before the group sessions and completed post-surveys at the conclusion of the sessions (Appendix A). The qualitative data were gathered using interviews, video tapes, journal notes, an open-ended question on the “School Connectedness Survey” and anecdotal notes based on session observations. The study used 30 at-risk sophomore and junior high school students who met weekly for 24 weeks for forty minutes per week. The group session opened with the talking stick and the last ten minutes of the session was used for the practice of autokinesis where students listened to music and allowed their bodies to move while sitting or standing. They were instructed to induce autokinesis daily for ten minutes and log their efforts. The study began in November of 2009 and concluded in June of 2010. By combining the different healing practices of the Kalahari Bushmen, Japanese, and Native Americans, these students were able to take advantage of movement opportunity and discourse to build community, self-esteem, and positive regard for others, leading to feeling of oneness and the connection to life.

I chose the mixed-methodology approach because I wanted to gather quantitative data about how connected students felt to the school they attended. I also wanted to use a
reliable and valid measure of their perception of their self-concept before and after the autokinetic treatment with the hope that my study could be generalizable.

Using a mixed-methodology approach is not uncommon especially using qualitative data to “supplement, validate, explain, illuminate or reinterpret quantitative data gathered from the same subjects or site” (Bogden & Bilken, 2007), which is what I strived to do with my study.

Bogden and Bilken (2007) list a number of ways quantitative and qualitative approaches differ. It is clear from this list that my study straddles both methodologies. Unlike a pure, psychological blind study, my students knew about the experiment beforehand. I was also part of the experiment in my role as a participant-observer and needed to consider my role in affecting the behavior of the students which called for self-reflection and reporting. This aspect of the study could not be explained by a statistical analysis, but rather informed the nature of the results.

It was important to me to ground the study in statistics, which has some objectivity. I felt that to have a study based only on qualitative data would relegate the entire experience of the students to my subjective narrative thinking. I did not want my narrative to become “the grand narrative, an unquestioned way of looking at things” (Clandinin & Connelly, 2000) like the myth of the Indian rain dances performed to bring rain rather than to celebrate its coming. Therefore it was important to me to have the checks and balances that both methods provide.

Description of the Research Implementation

Before getting started with choosing and interviewing groups, I sought and obtained the school’s and district’s approval for my study. The principal was very
supportive as this was a way for students to have more adult contact and to receive services. The superintendent also supported the project.

Administrators and school counselors at Happy High School provided me with a list of sophomore and junior high school students whom they perceived as at-risk. They were asked to recommend students whose parents were going through, or who had been through a divorce, students who were drug and alcohol users, students with anger issues, and any other students whom they felt would benefit from being in a group. I culled duplicate student names from the list and was left with 77 students who had been identified as being “at-risk.” The students were then randomly selected and divided into four groups: two control and two experimental groups. I looked up and documented whether these students were special education students, male or female, their GPAs, and the number of discipline referrals each student had last year. For the majority of the students the discipline referrals were tardies, or in some rare cases, using inappropriate language to a teacher. Two students had been suspended the year before for drug and alcohol use and distribution on school grounds. Both of these students were in my experimental groups.

Approximately 40 sophomores and juniors were randomly chosen from this list to participate in one of two control groups or one of two experimental groups. To make sure there was a representation of girls/boys, sophomores/juniors and special and general education students, the random sample was stratified. Once the students were randomly chosen and placed into the four groups, I interviewed each student, explaining that I was conducting research and described what to expect in the group. The research took place once weekly for 40 minutes and lasted for approximately six months.
Before the groups could meet I needed to design and get approval for a parental consent form (Appendix B), design the autokinesis log sheets (Appendix C) and choose the music. I received approval for the parent consent form from the district and Rowan University’s Institutional Review Board (IRB). The consent form included permission to video tape the students, I created the log sheet and I chose to use music from the album African Drumbeats by T. C. Zwane (2002), which uses African drumming as the basis of every song. Although I used the Seiki Jutsu version of autokinesis, which uses no music at all, I wanted to incorporate African music to have some connection to the roots of the process. I also felt that the students would be more willing participants if music were involved.

The control groups were made up of between seven to nine students. Each group followed the same session format: open with the Native American talking stick ritual where a stick was passed around the circle and the students were asked how they were doing and whether they needed time to talk in the group. No one could talk except for the person holding the stick. The stick was passed from person to person until all the students had checked in, then we began the regular group process. The students who requested time began to discuss the issues that were on their minds. About three to five minutes before the end of the group, there was a “check out” which included having the students take the stick again and pass it after they described how they felt the group session went for them. The talking stick always generated a lot of discussion. The stick was actually a mini-didgeridoo which I purchased when in Australia. It had red, black, and gold animals painted on it, and was about a foot long, which is one fraction of the size of a full size didgeridoo. The students asked what the stick was and I explained it
was a musical instrument called a didgeridoo made by the Aborigines in Australia, which prompted them to try to play it.

The students would often look at me as they held the didgeridoo and talked, but I would encourage them to share eye contact with each other which was part of making them responsible for their group and reducing their reliance on me. Always while sharing an intense moment one of the boys would reach for the didgeridoo and stroke it or slap it against his body. This happened in every group without fail and was to be expected as boys seem to find comfort in being focused on an activity when speaking about difficult topics (Horne & Kiselica, 1999; Pollack, 1998).

The experimental groups were made up of between six to nine students and followed the same procedures except for the last five minutes before the check out, during which time they listened to music and performed autokinetics. In January, 2010, I switched the protocol of the experimental groups to include autokinetics at the beginning of the group, feeling that the movement would relax the students and would contribute to a more fruitful group. Although the students moaned and groaned, the switch in protocol had the desired effect. The students were more open and seemed more connected to each other and the process after the movement.

The groups met in my office. I have decorated my 8x10 office to be inviting and magical to students. When one enters, to the left there is a giant ear on the wall framed by two shelves. One shelf contains two golden sphinx candle holders with miniature animal zombies sitting in front of them. To the right of the ear is a Mexican carving of the face of a Mayan Indian. Half of the face is the Mayan, the other half is half of a skull. Below the ear is a small, round, glass-topped table on which sits a painting of a man with
a snake coiled around his feet. The painting is done in vivid blues and reds. In front of the picture are two small rubber ducks. One is a red duck with horns – the devil duck – and other is white with a halo – the angel duck. Oftentimes students come in and gravitate to one or the other. On either side of the table are two green and beige padded dining room chairs each of which has a large green pillow.

Continuing to the right of the chairs is a file cabinet with a lamp on it. The lamp is shaped like intersecting tree branches, leaving big gaps to be filled. One of the gaps is filled with a ninja rubber duck. The duck is black with a red eye mask concealing its identity. It is decorated with numerous Chinese throwing stars. I often challenge the students to find the ninja duck. Also on the file cabinet is a photo album of my office at my previous job. Next to the album is a pair of old fashioned chattering teeth, a round, orange, green polka-dotted salt shaker and a life-like spider which I absconded with from the Elks Club Halloween party the year before. Along the window sill is a two-foot wooden cobra protected by a witch, pumpkin, and ghost PEZ dispensers.

In front of the window sill sit two purple velvet dining room chairs. The chairs have red, yellow, and green confetti embroidery. Between the chairs is a small cocktail table that is wrought iron with a wooden top with carved leaves. A toy fortune teller sits on the table. When you press her button she says in an Eastern European accent, “Tell me what you want to know. Go ahead, ask me a question.” I usually instruct the students to speak a yes/no question loudly because the fortune teller is old a slightly deaf. Once the question is asked, she usually gives a stock answer such as, “It is in the stars . . . or . . . in your dreams.” Once a student asked is she was going to pass for the year and I held my breath as the toy answered, “There iz no doubt!” That was a close call.
Next to the chairs is a large desk with a crimson shaded lamp. Yellow beads hang from the bottom of the shade. The base of the lamp is a monkey clinging desperately to a tree, hoping not to be seen. The desk holds a black and white photograph of cards being shuffled in mid air, a gift from a former student, a kaleidoscope, and a globe which contains a witch’s head which is motion activated. I keep the motion detector off so as not to have her talk all day long. She looks like a traditional witch—green eyes, long gray hair, crooked nose with a wart on it. When she is activated, her head sways from side-to-side, her eyes glow, and her mouth moves while she says, “Hello my pretty, let me show you the spell I’m going to use tonight, hahahaha.” The kids enjoy seeing her in action. I had found her years ago, during Halloween at Home Depot and had to adopt her. I used her a lot in my former district. When one of the vice principals saw her in my office, she complained to another vice principal that I was using witchcraft in the building and needed to be stopped to which the other vice principal responded, “I don’t give a damn what she’s doing in there. All I know is that whatever it is, it’s working with the kids.”

To the right of the desk is a large bookcase holding numerous books about counseling and the college process, none of which are mine. I inherited them from the former supervisor. Atop this book case is Priscilla, a two foot mannequin which was given to me by a colleague from my last job. Priscilla has no head or arms but does have a torso and she is dressed in a pink dress with pearls and ribbons making her look like a frothy confection. She is flanked by a porcelain shoe filled with fake flowers. Next to the bookcase is another file cabinet upon which sits a golden Buddha, perched on black and white stones, surrounded by small bamboo sticks. All of this is enclosed in a glass jar.
The jar is on a black, wooden platform surrounded by candles. Next to the glass enclosed Buddha is a stuffed bear whose name is Claire.

Atop the other bookcase is Violet, another mannequin who is dressed in a satin, purple, striped dress. I often introduce the mannequins to the students and tell them that they can visit the girls anytime and tell them anything as the girls will never tell a soul. Next to Violet is a black and red lacquered ostrich egg which I purchased in South Africa.

My desk is to the right of the bookcases and along with a standard computer there is a Zen garden, which not only contains sand, but stones with words on them such as, hope, love, courage. There is a black, multicolored, glass lizard in the sand along with a pewter wizard, a nose pencil sharpener, and a zombie finger puppet. Next to the sand tray is a tattooed rubber duck and a red rubber duck with white hearts on it. My most prized lamp sits on my desk – a replica of a Tiffany, dragonfly lamp, which has a series of dragonflies interspersed with blue, red, and green raised ovals. I consider this my lucky lamp which has traveled with me to every new job. My chair is not the usual office chair, but rather an exercise ball that sits in a metal frame which has wheels on the bottom so I can wheel myself from one desk to the other. I bought this chair last year after reading the benefits of sitting in such a chair and as a result the secretaries in my department, the main office and some at the district office have also purchased them. My office was the students’ first introduction to me and the project I was asking them to join.

While interviewing the students being considered for the experimental group, I explained what autokinetics is, specifically that the Japanese Samurai practiced this before going into battle. Additionally, the experimental group participants received a CD with music and a log sheet upon which they were to record whether they have been
practicing autokinetics daily as well as logging the music they used -- mine or theirs. I chose to use the CD *African Drumbeats*, composed by T. C. Zwane (2002), which is similar to the drumming used by the Kung Bushmen in the Kalahari desert (Keeney, 2005).

When the students entered my office for the first group, I had arranged folding chairs in a circle. The chairs were very close together because of the size limitations of my office. When the students filed in they naturally organized themselves according to gender – girls on one side of the room and boys on the other. The students’ knees were all touching, which I thought was a good thing because this would enhance their energetic connection. Many of the boys tipped their chairs back so they were balanced on the rear legs of the chair. Several of the students felt the need to activate the chattering teeth and several of the students began to fondle and squeeze the rubber ducks.

I usually sat facing the giant ear, putting the video camera behind me, allowing me close access to my desk. The music source was on the desk nearest the window and sat on the corner facing the group. I would often ask a student to press play and stop as I could not reach the music. Once seated, the students would stuff their backpacks under their chairs, except for a few girls who would keep their bags and/or purses on their laps.

During the first meeting of both the control and experimental groups, the students were asked to fill out a school connectedness survey (Appendix A). During the second week they were asked to fill out the Multidimensional Self-Concept Scale (MSCS) (Bracken, 1992). These surveys were repeated at the end of the study. I included an opportunity for students to write a narrative about how participating in a group affected them and whether the autokinetics made a difference in their lives. Participants were
given permission slips (Appendix B) to inform parents of the study and were asked to sign confidentiality (Appendix D) and group rule agreements (Appendix E). During the first group meeting, I discussed the importance of maintaining confidentiality through the year. We also discussed as a group the rules that would govern group behavior, which I had already committed to writing, and added any additional rules the group wanted. All members had to sign their own copy of the rules. Some of the rules included that the students would maintain confidentiality, respect each others’ opinions, not interrupt or make fun of others.

Data Sources and Data Collection

Once the participants had been recommended, I looked up their grade point averages (GPAs), discipline referrals, attendance, zip codes, special education status, and gender. These variables were included in the stratified random sample. As mentioned earlier, I used a school connectedness survey (Appendix A), which I designed. The survey looks at how connected the students are to the high school, what their academic self-perception is, and how much physical movement they get each day apart from physical education. They also answered the MSCS survey which looks at the domains of social, competence, affect, academic, family, and physical. At the end of the research, I conducted the surveys again to see if the students had made gains in any of these areas and school connectedness, particularly examining whether the autokinesis groups had increased gains. I also examined the students’ GPAs and discipline referrals, at the end of the year, to see if there had been any improvements over the prior year.

I kept a journal of the sessions, which acted as my field notes. I made sure that whatever happened in one group was repeated in the others for consistency and to
minimize any unintended variables as much as possible. Additionally, I videotaped most of the sessions to refer back to any specific groups and reflect on what had happened. I was primarily videotaping to capture the students demonstrating autokinesis and to view their reactions. I managed videotaped roughly 40 sessions, which included both control and experimental groups. I did not capture all the group sessions, because the video camera did not work – on different occasions either the batteries depleted, there was a loss of power, or a student knocked the camera over.

Data Analysis

Research Questions

Following are the research questions:

1. Does the students’ practice of autokinetics improve their academic self-perception?

2. Does the students’ practice of autokinetics improve their school-connectedness?

3. Does the students’ practice of autokinetics improve their self-concept overall?

4. Does the students’ practice of autokinetics improve their self-concept in the following domains?
   - Social
   - Competence
   - Affect
   - Academic
   - Family
Physical

In order to address the first research question, I analyzed the answers to questions 1, 2, and 3 from the pre- and post-“School-Connectedness Survey” instrument (Appendix A). In addition, I analyzed individual GPAs, both prior to and after the group meetings and autokinetics interventions, utilizing matched t-tests.

To address the second research question, I aggregated the answers to questions 15-23 from the pre- and post-“School-Connectedness Survey” instrument (Appendix A). In addition, I compared the number of students’ disciplinary infractions from the 2008-2009 school year to the 2009-2010 school year.

To address the third question, I aggregated and disaggregated the data, looking at differences among gender, grade, and special education/general education students of which the samples were too small to provide any meaningful information. I analyzed the data using a matched t-test and examined individual students to see if there had been any individual gains. I compared the students’ overall self-concept scores from their pre- and post- MSCS surveys.

To address the fourth question, I analyzed the individual scales (social, competence, affect, academic, family, physical) from the pre- and post-surveys of the MSCS by using matched t-tests to see if there had been an improvement in those domains. Bracken (1992) defines self-concept as being:

. . . derived from the many unique environmental contexts in which children find themselves as either passive or active agents. Children spend the majority of their waking hours acting upon or within the following six environmental contexts: social, competence, affect, academic, family and physical. These domains are not
mutually exclusive; in fact, the contexts overlap considerably and are moderately interrelated. For example, one’s physical attractiveness, intellectual abilities (competence), social skills, and family support and orientation might all be expected to affect how well a child performs within an academic setting, or other settings for that matter. (p. 4)

Bracken (1992) defines each of the domains as follows:

Social: The interactions with everyone in their universe especially teachers, family, friends. Their self-concept is formed by the reactions these people have toward the child.

Competence: As children succeed or fail at what they do and as others react to them, children begin to generalize about their competence in different areas.

Affect: Children’s affective behavior is differently reinforced, either positively or negatively and this pattern is maintained as the child grows.

Academic: Children receive ongoing evaluations of their performances in school and also develop their own evaluation of their performances based on a number of factors.

Family: Family is defined as “those individuals whom the child is dependent upon for care, security and nurturance.” (p. 4)

Physical: Others respond to children’s physicality. The reactions of others along with the child’s view of his or her body contribute to the child’s physical self-concept.

Additionally, I used a reflective journal about each group’s session and used short answers that the students in the experimental groups provided on the school
connectedness survey. As a participant-observer, and since I was tangentially looking at the role energy played in the groups, it was important to record my feelings about the group and the individuals in the groups. It was not important to record the content of the sessions as the topics discussed were not unusual for teens such as boyfriends/girlfriends, drugs and alcohol, “finding oneself,” parental and friend issues. What I needed to be aware of was my resistance to the process. Including autokinetics in the groups was new for me and I wanted to reflect on how my attitude affected the groups’ attitude on those days. Was I the only one able to affect the group or were some of the stronger members able to override my energetic intent? These were some of the questions that I thought about.

The students were asked to respond in writing to the following question:

“Describe how you felt about the Seiki Jutsu (movement) we used in the group.” This open-ended question was posed at the end of the school connectedness survey. I coded the information by dividing the answers into those that were positive about the experience and those that were negative. The key negative words that I looked for were: didn’t like, stupid, doesn’t work. The key positive words that I looked for were: liked, fun, helps. The students wrote very short answers and they were very clear about how they felt.
CHAPTER IV

FINDINGS

Planning Research and the Interview Process

In this chapter I will describe the entire research cycle beginning with the student interviews, key moments in group, and the results of the data analysis. To maintain the anonymity of the students, their student numbers, which I assigned to them, will be used to identify them.

I began interviewing the students during October, 2009 and had my first group meetings on November 9, 2009 and November 10, 2009. It is standard in the field of group counseling to interview the subjects to see if they would be appropriate for a group. I needed to ascertain that they would be willing to make a weekly commitment to meet with the group no matter the conflict that they faced, such as a test or project due, and I needed to get a sense of the students’ social skills to see if they would be a good fit for the group. It is not helpful to have all shy students, for example, but actually advantageous to have one shy student. The interview process allowed me to determine which students would work well together so I would have a good mix of group members.

When the students arrived for their interviews, they thought they were in trouble, so I had to explain that although I am an administrator, I am not the “trouble” lady and that I had asked them there to participate in a wonderful experiment. I used a script to explain the following to every student who was randomly selected for the experimental
group. The script for the control group was the same except there was no mention of Seiki Jutsu.

“You’ve been recommended to be part of my group because your counselor, the vice principal or the principal thought you could get a lot out of being here. First, let me explain a little about group. Once a week you and about eight to nine other sophomores or juniors will meet to discuss whatever you want to discuss. It’s your group and it’s that simple. I know that group helps students feel more connected to others and to learn more about themselves, but I want to see if something called Seiki Jutsu, an ancient form of Japanese movement, will make group more effective for students. I’m writing my dissertation on this topic.”

I went on to explain:

“Seiki Jutsu is a form of self-movement. You can sway back and forth or side-to-side. It doesn’t matter. The idea is that if you do this between five to ten minutes a day, there will be changes in your life and you will feel more creative. The samurai used to do this before battle to focus and the CEO of the Sony Corporation used to do this before important meetings.”

“Your group will incorporate this method of movement. All I ask is that you practice every night and record what you do on a log sheet that I will give you. I also expect you to show up for every group no matter what.”

I then asked them if they were interested and whether or not they felt they could make a commitment to showing up for group every week. I also stressed the confidential nature of the group and asked them if they would be able to keep confidential what they heard in group. In one case I interviewed a special education student who I thought would be
perfect for the group; however, he declined saying that he did not think he was smart enough to be in group. Of course I tried to persuade him to take the challenge, but I could see in his eyes that he did not believe that he was capable. That was a very sad moment for me.

Interviewing the students was stressful because I did not know them and they did not know me; I was nervous that I would not get any students to sign up and my whole study would collapse. Following are journal entries about the interview process:

10/5/09

Started interviewing for the control groups. I had to chase the students and those that came to be interviewed seemed lackluster about the opportunity. Sadly, many of the boys declined. I think that because I don’t have a caseload, the students are not familiar with me and are hesitant to honor their pass and to get involved. It was easier last year when I co-facilitated with another counselor and we chose her kids.

I’m concerned that I might not have enough males for the control groups which will force me to pick students from the list jeopardizing the randomness of my samples. The males are more reluctant than the females to be volunteers. Perhaps it’s because of the nature of the group of at-risk students. Or this type of male has had so many “group” activities that they are simply skeptical about the whole process.

10/14/09
Started interviewing for the experimental group which is going much better. The students are excited to be included in something that no one else is doing. I believe that I will have enough girls and boys to complete groups of between 8-10.

10/27/09

I’m in a panic because I have to now pick students from my universe to fill in for the students who don’t want to participate which are mostly boys in the control group. The boys in the experimental group like the idea of learning Seiki Jutsu. I took my remaining universe and randomized them for the experimental and control groups. This sample is not a stratified random sample.

I have come to learn that, when using human subjects, it is almost impossible to expect plans to go exactly as they have been conceptualized. I was surprised that I could not accept this notion at first as I have come to learn through my various work experiences that I have to be open and available to various issues that come up in any plan. Even before my groups began, my issues of control and order were being challenged. A quantum leader would have let the whole process take shape without any worries, trusting that out of the chaos order would form. I did not seem to be as quantum as I thought.

Initial Meetings and Key Moments in Group

I conducted my first groups on November 9, 2009 and November 10, 2009. I treated all four groups in the same way during the first group meetings. The students were given confidentiality agreements to sign and had their neighbor witness in writing. We discussed as a group, the group rules which would govern everyone’s interactions. Everyone had to sign as well. And I gave the students a copy of the parental consent
form which was due back by the next group meeting. The consent form explained what
the purpose of the group was, the fact that I was using this experience for my doctoral
work, and that the students would be videotaped for training purposes only. They also
took the school connectedness survey, which was short. I gave each student in my
experimental groups a copy of the CD I planned to use every week with a log sheet
(Appendix C) for the month of November. I asked the students to listen to the CD
between five to ten minutes nightly and to use the log to note the date, how long they
moved, and whether or not they used my music or their own. If they used their own, they
were to note the name of the music on their log.

Once the logistics were completed, I asked the students to pair themselves up and
gather information about each other which they would report to the group. There were
about ten minutes left of the period, so I taught the students how to check in with the
talking stick, which was actually a mini-digeridoo. This produced a lot of conversation in
all groups with some students actually trying to play it. We did not have time to conduct
a group session with the experimental groups, but I made sure that we could practice
autokinetics. During the second week of group sessions, the students took the MSCS
survey and we had time to begin sharing with each other.

Following are my journal entries for the first few group sessions. The theme that
runs through them is my anxiety over the methodology and fear of the groups failing
because of not having enough students:
11/2/09 – Experimental Groups

Group A

I had my first shaking groups today. I’m terrified. Although I’ve run hundreds of groups, I always get nervous before group begins because you can never tell what will or won’t happen. This is particularly stressful because I’m introducing autokinetics which is unusual for the students and for me because I’ve never done this with adolescents in a school setting. I have only facilitated adults. Thankfully the majority of the first day of group is paperwork – wonderfully safe and secure, deviation-free, paperwork. There is something to be said for bureaucracy. We started with going over all the paperwork – confidentiality forms, group rules, permission slips, CDs and logging their use. I also administered the school connectedness survey. Then I explained how the talking stick would work for check in, we would “do” group then practice autokinetics. The students were bubbly and excited when they walked in. We practiced the protocol and then did the autokinetics. They were giggling and found it difficult to let go.

Group B

With the second group I wanted to change the order to do the survey before group practice (which I did with the first group) but felt that I needed to stick to the protocol in order to have a clean study.
11/3/09 – Control Groups

Group A

I met my control groups and went through the same protocol as above. The first group began a discussion about drug use in the building and how rampant it is. I was surprised because it was our first meeting but this young man felt that he had to tell the group he quit smoking and that smoking was a gateway drug. Well it went on from there. The students were very open.

Group B

The second group began a discussion about parents not wanting them to date people of different colors or religions. I was surprised at their candidness. Later in the day a girl came to ask if she could be changed from one group to another because she felt uncomfortable in the group. I told her that I had to think about it.

11/23/09 – Experimental Groups

Group A

Met with my first group. They are a riot. They filled out the self-concept scale survey then proceeded to “do” group. A lot came out about divorce and how they are managing. They became very serious. We then started the autokinetics and they were stiff again. I asked if they were practicing at home and the majority said no but that they listened to the music. One young man, who was older than most in the group even though he was a junior, said that he was in fact practicing and would continue to do so but that he wasn’t going to keep a log. “I don’t do homework,” he stated. I got some students to move their heads at least.
At the beginning of the next period I came to learn that two of my students from the group withdrew and one had to leave because she was in a Children of Alcoholics (COA) group. Well looks like I’m putting the girl from tomorrow’s group into the autokinetics group. There goes my randomization. It is what it is. This seems to be the problem with human subjects.

Group B

The second group talked some about parents, anger and drug use. They filled out the self-concept scale but we did not have time to do the movement. I wonder if this will blow what I’m trying to do. I’m finding it really difficult to keep to the same protocol. The kids are different in each group – different personalities – and the groups all have a different energy, but according to the Advanced Placement (AP) Statistics teacher, I must keep the same protocol in order for the experiment to remain on track. I usually do things intuitively which I’m not permitting myself to do. I’m feeling frustrated. I wonder if my focus on protocol is hurting the progress of the students.

11/24/09 – Control groups

Group A

Many kids were absent today. It’s the population. The first group talked about anger issues – it got very intense. They don’t hold anything back. We did the surveys in this group also. One student said that he dealt with anger by meditating, so we meditated as a group while one student was still working on the survey. I took them through a body scan. They all felt really relaxed afterwards.
Group B

Because I did this [meditation, body scan] with the first group, I felt compelled to do it with the second group as well. This part is difficult. When it doesn’t arise organically, it falls flat and this meditation did. The students weren’t into it; however, I think they got something out of it. The group was very small. A number of students transferred out of the district. This reminds me of my teaching days and trying to use the stuff that happened in a classroom organically with my next class – never worked. I should have remembered that lesson. I’m frustrated with myself.

11/30/09 – Experimental Groups

Group A

Group one was awesome. All the students attended. There was a great discussion about Thanksgiving and stressors around that. One young woman discussed whether she should tell a boy she likes that she likes him. The boy is actually in group which is going to cause a dilemma for her. The movement section went very well with the kids getting into it.

Group B

Conversely in group 2 there were only 5 who showed up. We discussed piercings, drugs, alcohol use and the kids didn’t want to move at all. One young man was absent because his grandfather in Korea died. The other two just didn’t show up. I’m afraid that this group will dissolve and I’ll have to start all over again. A new girl entered the group. Thankfully she knew everyone.

1/11/10 – Experimental Groups
Group A

UGH. The first group was impossible today. The music didn’t work. They were so talky mostly about nothing. I’m resolved to never put at risk kids together again!! We eventually settled down to a good talk about drugs and alcohol. But of course none of them have anything that’s bothering them. I had to cancel the next group because of a meeting the principal called. We actually didn’t use music to sway, instead, they just moved without it. It seemed better.

12/21/09 – Experimental Groups

Group A

Student 7 brought in his own music for the Seiki Jutsu. The group seemed to be jealous that he did and immediately began to criticize his choice in music. It was interesting because the music I chose was more frenetic as compared to his which I would classify as New Age music. The group reluctantly shook to his music but were rambunctious. It took a lot of courage for student 7 to share his taste in music with the group.

Group B

Because I used Student 7’s music with the first group, I had to use it with the second group. They loved it. They all closed their eyes and began to sway back and forth.

2/8/10 – Experimental Groups

Group A

First group was goofing off as usual. Student 7 stated that he has given up drinking and smoking to see what it’s like. Said he was doing it too much. The
The group was supportive. One member came in hungover from the superbowl game. The kids don’t want to talk about anything substantive – why ruin the mood – is what they say. They actually challenged me when I suggested that we were wasting each other’s time because we weren’t “working.” Student 9 asked if I had said at the beginning that this was their group? I said yes and he said that “we all have problems Ms. Abrahams, and we just want to come here and chill. Why bring up the stuff we know we live with daily? And besides, you said it was OUR group . . .” He got me on that one. For all my breeziness and seemingly “go with the flow” attitude, I guess I’m a real control freak at heart. My fear is that they aren’t getting anything out of group by just sitting there and “chilling”. However, when I interned at an alternative school for emotionally disturbed kids, group was just them “chilling” and it seemed to calm and reset them for their day. So, I need to honor and respect what the students are telling me and let them have the experience they want . . . as long as we do autokinetics!

We are now standing and moving. I’ve asked them to hold hands. They complied but all of them ran for the hand sanitizer as soon as the music stopped. The boys were getting into it.

A discussion of “Breathworks” surfaced. I explained that breathworks is a much better drug than what they are used to. Some want to do breathing during one of the groups. Some don’t. Days like this are endless. I hate group on days like this.

Student 9 left early which was good. He’s a negative force in the group.
Group B

Two girls came in to see me first thing from the second group: Student 14 and Student 11. They had a feud over the weekend and Student 14 wanted to drop out of group. I said that she couldn’t simply because I didn’t want to lose another member . . . the integrity of the study . . . I relented and told her that she had committed to telling the group that she wanted to leave; therefore she needed to come to the group one last time to talk it out, then she could leave. In my experience, group members rarely tell a member who wants to leave to stay. They clearly don’t share the control issues I have. The other girl came in upset and wanted to deal with the issue in group. They did and seemed to resolve their difficulties. However, Student 14 told the group she wanted to leave anyway. The group gave her permission to do so (which I anticipated). I suggested that she think it over and come next time if she wanted to. She never returned. Too bad because just two weeks ago, she told me how much she enjoyed group and especially the autokinetics.

I feel like this study is going to hell in a hand basket. The randomization is blown, kids keep dropping out because of a number of issues – mental health, being hospitalized, being put out of district, leaving the district, interpersonal conflicts. I think it’s the nature of the type of student that I’ve chosen to participate in group. Never again will I pull together at-risk kids. The mixed model is much more effective.

In early February, I decided to have my experimental groups engage in autokinetics before the group session began, rather than interrupting the flow of group
and artificially inserting the movement at the end. I also asked them to stand and hold hands while moving which they moaned about, but eventually became engaged in. I thought this would loosen up the groups a little more and make them feel more relaxed. It worked. I found the groups to be more open and relaxed about talking. Since I participated in the autokinetics with my groups, I wonder if I simply felt more relaxed and subtly communicated this to the group, making them feel more relaxed. As I read over my journal entries above, I can see that on more than one occasion I was not happy about the performance of the group, was dissatisfied with the way the study was going or was simply having an “off” day. Although I cannot measure this, I think that my attitude, both positive and negative, had an impact on how group would go that day as the group looked to me for direction.

Key Moments in Group

There were key turning points in all of my groups that I wanted to share in this document to illustrate the power of community and movement. Many of the group sessions were filled with students pouring their hearts out to each other, so I picked what I feel are the most extraordinary examples of courage to share, and the power of the group to create unalterable change in the students, in the group, and within me. In some cases these moments happened in the experimental groups, in others, the control groups. I would like to attribute some of this to the autokinetics – even in the control groups, because I was holding the intention and the energy of the movement without actually engaging in it – although I cannot support this assertion with concrete evidence.

“I Can’t Believe I Was Such a Bastard to You in Eighth Grade. Can You Ever Forgive Me?” – Student 1P
This phrase was uttered by a student to another student in my Control Group A, which consisted of sophomores and juniors. During this session, Student 2P, a sophomore girl in the group who took great pride in her appearance – she had designer bags, shoes, and clothing – and had a natural beauty about her – long, dark hair, upturned nose, olive skin, but little interest or pride in her schoolwork – was failing world history and math for the second time, and was evaluated for special education classification but did not qualify. She began to tell the group the story of her father’s death. She was in 8th grade and her father died of a liver disease. Her dad and mom were older parents and now it was only she and her mom. She began to weep. The group asked her appropriate questions, but also knew when to be quiet and supportive. A classified, junior, male Student 1P, who sported a different color Mohawk weekly and was known throughout the building as someone you didn’t “f*ck” with, grabbed her hand and said, “I can’t believe I was such a bastard to you in eighth grade. Can you ever forgive me?” He went on to explain to the group that he always thought Student 2P was just a spoiled rich bitch until now. She looked up at him, paused, and said, “Of course I forgive you.” That was a turning point in our group. She then began to explain that she hated her mother because her mother had consulted Student 2P about whether to remove her father from life support. Student 2P stated that her mother feels so much guilt all of the time that Student 2P has the power in the household, and she does not like having the power. She just wants to be a kid.

Student 2P’s story touched other students in the group which led to a discussion of relatives who died and how one handles death and a very brief discussion of their own mortality.
“I Broke Up With My Girlfriend for My Boyfriend” – Student 1P

Student 1P, the young man mentioned in the previous story, was known as a crazy tough guy in the building. He always wore a Mohawk, a leather jacket and army boots. Thin and lanky, he rarely smiled, preferring to scowl. Student 1P revealed to the group that he was living with his father, his father’s girlfriend, and the girlfriend’s two children, who displaced Student 1P from his bedroom to the basement where he had literally erected several barricades to maintain his privacy. He also revealed to the group that his father and live-in girlfriend are both heroin addicts. The Division of Youth and Family Services (DYFS) had been contacted numerous times by the school and neighbors, but the father, who is a lawyer, has managed to convince the DYFS workers that nothing was wrong in the family. To shed more light on the plight of this young man, a close relative contacted the school in writing to say:

This may be out of line, however, I am telling you in strictest confidence that Charlie\(^1\) is going through a bit of turmoil at home. A new family is being merged in to his world this week, including two smallish children. Charlie’s room has been taken for one of them and he is relegated to the cellar. We were with him last night, fixed dinner and talked for a long time, making sure he knows we support him. His long-time girl friend Kay, from NY and he are, as he put, ‘on a break’.

Sarah, the mother of the two smallish kids who is moving in, is a good, thoughtful person and has sought over the past two years or so to be Charlie’s

---

\(^1\) All names in this section are pseudonyms.
friend, but he hasn’t related very well to her. Sarah is working like a beaver to get an RN degree from Rutgers.

Perhaps Charlie’s IEPs tell the story of his mother? She is bi-polar and a recovering addict. She and Charlie got along very well by phone and some weekend visits until about 18 months ago when she gave birth to another child. I don’t know the story, but she cut off contact with Charlie and her other son, Bill. Charlie doesn’t like to talk about it. Essentially it appears he was abandoned.

Of course, Charlie should not be given any special treatment: however, I thought it might help if you know what’s going on in the background. I learned from his father today that Charlie does see someone for counseling.

(personal correspondence)

Student 1P spoke weekly of dating the girl of his dreams at the high school and how she was the anchor of his life until the last group where he dropped a bomb:

“I need time [in group],” said Student 1P.

“Ok. You can go first if the group is ok with it,” I said.

“Sure. Let’s hear it, Student 1P,” said the group members.

“I broke up with S.,” he said with a smile.

Silent astonishment.

“What do you mean? How could you? I thought she was it?” said Student 2P, rather exasperated.

“Yeah, well, I broke up with her so I could date M. [another boy at the high school],” Student 1P said.
Silent astonishment. And more silent astonishment. I was even astonished.

Student 1P did not look like the type that would be hiding his sexuality. I had to pull myself together and get the group back on track.

“Student 1P, that’s really an interesting disclosure. Can you tell us how this came about?” I asked very neutrally as if trying to coax a baby groundhog out from hiding.

“Yeah. We were on an overnight field trip and we both talked about being gay. He’s really out, you know. And I said that I thought I was gay, so we decided to date.”

“I see . . .” but before I could ask another question the group asked several of their own: “What’s it like?” “How did your girlfriend take it?” “Are you sure you’re gay or are you just exploring?” “Maybe you’re bi?” “How’s the rest of the school handling this?”

Student 1P answered all their questions seriously and honestly and seemed to enjoy the attention. The students were curious, accepting, and supportive. A few weeks after group ended, Student 1P made an appointment to see me and disclosed that he was not gay after all, but that by working through this with his therapist, it became clear that he had huge intimacy issues when it came to women as his mother literally abandoned him after he was born. She was a drug addict. He told me that his male lover said that Student 1P was not gay enough and that his lover was right. So, now Student 1P was hoping to work out his intimacy issues with women and was trying to get another girlfriend.

“I’m a Drug-Free Knitter” – Student 13

Student 13, a classified, sophomore Korean boy who was in Experimental Group B, was suspended the previous school year for distributing drugs on the school campus.
In group he often talked about being one of very few Asian students, specifically Korean students, and longed to have a Korean girlfriend because his parents would not accept him dating a “non-Korean.” His dad is a minister and has high standards for Student 13 because he is the first-born son. When I asked Student 13 why he was selling and taking drugs, he laughed and said that he was trying to help his family out monetarily as his dad does not make a lot of money and that he needed to sample the merchandise. He was the only boy in this particular experimental group and loved every minute of it. When his grandmother died in Korea and he was away for two weeks, the group genuinely missed him and was worried that he would not return, but he did.

Student 13 was open to the movement part of the group from the very beginning. He swayed with his eyes closed as one would doing Seiki Jutsu. During one of our groups, he came in with a knitted hat. The girls immediately complimented him and he told everyone, very proudly that he knitted it himself. He stated that he had quit smoking both pot and cigarettes and used knitting to keep himself occupied. He said that he also tutored math. The girls were very supportive and told him repeatedly that he would make a great boyfriend.

“That is Not Appropriate Language to Use in Group!” – Student 12P

I became aware of my bias toward Student 12P the first time I met him. He was a special education student diagnosed with Asperger’s syndrome which caused him to act socially inappropriately in my Control Group B. When he first started coming to group he would curl up in a fetal position on one of my white and green striped chairs, clutching his binder. The kids ignored him at first. He would often blurt out non-sequitors in the middle of a group discussion. I would say to him, “Student 12P, that’s inappropriate
behavior in a group.” He would shrug and go back to his internal world. The group took it very seriously that all members should participate in some way so they turned their attentions to him and began asking him questions about his life, which he often answered in a nonsensical way. One member, Student 16P, a tough girl whose mother owns the local bar and who has been repeatedly abused, yelled at him and said, “Cut this shit out and talk.” Student 12P was stunned and replied, “That’s not appropriate language to use in group!” There was a moment of silence and everyone in the room burst out laughing, including Student 12P. As the weeks went by, Student 12P became a big part of group, often giving heartfelt feedback to the participants. One girl told the group that she wanted to see her birth parents but her mother would not let her and she added that her mother called her ugly and stupid. Student 12P seemed very agitated by this and said to her, “Student 10P, you are beautiful and smart and that’s what you should be hearing from your mother and it must be very hurtful for you to hear these things. No mother should say that to her child.” The group fell into stunned silence again. Student 10P looked down, rocked her legs, glanced at him and thanked him. Of course Student 12P, being Student 12P, then announced that he had to take a “dump” which elicited groans to which he replied, “Not appropriate, huh?”

Although he was not in the experimental group, he blossomed the most once the group treated him like their equal and not like a special education student. I believe that he appreciated the honesty of the group and the support, and although he never brought up anything troubling, he was always there to listen to the others and support them. I often wonder if my personal use of autokinetics on a daily basis affected the students who were not part of the experiment.
Sadly, during the year, several students dropped out. One was hospitalized for an eating disorder, one for repeated suicide attempts. Another young man was sent to an out-of-district-placement because of his uncontrollable anger related to drug addiction. Another student dropped out because of a conflict she had with another group member which she did resolve in group but chose not to come back. She was a frequent visitor weeks after group ended to discuss similar problems she was having with other girls in the building.

I deviated from protocol for the last group session. For the two experimental and one control groups, I had them write letters to each other. The letters were to be personal, wishing the students well or saying how a particular student affected the writer during the six months of the group process. Experimental Group A stated clearly that they had no interest in writing because this smacked of work. Then ended up writing to each other, but wrote very little preferring to have verbal running narratives while writing a few sentences, almost like ten streams of consciousness going on at the same time. Experimental Group B wrote diligently as did Control Group A. I promised the students that I would mail the letters to their homes on the last day of school.

Control Group B, however, wanted to throw a party, which I agreed to, assuming that they would not pull it together to actually do, but, they did and we ate in the courtyard where they talked about summer plans, how much they liked group and wanted to know if we could do it again. This was appropriate closure for this group.
Data Analysis and Student Aftermath

Quantitative Data Analysis

Potential research subjects were identified from the population of Happy High School in NJ. Though this school is a predominantly Caucasian, relatively high-performing public school – as a public school, it does take “all-comers.” The school resides in an area that borders on rural, and the student body population includes less well-off students, students who are disaffected with school, underperforming students, and students who are not college-bound, as well as students who are “traditional” college-bound, motivated teens.

A population of disaffected students at the school was identified in early 2009 by cross-referencing number of discipline referrals (involuntary trips to the vice-principal’s office which are all recorded in a database), low grade point average, students participating in the “RISE” program for disaffected and at-risk students, and teacher-identified students who might benefit from weekly group sessions. From this population, students were interviewed and offered a chance to participate in a weekly group of their peers to discuss issues relevant to them in a judgment-free atmosphere. The students that accepted this invitation were then stratified by grade (10th or 11th graders), gender, IEP classification (yes or no), economic status (whether or not the student receives free or reduced lunch is the classic public-school proxy for this variable), whether the student lives with both parents, and whether or not the student is Caucasian.

In the sample of 33 students that eventually agreed to commit to the group sessions and actually did so, there were a negligible number of non-Caucasians (n=1) and students receiving free or reduced lunch (n=2). This probably reflects the overall
population of the school and not a sampling error on my part. However, whenever dealing with human subjects participating in a voluntary activity, self-selection bias, voluntary response bias, and non-response bias can play a role. While it is impossible to say whether the students who opted out of the study shared any particular characteristics, future study of this sort at a less homogenous school, and utilizing a larger sample, would mitigate these sources of potential bias.

The 33 students were stratified by their component categories then randomly separated into four groups, each group containing roughly the equivalent gender proportion, grade (age) proportion, proportion of classified students (with an IEP), and proportion of students from single parent homes. Of the four groups, two were then randomly selected as the experimental groups, and two as the control groups. The participants did not know that there were multiple groups running and they were unaware that there were distinctions in the group’s activities, but were aware of the group that they would be in and knew that I was conducting their group for research purposes. The sampling and placement into the groups was done by the school’s AP statistics teacher, who has a unique knowledge of statistical sampling. A spreadsheet was utilized with all of the student’s vital information; no names were used. The students had each been assigned a code number for the purpose of group assignation.

A valid experiment must demonstrate three vital elements: control, randomization, and replication. This study met these criteria. There was a control group running alongside the experimental group, and participating in all of the same activities, except for the single activity being tested (the autokinetic action). The subjects were assigned to the experimental groups using a proportional, stratified, random assignment.
performed by the AP statistics teacher, who was unaware of the subject’s specific identities. Finally, the use of 32 subjects\(^2\) (17 experimental, 15 control) satisfies the replication criteria, which states that the experiment must be performed on more than one subject (Moore & McCabe, 2006). The experiment, while not drawn from a perfect population and while it may contain some unavoidable bias inherent in any study using human subjects, is therefore valid and meets the criteria for an appropriate statistical experiment.

Results: Discipline Events and GPA

Two of the factors used to select the subjects initially were number of discipline events and GPA. Table 1 summarizes the mean number of discipline events and Table 2 summarizes the mean GPAs for the students that participated in the study. The experimental group participated in 24 group sessions that included autokinetic activity as part of the sessions. The control group experienced the same sessions with the same stimuli, the same facilitator, and the same “leading questions,” but absent the autokinetic aspect of the hour.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Avg. # Discipline events 2008-09</th>
<th>Avg. # Discipline events 2009-10</th>
<th>Change</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>3.83</td>
<td>4.29</td>
<td>+ 0.47</td>
<td>17</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.6</td>
<td>3.53</td>
<td>+ 0.93</td>
<td>15</td>
</tr>
</tbody>
</table>

\(^2\) The data from one of the control subjects was corrupted and needed to be discarded. There were 16 control subjects in total, but valid data only exists for 15 of them.
Table 2  

*Change in GPA from September 2009 to May 2010*

<table>
<thead>
<tr>
<th>Group</th>
<th>Avg. GPA as of 09/2009</th>
<th>Avg. GPA as of 05/2010</th>
<th>Change</th>
<th>No. of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>78.91</td>
<td>79.76</td>
<td>+ 0.86</td>
<td>17</td>
</tr>
<tr>
<td>Control Group</td>
<td>79.21</td>
<td>79.67</td>
<td>+ 0.46</td>
<td>15</td>
</tr>
</tbody>
</table>

On face validity, there seems to be some positive impact to the use of the autokinetic activity. Note that both groups experienced more discipline events in the year of the group sessions than in the year prior, but also note that the increase for the experimental group was about half that of the increase for the control group (the increase for both groups, while disappointing, can perhaps be attributed to the fact that both groups were a year older, and it is well established that older disaffected teens tend to find themselves in discipline trouble more often than their younger peers).

Note also that the GPAs of the experimental group increased by more than that of the control group (on both an absolute and on a percentage basis). Again, while older students tend to take more electives and “learn the ropes” of high school, thereby leading to higher GPAs in general, it is heartening to note that the experimental group, while being exposed to the autokinetic activity, improved more than the control group.

While I have observed a difference between the two groups in terms of GPA and discipline referrals, I have not demonstrated whether this difference is in fact meaningful statistically, or is merely an artifact of the data. Specifically, I have not yet concluded whether this is truly a meaningful statistical difference, or if it is merely a distinction.
Statistical Significance and Other Considerations (Discipline Events and GPA)

Since I wanted to compare control and experimental groups, and the data were collected from randomly selected groups and were not identifiably non-normal (no outliers, no significant skewness), I was able to run a two sample t-test to test whether the difference between the two groups in the change in discipline referrals, and/or the difference in the change in GPA between the experimental and the control groups was statistically significant, that is: Were these results unlikely to occur by chance? Simply, while I have observed a difference, it would have been shocking if I did not observe SOME difference due to chance (or random) variation. Put another way, it would have been simply shocking to select two groups who changed year-over-year by identical amounts. The two sample t-test demonstrated whether the observed differences were meaningful, or statistically significant, and just HOW unlikely differences of this magnitude were by virtue of looking at a p-value\(^3\).

Table 3

\textit{t-Test for Change in Discipline Events}

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.470588235</td>
<td>0.933333333</td>
</tr>
<tr>
<td>Variance</td>
<td>11.13970588</td>
<td>9.638095238</td>
</tr>
<tr>
<td>Observations</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-0.406195569</td>
<td></td>
</tr>
<tr>
<td>P(T\leq t) two-tail</td>
<td>0.687481927</td>
<td></td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.042270353</td>
<td></td>
</tr>
</tbody>
</table>

\(^3\) The p-value in statistics tells us how likely the observed results are given that in fact there was no difference….that is, that if the “null hypothesis” of no difference holds true, how likely is it that we would observe results that are this different (or more so). The calculation of the p-value is done by software, as it involves integration (a calculus concept).
Table 4

\textit{t-Test for Change in GPA}

\begin{tabular}{|l|c|c|}
\hline
\textbf{t-Test: Two-Sample Assuming Unequal Variances} & \textbf{Experimental} & \textbf{Control} \\
\hline
\textbf{Change in GPA} & & \\
\hline
Mean & 0.855294 & 0.460067 \\
Variance & 1.356596 & 1.057072 \\
Observations & 17 & 15 \\
Hypothesized Mean Difference & 0 & \\
Degrees of freedom & 30 & \\
t Stat & 1.019551 & \\
P(T<=t) two-tail & 0.316093 & \\
t Critical two-tail & 2.04227 & \\
\hline
\end{tabular}

As can be seen from the test statistics generated in Table 3 and Table 4, neither statistic is statistically significant at the standard alpha = 0.05 level. This is to say that the probability of these differences happening by chance given that there is truly no difference (as represented by the p-value), is substantially higher than the traditional social science threshold of 0.05.

The t-statistic for the difference in discipline events for the two groups is 0.41 (see Table 3), less than the critical value of 2.04 (representing 2.04 standard deviations from zero, the hypothesized difference if, in fact, there is no difference between experimental and control) that would be demanded for statistical significance at the 0.05 level. The p-value of 0.32 demonstrates that results this “extreme” would be expected about 32% of the time given that there was no difference between the two groups. Hence, although the values seem to support that autokinesis reduces disciplinary events, I cannot conclude that autokinesis, when added to peer group sessions, makes a meaningful difference in mitigating the number of discipline events.
The t-statistic for the difference in GPA for the two groups is 1.02 (see Table 4), less than the critical value of 2.04 (representing 2.04 standard deviations from zero, the hypothesized difference if, in fact, there is no difference between experimental and control) that is demanded for statistical significance at the 0.05 level. The p-value of 0.69 demonstrates that results this “extreme” would be expected about 69% of the time given that there was no difference between the two groups. Hence, again, although the values seem to indicate that the use of autokinesis can make a positive difference in a student’s GPA, I cannot conclude that autokinesis, when added to peer group sessions, makes a meaningful difference in raising GPAs.

Data were also analyzed for these two variables (discipline and GPA) by sub-categories gender and household status (from a single-parent home or not) between the two groups (experimental and control). The results were extremely similar to those above, perhaps demonstrating that there is not a meaningful difference when considering these variables (discipline event change and GPA change) between the genders or due to household status. Due to the very small sample size (selecting a sample from a sample), any result generated based on a subset of the data must be met with some reasonable level of suspicion.

Results: MSCS Factors

All students participating in the study and participating in the group sessions were given the Multidimensional Self Concept Scale (MSCS) psychological assessment instrument twice; both before participating in the study and upon completion. I was trained to deliver this particular assessment instrument and have used it before in other

---

4 Two students in the experimental groups and one student in the control groups could not take the post-tests.
studies (Abrahams, 2004). The MSCS is a recognized assessment of “self-concept,” and is demonstrated to be, when administered properly, both a reliable and a consistent measure.

Within the MSCS, subjects are assessed on their global self-concept based on six environmental concepts: social, competence, affect, academic, family, and physical. There is also a “total” self-concept score that is generated. While the domains overlap and are intercorrelated, the MSCS is a measure of these six individual self-concepts and treats self-concept as a learned behavioral response pattern, similar to other well-learned habitual patterns. As a stable construct, self-concept is changed only gradually. It was therefore worthwhile to test whether experimental groups participating in the study and encountering autokinesis as an element of group sessions might impact any of the six global self-concept contexts.

The pre and post test average scores for the experimental and control groups over the six MSCS contexts are summarized in the Table 5.

Table 5

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL</td>
<td>98.57</td>
<td>98</td>
<td>96.4</td>
<td>91.2</td>
<td>-5.2</td>
</tr>
<tr>
<td>COMPETENCE</td>
<td>87</td>
<td>91.36</td>
<td>91.8</td>
<td>89.93</td>
<td>-1.87</td>
</tr>
<tr>
<td>AFFECT</td>
<td>87.93</td>
<td>91.79</td>
<td>82.73</td>
<td>89.47</td>
<td>6.73</td>
</tr>
</tbody>
</table>
Table 6

<table>
<thead>
<tr>
<th>MSCS CONTEXT</th>
<th>Difference in Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(experimental “improvement” – control “improvement”)</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>4.63</td>
</tr>
<tr>
<td>COMPTETENCE</td>
<td>6.22</td>
</tr>
<tr>
<td>AFFECT</td>
<td>-2.88</td>
</tr>
<tr>
<td>ACADEMIC</td>
<td>-1.64</td>
</tr>
<tr>
<td>FAMILY</td>
<td>2.54</td>
</tr>
<tr>
<td>PHYSICAL</td>
<td>-3.87</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2.45</td>
</tr>
</tbody>
</table>

The question must now be answered whether the differences observed pre and post-group sessions with and without the treatment (autokinesis) were statistically significant (alpha = 0.05). Simply, are the differences observed artifacts of random variability, or are they the result of the experimental imposed?
It is important to recognize that I am not analyzing whether or not group sessions have a positive impact. This is well-established, discussed in the literature review, and can be observed by the large number of positive values in Table 6, which summarizes the pre- and post-test scores for each of the MSCS contexts. Furthermore, I have not observed differences between students who participated in group versus those who did not participate in group. That was not the purpose of this study. I ask the question: Are the differences in improvement observed between the two groups statistically significantly different (from zero)? That is the key question of this section.

Put another way: Did students’ self-concept contexts improve after a year of participating in peer group sessions? The question is whether the students who participated in the groups that engaged in autokinesis improved statistically significantly more than those students in the control (non autokinesis) groups. I answer these questions, again, through the use of a two sample t-test, and make conclusions that follow.

Table 7

<table>
<thead>
<tr>
<th>MSCS CONTEXT</th>
<th>t-statistic</th>
<th>p-value (one tailed, “was there improvement?”)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL</td>
<td>0.96</td>
<td>0.17</td>
<td>Some observations with large positive change</td>
</tr>
<tr>
<td>COMPETENCE</td>
<td>1.50</td>
<td>0.07</td>
<td>Significant at ( \alpha=0.10 )</td>
</tr>
<tr>
<td>AFFECT</td>
<td>-0.31</td>
<td>0.88</td>
<td>Negative statistically insignificant</td>
</tr>
</tbody>
</table>
Statistical Significance and Other Considerations (MSCS factors)

As shown in Table 7, none of the MSCS factors were statistically significant at the customary 0.05 level. This test measured whether the differences in the change in these factors between the two groups were meaningful, or perhaps merely a function of random variation. While the differences were not significant at the 0.05 level, leading me to fail to conclude that there was a difference in the experimental group and the control group, there are some noteworthy points to make regarding these outcomes.

Naturally, the data suffer from small sample size. The limited scope and resources available, as well as the difficulty of following and tracking individuals longitudinally through the course of the study, resulted in sample sizes of 14 (experimental) and 15 (control). While I cannot conclude that the difference in the mean scores between the two groups for any of the MSCS factors was significantly different from zero (nor can I conclude that the mean of the differences was statistically different from zero), there were individual observations that showed a dramatic change, and these individual changes seem to be more pronounced among the experimental group than
among the control group. Some of these notable individual impacts are discussed in the next chapter.

Results: School Connectedness

Utilizing the self-authored “School Connectedness Survey,” I attempted to answer questions relating to whether autokinetics improves a student’s academic self-perception and whether autokinetics improves a student’s school-connectedness. In a similar methodology to the other assessment instruments, students participating in the program were assessed with this survey both pre- and post-study. The differences in their individual scores were calculated, and then the means of the differences for the experimental (autokinesis) group were compared to the means for the control group.

Utilizing a 23-question survey instrument (Appendix A), certain questions (notably questions 1, 2, and 3) were analyzed to answer the question regarding academic self-perception (see Table 8). Questions 4-8, which deal with homework completion and study skills, were also considered on a case by case basis, but because of the large variability of the response group in terms of household composition, GPA, and academic affect and aptitude, these questions were not aggregated to answer the broader question of change in academic self-perception due to the participation in the autokinetic group.
Table 8

*Differences in Means for Q1-Q3 Between Pre- and Post- Tests of the Experimental and Control Groups*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Difference in means (experimental – control) pre-test</th>
<th>Difference in means (experimental – control) post-test</th>
<th>Difference of the difference in means.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>0.274509804</td>
<td>0.390476</td>
<td>0.115966387</td>
</tr>
<tr>
<td>Q2</td>
<td>-0.062745098</td>
<td>0.238095</td>
<td>0.300840336</td>
</tr>
<tr>
<td>Q3</td>
<td>0.733333333</td>
<td>0.119048</td>
<td>-0.614285714</td>
</tr>
</tbody>
</table>

It is important to note when considering Table 8 that there was a “negatively worded” question, implying that a low score (strongly disagree) was the answer given by a student who felt strongest academically. The other two questions were “positively” worded questions, implying that higher numbers demonstrated feelings of academic success. All three outcomes demonstrate differences such that those students in the experimental group felt, on average, that their attitude towards academics had changed more positively after the group sessions than those students in the control group. This is what is demonstrated by the “difference of the difference of means” (this is the pre/post test difference of the differences between the two groups; hence, the difference of the difference). While the small sample size and the nature of the data (categorical data, strongly agree, agree, neutral/not sure, disagree, strongly disagree) precludes running a traditional hypothesis test, there was some empirical evidence that academic self-perception, as measured by this survey, improved for the experimental (autokinesis) group more than for the control (non-experimental/non-autokinesis) group. Despite the small amount of data, this was an exciting result that may be worth further study.
dedicated to the impact of autokinetic activity on student’s academic self-perception (interestingly, this result was not found when analyzing the GPA data).

Questions 15-23 (see Table 9) were aggregated and considered in order to answer the question about school connectedness. These questions were specific to the high school experience, resources available at the high school, and feelings towards faculty and staff at the school.

The differences in the school-connectedness scores were less consistent. Some even went down (all were “positive” questions, students who felt more school connected would answer higher values). This may be simply due to the fact that this population of teens feels less connected to school in general. They often resent coming to school, and their academic futures appear hazy. Answering positively about their relationship with their teachers, or whether they attend school events, may simply not “be their style.”

Table 9

*Differences in Means for Q15-Q23 Between Pre-and Post-Tests of the Experimental and Control Groups*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Difference in means (experimental – control) pre-test</th>
<th>Difference in means (experimental – control) post-test</th>
<th>Difference of the difference in means.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q15</td>
<td>0.168627</td>
<td>0.171429</td>
<td>0.002801</td>
</tr>
<tr>
<td>Q16</td>
<td>0.294118</td>
<td>0.195238</td>
<td>-0.09888</td>
</tr>
<tr>
<td>Q17</td>
<td>0.035294</td>
<td>-0.24286</td>
<td>-0.27815</td>
</tr>
<tr>
<td>Q18</td>
<td>0.113725</td>
<td>0.119048</td>
<td>0.005322</td>
</tr>
<tr>
<td>Q19</td>
<td>-0.47451</td>
<td>0.485714</td>
<td>0.960224</td>
</tr>
<tr>
<td>Q20</td>
<td>0.258824</td>
<td>0.514286</td>
<td>0.255462</td>
</tr>
<tr>
<td>Q21</td>
<td>0.290196</td>
<td>0.014286</td>
<td>-0.27591</td>
</tr>
<tr>
<td>Q22</td>
<td>-0.39608</td>
<td>0.071429</td>
<td>0.467507</td>
</tr>
<tr>
<td>Q23</td>
<td>0.396078</td>
<td>-0.05714</td>
<td>-0.45322</td>
</tr>
</tbody>
</table>
The question with the largest difference (pre/post test) was clearly question #19 (see Table 9), which asked: “I feel I can talk to my guidance counselor about my academic issues.” Since the study was run by a guidance counselor, the students appeared to become more comfortable with guidance counselors, and learned to interact with them as people and supportive adults, not as “the enemy.” They spent more time in the guidance office, which based on my experience as a counselor, tends to correlate with an increase in overall positive feelings towards counselors. Because the students knew that I was the counseling supervisor, they might not have wanted to get their counselors in trouble by stating that they could not talk to them about academic issues. Given my experience working with students I am not surprised by this result.

Thoughts on the Data Analysis

While the statistical outcomes did not support my hypothesis, in terms of finding true statistical significance, many avenues were opened for further study. Clearly, better results would be found with a larger and less homogeneous sample. Additionally, surveying a similar population of students who were not invited to participate in any group would help to tease out the effect of group participation from the experimental autokinetic participation. Simply, it is known that students improve certain self-concepts after participating in group. How much improvement is truly due to the autokinetic activity, if any? I have started to answer those questions in this section, with mixed results. Clearly, there is some impact on school connectedness, though data need to be analyzed utilizing different tools than are available at this time or that are in the scope of my knowledge.
The data collection process and the sampling techniques can serve as a model for future researchers. This was a sophisticated and careful data collection process, after embarking on a comprehensive (and somewhat tedious) proportional stratified random sample from an identified population. Continuing to follow these groups of students longitudinally may also provide some surprising findings. Anecdotally, some students who participated in the autokinetic activity expressed a desire to continue the activity outside of school and into the future.

Although I included questions in the survey on physical activity, and several on homework and study habits, they did not relate directly to answering the research questions. Therefore I would suggest that other researchers analyze these data and perhaps replicate the entire study with a larger sample.

Qualitative Data Analysis

Included in the school connectedness survey for the experimental groups was the following question: “Describe how you felt about the Seiki Jutsu (movement) we used in the group.” I expected at least a paragraph detailing their self-reflections about the movement experience. Instead I got one line answers. While the students were taking the survey, they complained continually. They complained more when it came to answering this open-ended question. My experience as a counselor with at-risk students tells me that completing long written answers is difficult and they are often left unanswered.

Rather than develop an elaborate coding system for the open-ended answers, I divided the answers into “positive” and “negative” piles. The key negative words I looked for were: didn’t like, stupid, doesn’t work. The key positive words I looked for
were: like, fun, helped. I reviewed their survey answers and a slight majority felt it was not effective. Some the responses were:

“It was unnecessary.”

“It was awkward and doesn’t work.”

“It didn’t change anything.”

“Waste of time and didn’t help.”

“It’s stupid.”

“Pointless?”

Interestingly, when I looked at the responders, all of the negative responses were from Experimental Group A. Out of the two experimental groups, this group had the hardest time engaging in the movement. They seemed to feel the most awkward and self-conscious. One of the girls in this group had a crush on one of the guys, told him outside of group, was rejected which resulted in her refusal to speak in group. She also refused to move at all, which I feel was because she wanted to spare herself further embarrassment.

However, Student 7 from Experimental Group A, who brought his own music and swore that he practiced every day wrote, “It brought out the inner beast in me.” Although I am sure that this was written as tongue-in-cheek, he was accurate in describing how the practice of autokinesis can liberate one’s feelings of control. This practice is supposed to be extremely freeing over time, allowing one to lose control of the body. So freeing the inner beast is not far off from what is supposed to happen. Although I will never know, I imagine on a subconscious level this small act of movement out of the context of a rave
or party, was somewhat freeing for this young man who seemed to be very in control of his movement and actions at all times.

Another young man from Experimental Group A wrote, “During the group it was interesting.” He spoke rarely, but when he did he gave the group many insights about his family. He was open and honest and often made the group uncomfortable because of his honesty and his willingness to be real about his issues. It was a huge step for this young man to participate in such an unusual situation.

Conversely, Experimental Group B which was composed of one boy and the rest girls, had this to say:

“I did not like it, but other people found it interesting.”

“It was a new experience and fun with friends.”

“At the beginning it felt awkward, but after awhile, it became fun to dance with my friends from group. : )”

“It helps to relax.”

“I like the movement. It’s relaxing.”

“It relieved some stress.”

These students did not know each other prior to group and two of them referred to the members as “friends.” Some of the students felt that it was a stress reliever and a way to relax. Although the quantitative data show no significant differences between the control and experimental groups, given this small feedback, I would cautiously conclude that the movement, at least in Experimental Group B, built community by having a soothing and bonding effect on the participants. I think having the young man in the
group, who participated in the movement fully, helped to motivate the other students to let go and try it.

As I reviewed the videos, I noticed that the control and experimental groups had consistently different body language. All the students in the control groups had their arms crossed in front of their chests during most groups. They also had their feet crossed. This body language signals others to stay out. The experimental groups displayed no such body language. Rather, they often sat sprawled out in one group, and in the other their arms were at their sides or in their laps in a relaxed manner. They also seemed more open to the other group members. I concluded that this was a result of the students’ participation in autokenesis, which was the only different variable between the groups. Perhaps sharing movement with others created a level of intimacy that even the students could not articulate. In early February, I had them stand and hold hands. Touching creates a level of intimacy even if it is only hand holding. Despite them all running for the antibacterial gel, this element may have contributed to a different feel or vibration in the group. Although Experimental Group A refused to delve into any of their issues and feelings around those issues, it felt to me as if they had a very deep level of intimacy by the way they lounged around and teased each other. Keeney (2005) has written that in the Kalahari the tribesmen tease each other mercilessly so that egos remain in check. The Bushmen call this “insulting the meat”. That is what happened with this group, mostly among the boys. The girls would add an idea every now and then. Upon reflection, I was too caught up in what the group was supposed to be like rather than appreciating how the group was evolving into a mini-Bushmen tribe. Particularly with Experimental Group A, I had wanted the group to get below the surface of their banter. I was expecting
them to disclose some of the issues that were going on in their lives and for them to work
together to process these issues which in my experience creates a very deep level of
intimacy. I was trying to force the process to unfold the way I wanted it to unfold.
However, they already had a deep level of understanding and intimacy and were trying to
bring me to that level, unconsciously, by challenging my authority, asking me if I had
ever used drugs and teasing me when I side stepped the question; and playing a joke on
me to bring to my attention that I was taking this all too seriously.

During one session, Experimental Group A came in and told me that they had a
huge party at a house where the owners were away. They said that they destroyed the
house, had orgies, took a lot of drugs, and that several of them jumped out of a second
story window to avoid the cops. Of course I was completely drawn in by this and very
seriously told them that they needed to make better choices and so on. They could barely
suppress their laughter. Later that morning one of their teachers who had two of them in
class, said, “They gotcha this morning, didn’t they.” “What do you mean?” I asked.
“They told me you bought the story about the party. Well it never happened. They were
pulling your chain. Don’t tell them I told you.” Needless to say, I was slightly
embarrassed and angry. I was angry because here was proof again that they were not
taking the group process seriously. Once I got over my imperiousness, I decided to fake
a Trenton Times article and write about what happened along with “the police are
questioning several students from Happy High School. Anyone with any information is
encouraged to call 609-555-1212.” I opened the next group with “I really thought you
guys were pulling my leg until I read this . . .” and handed out the fake article. They were
flabbergasted and finally figured out that I was joking. They insisted, however, that I was
fooled by them. I was too embarrassed to admit it. They were using what the Kalahari Bushmen used to keep other members of their tribe in check – relentless teasing and joke-playing – so tribal members’ egos would not get out of control. The students were making sure I would be true to my motto of “It’s your group.”

The group sessions concluded at the end of April 2010. As a supervisor, I do not have a caseload of students. Even so, several of the students made appointments with me to discuss their personal issues or I was brought in by the principal to consult. I want to describe two cases where students from the experimental groups made an appointment with me or I was asked to consult with them on various issues. Both cases demonstrate how the students from the experimental group, although still struggling with self-concept issues, were receptive to the notion of play and fantasy, which I believe resulted from their exposure to autokinesis.

“Water Vampires”

Student 10 was from Experimental Group A. She is a long-haired bleached blonde with pale skin. She is of average height and dresses provocatively, mostly in leather. She is known to wear plunging necklines with short leather skirts and is often shod in thigh high red leather platform boots that have criss-crossed black laces. She is never without wearing her playboy bunny necklace.

About halfway through the group, the principal called me in and asked me to speak to Student 10 about an issue that came to his attention. He told me that it was reported to him she was cutting and since her counselor, the SAC (Student Assistance Counselor) and I were out of the building that day, he decided to meet with her to discuss the issue. Student 10 told him that she was a vampire who drank her own blood and the
only way to get to her blood was to cut herself. “So don’t tell me not to cut Mr. D. because I’m not going to stop,” is what she told him when he implored her to quit. Because of her commitment to self-mutilation and her arrogance, the principal felt that he had no choice but to call her mother and reveal the fact that her daughter thought she was a vampire and was also a cutter. According to Mr. D., mom was embarrassed by the whole situation but agreed to speak to her daughter about her behavior.

Mr. D. asked if I could speak with Student 10 as she was in my group. I agreed. Student 10 and I had met individually a few times previously because she wanted to discuss how to handle her crush on another boy in our group, so meeting with her was not going to be a problem. When she came to visit, she wanted to know if Mr. D. asked me to meet with her.

“Yes,” I said.

“I am not going to stop cutting and you can’t make me! I am a vampire and you can’t make me stop that either!” she shouted.

“Who said anything about stopping? And by the way, welcome to the club.” She stopped and stared at me, cautiously.

“What do you mean by that?”

“I too am a vampire and was hoping I could connect to other vampires in the school and it looks like I have!” I smiled.

“No f*cking way,” she said with disbelief.

“Yes, way. Student 10, I am pleased to meet one of my kind. Tell me how you decided to become a vampire.”
She then started telling me that she was in love with the *Twilight* series. The *Twilight* series, written by Stephanie Meyer, chronicles the love story between a human teenager and her vampire lover. It takes place in a small town in Oregon and involves mostly vampires, werewolves, and teenagers. The story has no foul language, nor any graphic sexuality. It is filled with the longing of unrequited love that causes so much angst among teenaged girls.

“Student 10, I’m confused. The vampires in the series either drink human or animal blood, not their own, so how does that fit with you being a vampire?” I inquired.

“Well you don’t expect me to drink human blood. I could get AIDS of course and there’s no way I’m going to kill an animal! So my only option is to drink my own.”

“There are blood banks . . .” I suggested.

“That’s true! But I think getting the blood would be difficult.”

“Well, how about donating your blood then drinking it when you get the urge? You could have your own private blood bank.” I suggested.

As I was saying all this, I was hoping and praying that she did not run out of the room screaming that I was crazier than she. I knew this was the correct way to proceed with her. She was in a state of resistance which can be defined broadly as “behavior that keeps us from exploring personal conflicts or painful feelings” (Corey & Corey, 2002). A counseling technique that is used in modern psychoanalysis when dealing with resistant clients is called “joining the resistance.” “Joining the resistance” is when the analyst aligns him or herself with the patient’s resistance which facilitates emotional communication. According to Spotnitz (1985):
Many communicators that have a motivational effect reflect the old adage: If you can’t lick ‘em, join ‘em. . . . The term ‘joining’ denotes the use of one or more ego-modifying techniques to help the patient move out of a repetitive pattern.

(p. 253)

I knew I was coming from a sound psychological base of knowledge; however, I was not confident that I should be joining the resistance so completely. My fear is that my counseling strategies are too unconventional for a public school system and I think this would qualify. Based on the creative therapy work of Dr. Keeney (2009), I decided to go where I needed to with this student. Keeney once told me that he was asked to see a patient at a nearby mental institution who kept saying that he was Jesus. Keeney observed the patient standing with his right arm bent to a 90 degree angle making back and forth movements. Keeney gave the man a saw and some wood and over time the man became quite good at building all kinds of furniture and was later released.

We agreed that the blood bank idea was too risky. I then asked Student 10 what she liked so much about the vampires in the novels. She began to list the following: “They are: strong, smart, loving (for the most part), sexy, compassionate, and the good ones at least act like family.”

“You know what? You are strong, smart, loving, sexy compassionate and although you may not have a good family situation, you try very hard to be family to your friends and to people in our group,” I said. “But you know, the vampires in Twilight don’t harm themselves, do they?”

She hesitated then said, “No, I guess not.”
“And how angry was Edward when he found out that Bella tried to end her life?” I asked.

“Really angry.”

“Ok then. I suggest that we remain vampires but figure out another way to get sustenance.”

I then took down my bottle of True Blood. True Blood is a television series which takes place in present day Louisiana where vampires have “come out of the closet” thanks to a synthetic blood called “True Blood.” This relieves them of the need to rob blood banks, or worse, feed on humans. HBO cleverly has marketed the True Blood product as a red-colored, blood orange soda which can be mixed with various liquors. Student 10 watched the series religiously and mentioned she had noticed my bottle sitting on my bookshelf. I asked her what was the one thing humans could not live without, and she answered water. I then suggested that we become water vampires, but our water would be mixed with a wee bit of True Blood, which I would give to her for safe keeping and which she would add a drop to one glass of water daily to keep her satiated. She thought this was the coolest idea ever. I also asked if we should have a water vampire ceremony and suggested that she bring a friend to the ceremony. We set the date.

At the appointed time Student 10 and Student 3P, her friend who was from Control Group A, arrived. I had a black choir robe on and a silvery, feathered Mardi Gras mask over my eyes with my magic wand in hand. We had cups of water with some True Blood mixed in ready to be consumed. I asked the girls again what the positive qualities of the vampires in Twilight were and as they said them I touched my wand to their crown chakras and said, “You are strong,” or whatever the positive attribute was,
then I made them repeat what I said but using “I.” After we did this I made them vow that water vampires never hurt anyone, especially themselves. We toasted the vow with our water and True Blood and swore to keep this a secret. I asked the girls if they wanted to shake. Student 10 nodded her head eagerly and told Student 3P that this is what she did in her group. Student 3P raised her eyebrows and looked hesitant, but agreed to try. We took each other’s hands and began to sway and shake our bodies, then began to make moaning and howling sounds. They were laughing and moaning and we began to jump. Both girls seemed alive and were having fun. Student 10 who had been reluctant to participate in the autokinesis in the group setting was fully participating. We finally simmered down, the girls still laughing and then they left with big smiles on their faces. We now show the “V” sign when we see each other.

As far as I know, Student 10 has stopped cutting and has seemed to grow out of her vampire phase. The principal asked how I handled Student 10 and I told him. He hoped that this would not show up in the “Times” but was grateful that Student 10 seemed better. Although there is no empirical proof, I think Student 10’s exposure to the autokinesis helped her trust me with her fantasy of being a vampire. I also think that exposure to this kind of energetic movement allowed me to enter her fantasy and help her guide it to a safe conclusion. I believe that this is what autokinetics has done for me as well. Five years ago, I would have simply referred her to a therapist who dealt with process addictions, but autokinesis has opened up my receptivity to play and creativity, which has in turn helped this student.

Creativity encourages inspired presence rather than stale imitation. It embraces the process of developing something new, uncommon, and unique. Not simply
“new for new’s sake,” but tailor-made both to fit and help liberate the immediate circumstances. Rather than replicating or reproducing a template to be hammered into every clinical session, creative therapy custom-builds a therapeutic encounter as the occasion calls it forth. Respecting the authenticity of each moment, it brings about original clinical work. (Keeney, 2009, p. 2)

Student 10’s desire to be a vampire expressed her need for nourishment which she was not getting from her parents, boyfriend, or friends. She was trying to nourish herself through drinking her own blood, a destructive act yet a metaphor for an intense desire to be able to nourish herself instead of relying on outsiders to do this. Unfortunately, this healthy desire was expressed in an unhealthy way by cutting herself. Cutters cut because of the need to balance strong emotions (Strong, 1998), so in a very dysfunctional way they are trying to reach a state of homeostasis. I believe this is what Student 10 was also trying to do but she placed this within the context of the fantasy of vampirism. By replacing a negative behavior (cutting, drinking her own blood) with a positive behavior (no cutting, but drinking TrueBlood) and nourishing herself with positive statements about who she truly is (strong, smart, loving) she was able to come to homeostasis on her own and begin to learn to rely on her strengths. Sometimes as adults it is hard to remember that the teens we work with are still children in many ways. They enjoy stories, metaphors, and fantasies. When I introduced autokinesis to the students I put it within the context of ancient Japan and the Samurai which I believed gave them a reason to participate. I built a fantasy within which they could explore themselves and others and be bound together by movement and energy.
“The Cup of Self-Esteem”

Student 8 was a sophomore boy who was part of Experimental Group A. Tall and thin with glasses, he sported two small horns that protruded from just below his lower lip, among other piercings. He was usually quiet in group but when he spoke, he spoke from a place of honesty and truth that often stunned this particular rambunctious group into silence. He frequently spoke in a soft voice about his father abandoning the family and feeling lonely. He participated in the movement without any complaining or embarrassment. One day about a week after the group ended I received a request to see him. When he appeared at my door, he was in tears. I had never seen him upset at all.

“What’s wrong?” I asked with much concern.

“My girlfriend broke up with me. She said that she needed some space,” he said sobbing. In my experience in working with teens, the “needing some space” was a clue that she might simply want to be rid of him. He told me his tale of woe: that she had cheated on him in the past and they had broken up numerous times before but he felt that this was REALLY it.

“It sounds to me like she didn’t treat you so well,” I said trying to be supportive.

“She hasn’t really, but she also makes me feel really good about myself when things are going well.”

“I didn’t realize that you felt bad about yourself,” I said with surprise.

“Oh yes. I have no self-esteem; but when I’m with her, I feel confident like I can do anything.”

I explained that actually his self-esteem had nothing to do with her, but rather that it was something inside himself and that his girlfriend recognized his strengths and
reflected them back to him. “She has uncovered your gifts!” I told him. I suggested that if he were to ever get back with his girlfriend, or any girl for that matter, that he not hand over his self-esteem. He gave me a puzzled look, so I took a red plastic cup out of my file drawer and wrote on the cup, “My Self-Esteem” and handed it to him. I said, “Let’s make believe that this is your self-esteem. Now, let’s say that I’m your friend, girlfriend, parent, whomever, and you hand me your cup of self-esteem to take care of and cherish.” He handed me the cup. “I have two options here: I can cherish your self-esteem and protect it or I can . . .” At this point I crushed the cup. “I can crush your self-esteem and hurt you deeply.”

Student 8’s eyes widened signaling that he got the message. I emphasized that his girlfriend helped him become aware of what a productive and confident young man he really was and that he needed to nurture that himself. I even dared to tell him that his girlfriend was giving him the gift of freedom to explore growing his self-esteem on his own. He had never thought of it that way. I suggested that we plant a small plant together that he could nurture and while the plant flourished, so would his self-esteem. He agreed and brought in some seeds and we planted. Subsequently, he stopped by to say that he and his girlfriend were back together and he was trying very hard not to give her his cup of self-esteem.

As with Student 10, I believe that being exposed to the movement and the energy surrounding it, allowed him to feel free to open up to me and to take such “crazy” advice about handling what seemed to him a devastation. Interestingly, I saw two students from the control groups for different reasons and when I tried to take them down a more creative path to a solution, they were more reluctant or simply did not want to go there
and asked for more concrete “advice.” I regret that I allotted such a short amount of time to the movement in group. I think if the students moved more there might have been more significant results in their overall attitudes about themselves and perhaps improved school performance.
CHAPTER V
CONCLUSIONS AND IMPLICATIONS

A Case for More Research

The purpose of this study was to investigate whether the practice of autokinesis would increase the self-concept, school connectedness, perception of academic performance and Grade Point Average (GPA) in at-risk high school students. Based on my research and analysis, the data suggest that there was no significant difference between the experimental group of the students who engaged in autokinesis during the group sessions and the control group who did not participate in autokinesis during their group sessions. Upon further investigation of the data, however, the students who did engage in autokinesis had a mean increase in GPA, and although both groups had a mean increase in discipline referrals, the experimental group had less of an increase than the control group. Additionally, on an individual basis, approximately 50% of the students who practiced autokinesis did have an increase in their overall self-concept scores. From a qualitative perspective, many of the students became more self-reflective and open to change in themselves and in their lives. They were as I perceived, “shaken” up.

Data Observations

Although there was no statistically significant difference between the experimental group and the control group, there were positive increases in some of the values that merits further study. Additionally, 50% of the students in the experimental group increased their total self-concept scores from 4-26 points and some by much less or
not at all (see Appendix F for data tables). Overall, half of the students in the experimental group increased their total self-concept scores as compared to a third in the control group.

Student 2, who was in the experimental group, increased in the following domains: social (20 points), affect (38 points), family (53 points), and total (24 points). Interestingly, student 2 was an English as a Second Language (ESL) student who had come from Poland when she was in the 8th grade. She willingly participated in the autokinetics portions of the group and although she often did not speak much in group, when she contributed, she did so thoughtfully and with insight. She talked of having a close relationship with her family and disclosed to the group that she was dating an African American boy who had been harassed by the local police numerous times because of his color and because “he was from Trenton.” The group was accepting of the interracial romance and was supportive of the student’s disappointment with the local police stating that the students too, even though they are white, have been victims of harassment. Perhaps the support she received, coupled with the movement which did not embarrass her, contributed to the increase in her self-esteem.

Student 3, a junior who was also in the experimental group, increased his total self-concept score by 4, but more interestingly, his academic self-concept increased by 9 and his competence by 8. Student 3 is a young man whose parents had him late in life. Although he has siblings, he considers himself an only child as his siblings are in their 30s. His parents travel often and spend little time with him, leaving him to his own devices, which include much drinking and pot smoking, all of which he disclosed during
group. He gently participated in the autokinetics and would quietly encourage others to do so as well.

Another student in the experimental group, student 10, was the girl who believed she was a vampire, had a 6 point increase on her total self-concept score, an 8 point increase on her family score, and a 2 point increase on both her academic and competency scores. This girl has disclosed to me that she yearns for more closeness with her mother who seems to ignore her in favor of her stepfather. She has had a string of multiple boyfriends, but her true love resides in Pennsylvania. She has mentioned that she will marry him when she is of age because she loves him, but also because her parents hate him. Evidently there has been a long-standing family feud between his and her families for generations. I was pleased to see that her total score and family scores increased.

Student 11 from the experimental group increased in all the domains except affect. She is a sophomore who appears bubbly and who wants to please. Her highest increase was in the domain of competence. The group often challenged her when she put herself down by calling herself stupid. She talked quite a bit in group but I felt did so out of nervousness and the desire to be liked. She had a run-in with another student in the group because they were gossiping about each other and she handled it maturely by apologizing and promising to not gossip again. The other girl left group, refusing to work out her own issues about gossiping and revealing secrets about others. Student 11 participated in the autokinetics with gusto, often cajoling others into doing it. She considers herself a risk-taker which was supported by her trip to Kenya this past summer.
Experimental group student 13 was the Korean sophomore boy who had been expelled the prior year for distributing marijuana on campus. His scores improved greatly. There was a 21 point improvement on his overall self-concept score, a 20 point improvement on his social score, a 12 point improvement on his competency score, an 18 point improvement on his affect score, a 9 point improvement on his academic score, a 15 point improvement on his family score, and an 11 point improvement on his physical score. I am not surprised as he was very open with the group and became more trusting as time went on because he was fully supported in all he talked about and the hobbies he engaged in such as crocheting. He was the only boy in a group of all girls and seemed to enjoy the support, attention, and encouragement that they gave him. He was very serious about the autokinetics and would often go into a deep trance while moving. I think he may have felt particularly connected to this movement because the type of movement we were doing had its roots in Seiki Jutsu, which is the Japanese version of the Bushmen movement. He had often expressed that he felt isolated in the school because of his ethnicity and, although the movement practice was from Japan, it is an Asian practice and may have served as an oasis for him.

Experimental group student 15’s self-concept score increased 10 points. The only other domains where there was a slight increase (2 points) were the academic and affect scores. The increase in her self-concept score came as a big surprise to me because she continually talked about fat she was. Student 15 was a female sophomore student who was also expelled for drug distribution the year before. She was part of the same drug ring as student 13. She was tall with long, blonde hair and could have actually become a model. Despite her appearance her self-image was poor as she always complained to the
group that she was physically unattractive. Whenever she stated this, the girls in the
group, like a Greek chorus would recite, “You’re not fat! You’re beautiful. Look at me,
I’m fat!” This chant landed on deaf ears until student 13, the Korean boy, said it with
strong intent, “You are beautiful, not fat and could be a model.” This silenced the chatter
and student 15 truly listened to him.

When reviewing the tapes of the experimental groups, student 15 was not a
vigorous participant, but did tap and sway her feet in time with the music. However, her
body language demonstrated a guarded stance and she often kept her large handbag on
her lap as if protecting herself. Her pre- and post-survey physical score remained the
same. I was pleased to see the score did not decline.

Student 17, also in the experimental group, was a tall, slender sophomore girl
whose total self-concept score increased by 26 points. She told the group that her mother
had her at 16 and that her mother was still with her father but they were unmarried. Both
parents were employed and did not seem to spend much time with the student. She is a
big advocate of birth control and openly discussed her sex partners and the fact that she
used birth control all of the time and asked me if I could work with her to create a club
that would promote safe sex habits. She made it clear that although she was sexually
active, she did not want to follow in her mother’s footsteps. Student 17 also actively
engaged in the autokinesis by swaying to the music with her eyes closed. When the
group stood and held hands, she would not only move her own body by swaying her arms
forward and back, but by also moving from side to side to try to engage the students on
either side of her.
Overall, although there was no statistical significance between the control and experimental groups, there were individual gains among students in the experimental group in their self-concept scores. More importantly though, the video tapes showed that the students in the experimental groups seemed to develop an openness and ease with their bodies that was not evident in the control groups. This was something that was not evident to me while being a participant/observer in the groups, but became clear after reviewing the video tapes.

Recommendations for Further Study

The results of the study provide a view into how autokinesis has the potential to positively impact the self-esteem and school connectedness of at-risk high school students. This initial research study provides a foundation for additional studies that can provide insights into using autokinesis and other movement forms integrated with group counseling. The design of this study can be replicated in a similar environments such as, location, population demographics and size, would reveal similar or contrasting results. Another factor for consideration in future studies would be to involve a more heterogeneous student population that included at-risk students and students who are considered not at-risk. An additional recommendation is to gradually increase the time, during the group session, that is devoted to the autokinetics from five minutes to at least 10 to 15 minutes to allow students to fully engage in the movement. Keeney (1998), suggests that one needs to practice autokinetics for at least 10 minutes daily to have an impact. Although the groups barely completed five minutes, there was still a positive impact and I can only wonder how much more these students would improve if they were to practice a minimum of 10 minutes daily. This, however, is a big challenge in a high
school with an at-risk population, as they tend to resist any type of homework even if it is considered fun.

My sample size was too small to make the results generalizable; therefore, I suggest that if the research study is duplicated, it should include a larger sample that includes more than 30 subjects for each group. I was constrained by the population size of the school, the limited amount of time to facilitate groups, and the number of students, initially eligible for the study, who chose not to join the research groups.

Additionally, I was hesitant to lead the experimental groups into a fully engaged shaking experience, similar to those I have experienced. I was constantly aware of all that could go wrong if I let the shaking expand, which may have contributed to curtailing the students’ ability to fully engage in the autokinetic movement. Shaking can sometimes cause a complete loss of control which is both liberating and terrifying. It allows deep seated emotions to be expressed which can cause screaming, moaning, speaking in tongues, weeping, and writhing among other expressions. Although within the context of a “shaking” weekend where everyone is dedicated to the work and participants are only interacting with other participants exploring a spiritual and emotional release, this type of behavior is not only accepted but encouraged. Within the walls of a public school, it would be neither accepted nor encouraged. This is why I limited the experience of the shaking so as not to encourage students to go deeply into an ecstatic event. I was cautious with increasing the intensity of the shaking because I was grateful to have had the full support of the superintendent and the building principal to implement this innovative study in such a conservative town, and I did not want to jeopardize any future opportunities to introduce another “out-of-the-box” study.
As a result of this study, the counselors at Happy High School have begun to facilitate more group sessions. One counselor created a new student group which evolved into a peer support group. Two of my other counselors ran senior transition groups – one for special education students and general education students planning to go to community college, and one for those same populations who will be attending four year colleges and universities. Additionally another counselor conducted a peer group with her seniors and juniors and then took two of the senior group members to lead a group for at-risk 8th graders at the middle school. During the 2010-2011 school year, all of the counselors will be facilitating groups and the principal will be conducting a grief group. I will continue to facilitate one of the study’s control groups during the 2010-2011 school year, which will be co-facilitated by the district’s business administrator.

Although I have not been successful incorporating movement into classrooms, I feel that those who had knowledge of my research were inspired to try some of their own. The director of the school district’s Special Services is sending one of her child study team members to get training in Mindful Meditation. She will run a combined group of special and general education students in which she teaches them mindful meditation techniques. I suggested to her that she evaluate the effectiveness of the program by setting goals, then using pre- and post- survey instruments to see what impact occurred with the students as a result of the program. I feel that my research will lead to an increased number of innovative counseling strategies that involve movement both in the building and hopefully district-wide.

Finally, all this shaking has truly been about the use of energy in shifting people’s emotions and behaviors. I feel that I have accomplished this with my students, my staff,
and that my research will have a gradual impact on the students, faculty and programs in
the school. My journey as a leader has paralleled the journey of my students. We have
all become more self-reflective, we have learned to incorporate play and fantasy in our
day-to-day existence, and we have learned how we are connected to each other in an
energetic way.

Although my students might not be able to articulate how they feel or the changes
they have experienced, I believe after having participated in the group process, they can
feel it. This feeling of connectedness has become a “knowing” rather than a cognitive
concept. I hope that this study inspires other counselors and school leaders to explore
more non-traditional ways of helping students cope with the challenges they face within
themselves, each other, and life in general.
CHAPTER V

LEADERSHIP PLATFORM

In this chapter I discuss my leadership philosophy which is integral to the study I completed with the students at Happy High School. I have created my own leadership style called “Quantum Leadership,” which is based on the theoretical physics that Wheatley (1999) discusses within the context of leadership, and on the resonance principals of Goleman et al. (2002). This leadership style and the beliefs inherent within it not only informed the direction of my study, but contributed to my daily interactions with staff and students at Happy High School. My belief is that a leader can affect an individual’s or group’s performance energetically, or vibrationally, such as when a leader is optimistic often the staff will reflect that optimism. Conversely, a leader who is negative or consistently angry will have a staff who reflects that as well (Goleman, 2002).

The quantum leadership style that I espouse was the basis of my research planning. Because I believe that people can affect each other on a sub-atomic level, I wanted to explore how the movement and the subsequent vibration which that movement caused could affect a group of at-risk adolescents. I specifically chose to use the movement of Seiki Jutsu with my students because of its history in spiritual, mental, and physical healing rather than simply a random set of movements.

My leadership platform is clearly something that I have crafted as an ideal, and is the type of leader that I am striving to be. However, while implementing the research study, it became clear to me that my day-to-day style was more directional than quantum.
While doing the research, I felt compelled to force the research to follow certain protocols for the sake of a “pure” research design rather than what was best for my students in the moment. The students pointed out that my espoused belief was that the group session was “their group,” and that the content should be dictated by them. Because I felt there was no depth to the experience (the students were talking about trivial matters such as the movies they saw the prior weekend and the dresses they were planning to buy for the prom), I intruded on the process, demanding that the students reach deeper into their feelings and their daily experiences and struggles. The level of trust between the students and me gave me immediate feedback about my leadership style and pointed out the contradiction in what I had promised and how I was conducting the group session.

This experience gave me reason to pause and examine how I was interacting with my counseling staff. It became clear to me that although I do strive to be a “quantum leader” there is much personal leadership work to be done. My goal is to be less directional and more collaborative. I realized that my time spent working at a financial services firm formed my directional style, which is a masculine style of management. However, by practicing the art of collaboration, a more relational, feminine form of management, it is much closer to the quantum leader ideal that I hold so dear.

Finally, while analyzing the data, video, journals, and post-discussions with the students, I continually reflected on how my feelings, state of mind, and body language may have affected the group performance. I noted in some of my journal entries that I was frustrated or feeling off and happened to note that the groups that day were not as successful as I would have liked. Upon reflection, it was clear that my definition of
“successful” may have been different than the students, as they were not concerned about success or failure within the group setting, but rather whether their time spent talking to each other was meaningful, the definition of which was specific to each individual. Although I had read a lot about quantum physics and how expectation and intention can affect the outcome of quarks, it still surprised me that I could do that to a group of students. In the experiments with quarks, the experimenter’s intention of expecting to see the quark appear as a wave or a particle influenced how the quark appeared. If the experimenter expected to see a wave, then the wave appeared. If the experimenter expected to see a particle than a particle appeared. This again forced me to look at how I was feeling about the adults in my environment and encouraged me to change my feelings and thoughts towards people – another characteristic of the quantum leader – because my intention would most certainly have an effect on them. I needed to become aware of any negative thoughts or feelings I had towards people I was interacting with and change those thoughts and feelings to positive ones.

Please note that I have used the pronouns he and his throughout my leadership discussion. I use these pronouns for simplicity’s sake so as to avoid the awkwardness of using he/she or his/her.

Leadership Platform

My definition of a leader is a person who has spent most of his lifetime becoming self-aware and in that process has uncovered many of the blind spots that prevent leaders from being effective. Leadership is not meant for personal gain, but rather as a vehicle to serve individuals and communities and to set a steady example in the face of ethical and moral ambiguity. Leadership embodies creativity, sensitivity, empathy, goal-setting, and
goal completion. It becomes a reciprocal, transformative relationship with those who follow, so by the end of the experience both leaders and followers have grown and can function within a more fluid context where the usual hierarchical nature of the relationship is transformed into a unified entity which draws upon the strengths of all who are collaborating.

A leader is committed to change, not for the sake of change, but because he recognizes that his environment is not static that he must continue to learn which will move him and the organization forward. A leader must be able to lead a team of people and “set the tone for a focus on results” (Lencioni, 2002, p. 219). However, whatever changes the leader is contemplating, he must be sensitive to where his staff fall on the personal and career continuum and must make adjustments to motivate, nurture, and meet his staff where they are, or they will certainly have no investment in the change or ideas he is proposing (Evans, 1996).

A leader needs to temper his desire to quickly change a culture and improve it with the realization that many people live in fear and prefer stasis. A leader recognizes these obstacles and will try to unfreeze and neutralize these obstacles by providing the necessary psychological and educational nourishment to move his staff along (Schein, 1995). This is my definition of a leader.

My Core Values

My core values embody integrity, honesty, fairness, and a strong desire to make the right decision, no matter how alone I may stand. My subordinates come first and I make decisions based on what will help them grow and be more productive. Everyone in a work setting has gifts, some realized, others still hidden, and it is my job to recognize
and utilize their gifts, helping them uncover their hidden potential. One of my counselors had asked to do more counseling instead of paperwork, but continually shied away from students who really needed the counseling, claiming that they needed “therapy” which was beyond her scope of practice. After a while, it occurred to me that she did not think she could do “real” counseling. I watched her time and again work with students and it was clear that she was able to gain their trust, which allowed the students to share very personal situations with her. I pointed out to her that she had a talent for getting kids to disclose very private information, and that she knows exactly what to say to them. After our talk she agreed to run a group next year, even though she admitted that she did not really know how although she had taken one course in graduate school. She revealed that during her internship, which was at the school we both work in, she never had the opportunity to run a group and she was fearful that she would not know what to say if a student began to reveal too much. I promised her that I would provide professional development and that she would co-facilitate with a counselor who has already run a group.

I can make decisions and will stand by them. If my decisions are wrong, I will take the blame. For example, this year a counselor brought to my attention a new software program that could automate how we deliver mid-year reports to colleges. The process was a complete disaster and she became very angry about it. When we talked, she said that she felt it was her fault for suggesting it. I pointed out that I made the decision to go ahead and implement the software but neglected to prepare a process and that it was not her responsibility to fulfill that task. Other administrators were openly critical of the “disaster” and I told them that I made the decision, and that when any new
software is implemented, there are always problems. I try to model the professionalism I expect of my subordinates such as getting in the trenches with them to complete a task so they know I will never ask them to do something I would not. I did this during the mid-year debacle by stuffing envelopes and staying past 10:00 p.m. to get the job done alongside my secretaries. I have also demonstrated this with proctoring exams. Although I do not have time to do this because I am a K-12 supervisor, I feel it is important to show my staff that I am right there with them to help get the job done.

Lastly, I am direct with my subordinates and give them honest feedback with specific examples so that we are clear. This is often uncomfortable for us, but I feel it is necessary. I had one discussion with a subordinate to whom I told that he was not giving 100% effort in the job. He took offense and said that no one in his 16 years of counseling had ever said that to him. When I pointed out that he sneaks in late every day, and through the back door so he will not be caught by the principal, he smiled and said, “You got me on that one.” I think in the end, after I had articulated what I saw as not giving 100%, he understood and although did not like what he heard, he appreciated my candor. He also made great efforts to change his behavior such as coming in on time and volunteering to help out which he had not done before.

Leadership Theories That Inform My Practice

I appear to others to be a situational leader, remaining as Hersey and Blanchard (1995) state, “.... sensitive to the follower’s level of readiness. As personal problems arise, new tasks are assigned, or new goals are established, the level of readiness may change” (p. 207). This means using the appropriate leadership style to fit a situation. However, that is only the output, the surface. At my core I am a quantum leader. A
quantum leader sees an organization as a “more fluid, organic structure, boundary less and seamless . . .” (Wheatley, 1999, p. 14). I do not see the organization as a Newtonian mechanism, but rather as a living organism. Like Fullan (2005), I see change coming from a systemic shift happening simultaneously throughout the organization and once that shift is realized, there is true sustainability. As a quantum leader, I understand that systems are affected on the level that cannot be seen. The visible is simply the result of a change on a very deep level. This is similar when there is a personal change. Although a person may cognitively wish to change, until there is an emotional understanding and shift, the change will not be permanent. As Wheatley (1999) states:

In the quantum world, relationship is the key determiner of everything. Subatomic particles come into form and are observed only as they are in relationship to something else. They do not exist as independent “things.” There are no basic ‘building blocks.’ . . . These unseen connections between what were previously thought to be separate entities are the fundamental ingredient of all creation. (p. 11)

A school is an organization of relationships – students, teachers, parents, administrators. And, although they seem like separate, independent entities, when they come together in the context of a school, they are all interrelated, affecting each other on many different levels. What prevents a school from functioning as a cohesive unit, is the members’ perceptions of being discrete, unconnected units. This not only effects the staff, but has a profound effect on the students, often making them feel disconnected from the school. To change this in my district, I’ve instituted a program called “Challenge Day” to dispel the illusion of isolation. The program brings adults in the school together with students
to develop a very deep emotional bond which ultimately reveals that not only are we connected, but affect each other deeply without being aware of it.

Figure 1 describes the type of leader I am and the theories which inform my leadership style. My fundamental belief is in a quantum approach to leadership which to recognizes the basic human connections which may be obscured on the surface. This leads to Goleman et al.’s (2002) theory of resonant leadership in which they discuss the “open-loop nature of our limbic system, our emotional centers . . . in other words, we rely on connections with other people for our own emotional stability” (p. 6). They go on to say that, “. . . our emotions automatically shift into the register of the person we’re with. The open-loop design of the limbic system means that the other people can change our very physiology and so our emotions” (p. 7). We are connected on a subatomic level that can be influenced by others. Just recently, the supervisor of English commented that when she walked into my department she said she felt a definite “difference in the energy of the place,” saying it was much lighter than a few days before. I explained that our state and Advanced Placement testing was completed and in fact the department did feel much lighter.

This has been borne out by the work of Dr. Masaru Emoto’s (2004) water studies. He took samples of water and labeled them with negative phrases, such as “stupid,” “I hate you,” “I hope you die.” He took other water samples and labeled them with positive phrases, such as “I love you,” “You are beautiful,” “You are peaceful.” He then froze all the samples. What he discovered was that the ice crystals that formed in the “negative” water were deformed, whereas the crystals formed in the water that received positive phrases were beautiful as they should be. Since we are made up of up to 78% liquid, a
negative thought or suggestion towards another can have negative consequences and can undermine any systemic change that a leader is working toward; however, the opposite is also true. If a leader can work to move the energy in a certain direction, then once there is a critical mass, the system will change. When the English supervisor left the department, I realized that I was setting the tone of the office by being frustrated and angry about having to administer all of these tests. Once it was over, my mood lifted and this mood change was reflected by my staff.

As Figure 1 shows, my resonant leadership naturally leads to Transformational Leadership (Burns, 2003). Again, this type of leadership’s primary focus is relationships—building them, sustaining them and growing them. It is my duty to help my staff grow and change so they can reach their highest personal and professional potential, part of which is their realizing the basic connections between themselves and others. My core quantum style manifests into a transformational leadership style, which then leads to a situational leadership style, which can appear as transactional, charismatic, or servant. As the name implies, my leadership response relies heavily on the situation and my feelings about the situation, thereby giving my staff what they need at any given moment. I change my approach to fit the circumstances, but always hold to my core belief, which is Quantum Leadership, knowing that I am affecting people on a deep level through my intentions and feelings.
Figure 1. Quantum Leadership Theory Diagram

Fullan’s (2005) book sparked the idea of fitting quantum mechanics into a systemic approach to leadership. I see the validity of his approach to affecting all levels in a systemic change to reach sustainability, but he does not take into account the messiness or chaos of such a shift. He relies on a linear approach, which is a male, mechanistic approach to leadership.
Role of Leaders

I feel that the role of a leader is both exoteric and esoteric. The exoteric role is to accomplish and realize a vision for an organization, meet goals and move an organization forward. The esoteric role of a leader is to be a transformational catalyst for individuals in the organization. Being a situational leader, I am comfortable moving into the role of a transactional leader or a transformational leader. I am a transformational leader first and transactional leader second. Through solid relationships with staff and administrators the most impossible jobs can be achieved and if one sets high expectations for others, miracles can happen. Tasks need to be completed during the day and my staff knows that and does so accordingly, but tasks without relationship are dead, unfulfilling, and empty; whereas tasks infused with personal meaning or institutional meaning transmitted through relationships become alive and gifts of transformation. My job is to create the potential for that transformative experience for my staff, through provoking them to be self-reflective. The staff who do not want any type of self-actualization will fall away and find a leadership style that resonates with them, or will begin to change and grow subtly because to do otherwise leads to personal and professional stagnation. Whatever the staff member chooses will force a change that is necessary to survive. It is really evolution playing out on a personal level.

Role of the Follower

I perceive the role of my followers as fluid. At times they will lead me, or at least that is what I expect, and at other times I will be leading them. We are two halves of a whole system that must work in unison, learning from each other and improving each other in order to achieve our maximum potential as a team. A leader cannot lead without
followers. I expect my followers to challenge me when they feel I am wrong and to expect me to listen to them; however, they also need to execute a decision I have made once the input and discussion has ended. I expect them to hold me accountable as I will hold them. I expect them to function as a team and challenge the group when “groupthink” begins to invade. I expect my staff to begin to embrace change to question all processes and procedures and to demonstrate creativity and suggest new approaches so that the department never becomes stagnant and ineffective. They are responsible for being co-creators in designing the vision, mission, goals, and objectives of the department and fulfilling them.

Experiences That Inform My Leadership Platform

Having worked in the private sector for many years and in public education, I reported to managers whose style was transactional. Management was top-down and followers were held responsible for projects mandated by the “boss” with no resources to fulfill the task. If the task was not fulfilled, the followers were held responsible anyway. This environment both in education and the private sector engendered fear, resentment, and detachment from the organization. It was a dysfunctional system.

When I left the private sector to return to education, I anticipated a similar approach; however, the principal of the school where I was counseling was truly a transformative leader, who cared about her staff. She developed them and nudged them to fulfill their potential. The opportunities for creativity abounded. Her leadership made it possible for me to see that there was an alternative to top-down management. At that point in my life I was ready to accept and respond to that type of leadership style because of my self-growth over the years and the experiences that I had had in my personal life.
The experiences that have informed my leadership platform have been in my most recent position as District Counseling Supervisor. Although I had been in management before, I had never managed a department where I had little if any control over the firing of people. In the private sector, it is often taken for granted that one will bring in new “loyal” employees when taking over a department. While working at Merrill Lynch I had the opportunity to hand pick my staff because I was creating a new department, which was not the case when I became supervisor of counseling. I was replacing a woman who had been there for 15 years and was retiring. At the same time as I was taking on the new position, I was beginning the doctoral program and was learning about the different leadership styles. I realized that because of my training at Merrill Lynch, which was highly competitive and bottom-line oriented, there was little time for coddling employees, asking how they felt about an initiative, or really caring about how they felt. If they performed, they received a substantial bonus; if they did not, they did not receive a one. This is truly transactional. Wren (1995) defines it as focusing on an exchange between the leader and the subordinate. The atmosphere bred transactional managers of which I was one, though not necessarily by choice, but because I needed to survive in that type of culture. I tried using that style in my department, which was a huge mistake. Not only did I use a transactional style, but I was also a pacesetter, which I learned can burn out employees of even the most functional departments.

Because I could not motivate my staff with more money, the “transactions” translated into being flexible with the counselors’ comings and goings in exchange for them doing two night programs for parents which was not in their contract to do. It met my goals but I felt empty and it was not working on many levels. I was desperate to try
something that would work when I learned about Burns’ (2003) transformational leadership, which is defined by Burns (1995) as,

. . . when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. Their purposes which might have started out as separate but related, as in the case of transactional leadership, become fused. (p. 101)

I thought I might try to become that type of leader. That struck me as a much better way of leading and would remedy the emptiness I was feeling from the transactional model. What I was not prepared for when I started to implement a transformational management style on my staff was their cynicism and indifference. I had not yet hit the leadership style that would make our group gel, or perhaps they were sensing my shotgun approach which reeked of inauthenticity. Because I had been a transactional leader for so long, it was hard to cultivate another style.

I had read Goleman et al.’s Primal Leadership (2002) years ago and found it much richer on the second read, probably because I was desperate to find the right leadership style for the group. What struck me on this reading was their discussion about resonance and how we can affect each other on a vibratory level. They were speaking my language since I had been steeped in studying energy work along with the layman’s understanding of quantum physics. I tried setting my intentions for the department and setting a positive resonance, but became too overwhelmed with the negative tone of my staff and my own insecurities as a leader at sea. In theory and in my practice as an energy worker, I knew this could be transformational for my staff, but I was not there yet as a leader. I also expected changes to happen immediately or sooner which were more
echoes from my time at Merrill Lynch, but most organizations and departments do not change quickly, especially education.

I use Nadler and Tushman’s (1995) definition of a charismatic leader to describe myself. They define a charismatic leader as one who is:

Envisioning: articulating a compelling vision; setting high expectations; modeling consistent behavior.

Energizing: demonstrating personal excitement, expressing personal confidence, seeking, finding and using success.

Enabling: expressing personal power, empathizing, expressing confidence in people (p. 109)

This style of leadership has helped me accomplish tasks in any job I have had. While I was a counselor at my previous school I was able to use this type of charisma to convince the math supervisor that we should group students by learning style instead of inability to do math, which led to us getting a grant and actually grouping them as I suggested.

Having met with success with this style, I thought it might be a better fit for me to use with my staff. It failed. I think it failed because I was not being authentic with them. I did not know what they wanted or expected and did not realize that they were still mourning the loss of their previous supervisor who was completely different from me. I had just come into the job, and the last thing they wanted was enthusiasm and ideas.

I was complaining about my staff when a colleague suggested that I try to become a servant leader (Greenleaf, 1995). I did not think I would be able to do it. I did not have it in me to ask my staff what they needed and wanted, when I knew where the department should be going. I was in charge and I needed my staff to know that. Up until this point,
my natural and emotional intelligence were thrown out the window until I had a crisis in my department. One of my counselors was spewing all sorts of venom at me and I listened and decided I was going to quit. I spoke to my colleague about the issue I was having and the frustration I was feeling and she said,

“Have you tried being a servant leader yet?”

“To those nasty people? Are you crazy?”

“Just try it. That’s what I did the first year I was here and it worked. Ask them how you can help them.”

I licked my wounds for a few days, then tried it. What I found is that they just wanted to be heard and helped and they wanted to feel that I cared. I realized that until that point, I was putting a lot of energy into relationship building with administrators, parents, and teachers, and was neglecting the emotional needs of my staff. This went against my grain as I have always felt work is work, so just get in there and do it. But, for my staff, work was an extension of their families, so I had to make adjustments like popping into their offices daily to ask how they were doing; bringing in baked goods every now and then; hosting lunches. Implementing this style of leadership was very difficult for me. It forced me to humble myself which was a good lesson and one that is in line with all the spiritual practices I have adopted.

As a result of using the servant leadership style, I have been building more trust with my employees. It also led me back to Goleman et al.’s (2002) resonant theory and helped me to evolve my quantum leadership style. As a result I am now able to use different styles when the situation calls for them. I have become a more authentic leader,
switching styles to meet the challenges of the moment. I have given up trying to use “theories” which I had done at the beginning of my tenure and which failed miserably.

Now that I am more comfortable in my administrator’s skin, I try to emulate aspects of my previous principal. I am fortunate that my current principal is similar to my old principal in that he is a caring person and puts the needs of students and his staff above all else. He supports me in my leadership efforts to transform my department into one which is more student focused and less concerned with strict deadlines and paperwork.

The Role of Reflective Practice and Continuous Learning

The role of reflective practice and continuous learning are paramount for me and for the people I lead. I am a life-long learner and feel that everything I experience I can draw on one day to solve a challenge. It is paramount for educators to be life-long learners not only for themselves, but to model this thirst for knowledge for their students. As a leader it is important for me to self-assess my leadership through the examination of learning points within every situation. By doing this self-reflection I am sure to enhance my leadership skills. Self-reflection will also help me in identifying my learning needs and developing action plans in response to those needs, thereby putting the responsibility for professional development into my hands, rather than the district’s. Through the self-reflective process, I will be able to modify my current practices in response to the learning that I have undertaken. A good example of this is developing my leadership style by going from a transactional leader to a situational leader. I did this by reflecting on what was not working while learning about different styles through the doctoral program.
What is also important to me is that reflective practice has the potential to validate my values and allows me to recognize my strengths and skills which can be applied in other situations. It can go a long way in improving my professional judgment by helping me to learn from my successes and mistakes.

Schön (1983) writes about reflection-in-action where one reflects while the situation is going on and also reflection-on-action where one reflects on the situation after it is over. Both are important to cultivate and use on the job. Reflection-in-action might be harder, but if mastered, it is very useful in giving me an opportunity to avoid costly mistakes by being present and in touch with my emotions. However, reflection-on-action is helpful to me in order to understand what transpired and could be improved.

Another useful reflective tool is Gibbs’ (1998) Reflective Cycle where there is a description of an event, a reflection on the feelings at the time, an evaluation of what was good or bad about one’s reaction, an analysis of the situation, a discussion of what else could have been done, and an action plan of what one would do differently. This cycle is helpful to me personally and for use with my staff. I also use it with students I am counseling. This type of reflection can only make one a better leader and worker in general.

Reflective practice challenges people to balance their emotions and actions on the edge of unconsciousness and consciousness in any given situation. By consistently reflecting on what I am doing in the moment, I stay conscious and in the present, keeping my habitual responses at bay, watching them, but not succumbing to them, putting the highest good of the immediate situation in the forefront. If that is impossible, then it is just as important to reflect on what happened immediately following a situation so the
same mistake can be avoided. It is all part of a continuous learning process which contributes to personal growth and change. This is very important to me and I try to communicate it to my staff by being a model of reflection and continuous learning. They go hand in hand. As I say to my students, “College is a cake walk compared to learning about yourself, understanding who you really are and what makes up your reactions.” I think that if all staff could incorporate reflective learning, then institutions would be less dysfunctional and staff members less reactive.

In conclusion, this journey, which is still going on, has taken me from the outside to the inside of leadership. My first day as an administrator was like that of a new baby coming into the world: there were so many distractions and ways to interact and manipulate my environment. As I started to grow in the position, I became childlike, fascinated by the different theories I could pluck from random textbooks to subject my staff to, like a child playing queen and subjecting her pets to her every whim. I entered adolescence where I became unreasonable, demanding and negative, making everyone feel miserable. I reached adulthood, where I could begin to transform myself but not yet realize what a profound affect my transformation had on others. Now, I am moving into maturity where I am better able to understand how profoundly we do affect each other and how it is my responsibility to heed my thoughts, words, and deeds so that as a leader I demonstrate integrity even when I want to scream, stamp my feet, and go back to being that demanding adolescent or, even better, that child who thinks she is queen and her subjects are there to please her. But, I cannot go back. I can only continue to grow forward, realizing that each stage builds upon itself and that each moment, no matter how difficult or seemingly imperfect is really perfection. All these perfect moments designed
to bring me to where I am right now in my leadership role, which is squarely grounded inside myself and as an extension, inside those whom I serve.

My journey through leadership has led me to quantum leadership which is what informs not only my management style, but my project working with adolescents also. Autokinetics relies on movement, vibration, and energy exchange which all have to do with quantum physics. My work is designed to create change on a vibrational level, within students who have been labeled “at-risk” to help them feel better about themselves, their families, and their school. They challenged me to be true to my philosophy and to be consciously aware of when I am not being true to it.
REFERENCES


Appendix A

Pre- and Post-Surveys
Pre-Survey

Pre-Academic Achievement, Physical Activity, and School Connectedness Survey

Dear Student:
The survey below is designed to explore how you feel about your school and your academic achievement and to explore your physical activity. It is anonymous, so be as honest as you can. Your participation in this survey represents your informed consent to participate. When you have completed the survey, please return it to me. Thank you in advance for participating.

Please mark only one answer for each question.

1. I feel that my GPA accurately reflects what I have learned and achieved in my subject areas.
2. I feel academically successful in school.
3. I feel that there are situations in my personal and school life which prevent me from achieving my best academically.
4. On average, how many hours a week do you spend on homework?
5. On average, how many hours a week do you spend studying on your own?
6. On average, how many hours a week do you spend outside of the classroom getting help from teachers?
7. On average, how many hours a week do you spend getting help from your parent(s) or guardian(s)?
8. On average, how many hours a week do you spend studying with your friends?
9. What do you perceive as preventing you from achieving your best academically? (Check all that apply) **If you answered “Disagree” or “Strongly Disagree” to question 3, please skip this question.**

   ___ There is too much homework.
   ___ There are too many classes.
   ___ My teachers aren’t clear when they teach.
   ___ My teachers don’t like me.
   ___ I have no support from my parents/guardians.
   ___ The classes are boring.
   ___ I’m not interested in school.
   ___ I have no friends.
   ___ What I’m learning in school has no relevance to the real world.
   ___ I have to work, so there is no time to study.
   ___ I have to work, so there is no time to do homework.
   ___ My friends don’t support my doing well in school.
   ___ School starts too early and I can’t focus well in the morning.
   ___ I spend a lot of time playing video games.
   ___ Does not apply
   ___ Other (Please explain)

Please mark only one answer for each question.

<table>
<thead>
<tr>
<th></th>
<th>Less than 1 hour</th>
<th>1-2 hours</th>
<th>3-4 hours</th>
<th>5-6 hours</th>
</tr>
</thead>
</table>

10. Not including time in your PE class, on average how many hours a week do you spend on physical activity?

11. On average, how many hours do you spend playing sports for a local, recreational team?

12. On average, how many hours a week do you spend playing outdoors, informally, with friends?

13. I play on a CHS team.    ____ Y    _____ N

14. If you answered “Y” to question 13, then which sport do you play? ________
Please mark only one answer for each question.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral/Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

15. I feel positively connected to CHS.
16. I belong to at least one club at CHS.
17. I usually attend events at CHS such as plays, concerts and other evening activities.
18. I know who my guidance counselor is.
19. I feel I can talk to my guidance counselor about my academic issues.
20. I feel I can talk to my guidance counselor about emotional and social issues.
21. I feel that most of my teachers care about me.
22. I feel that there are several adults at CHS I can talk to when I’m feeling troubled.
23. I feel positively connected to other students in the school in addition to my friends.

Thank you for participating in this survey.
Dear Student:
The survey below is designed to explore how you feel about your school and your academic achievement and to explore your physical activity. It is anonymous, so be as honest as you can. Your participation in this survey represents your informed consent to participate. When you have completed the survey, please return it to me. Thank you in advance for participating.

Academic Achievement
Please mark only one answer for each question.

1. I feel that since participating in group
   a. my GPA accurately reflects what I have learned and achieved in my subject areas.
   b. I feel academically successful in school.
   c. I feel that there are fewer situations in my personal and school life which prevent me from achieving my best academically.

   Strongly Agree | Agree | Disagree | Strongly Disagree

2. On average, how many hours a week do you spend on homework?
3. On average, how many hours a week do you spend studying on your own?
4. On average, how many hours a week do you spend outside of the classroom getting help from teachers?
5. On average, how many hours a week do you spend getting help from your parent(s) or guardian(s)?
6. On average, how many hours a week do you spend studying with your friends?

7. What do you still perceive as preventing you from achieving your best academically?
   (Check all that apply) If you answered “Disagree” or “Strongly Disagree” to question 1c, please skip this question.
   ___ There is too much homework.
   ___ There are too many classes.
   ___ My teachers aren’t clear when they teach.
   ___ My teachers don’t like me.
   ___ I have no support from my parents/guardians.
___ The classes are boring.
___ I’m not interested in school.
___ I have no friends.
___ What I’m learning in school has no relevance to the real world.
___ I have to work, so there is no time to study.
___ I have to work, so there is no time to do homework.
___ My friends don’t support my doing well in school.
___ School starts too early and I can’t focus well in the morning.
___ I spend a lot of time playing video games.
___ Does not apply
___ Other (Please explain)

Physical Activity

Please mark only one answer for each question.

<table>
<thead>
<tr>
<th>Answer</th>
<th>No hours</th>
<th>Less than 1 hour</th>
<th>1-2 hours</th>
<th>3-4 hours</th>
<th>5-6 hours</th>
</tr>
</thead>
</table>

8. Not including time in your PE class, on average how many hours a week do you spend on physical activity?
9. On average, how many hours do you spend playing sports for a local, recreational team?
10. On average, how many hours a week do you spend playing outdoors, informally, with friends?
11. I play on a CHS team. ____ Y _____ N
12. If you answered “Y” to question 11, then which sport do you play? _______
Connectedness to Central High School (CHS)

Please mark only one answer for each question.

13. Since participating in group

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

a. I feel positively connected to CHS.
b. I belong to at least one club at CHS.
c. I usually attend events at CHS such as plays, concerts and other evening activities.
e. I know who my guidance counselor is.
f. I feel I can talk to my guidance counselor about my academic issues.
g. I feel I can talk to my guidance counselor about emotional and social issues.
h. I feel that most of my teachers care about me.
i. I feel that there are several adults at CHS I can talk to when I’m feeling troubled.
j. I feel positively connected to other students in the school in addition to my friends.

Thank you for participating in this survey.
Appendix B

Letter of Consent
Dear Parent/Guardian:

I am the Supervisor of Counseling Services for the Happy Regional School district and also a graduate student in Rowan University’s Educational Leadership Department. I am writing to ask your permission to allow your child to participate in a research project under the supervision of Dr. Robert Campbell as part of my doctoral dissertation. The research project explores whether the use of self-movement (autokinetics) within a peer group setting can positively affect a student’s self-concept and feeling of school connectedness. The autokinetics portion of the peer group will be approximately 5-10 minutes where students sway to music.

To measure this, I plan to administer a pre- and post-school connectedness and a self-concept survey. Additionally, there may be times when I either record and/or video tape the group. I will retain the audio and video tapes at the conclusion of the study. To preserve each child’s confidentiality, only first and last initials of their names will be used to identify individuals. The video and audio tapes may be viewed by other researchers when the data are presented at a professional conference. All data will be reported in terms of group results; individual results will not be reported.

The groups receiving the autokinetics exercises will be randomly selected; therefore your child may not be selected. All groups, both the regular peer groups and the autokinetic peer groups, will provide students with a mutual support system as well as a resource to deal with problems and issues. These are not therapy groups but peer groups where students learn to express their feelings, help one another and themselves, look at options, and make responsible choices. The group is not limited to one particular type of student, but rather is composed of a broad range of students with different interests.

The groups meet weekly for approximately 40 minutes. The meetings will be held during school hours, so the participants will miss one class period each week (Monday or Tuesday). They will not miss the same class period as the meeting will rotate weekly, which means they will miss one subject class once every 9 weeks. This time will be excused without penalty. Students will be responsible for the work they miss during this time. They will be given a schedule of group meetings on the first day of group, and will be asked to share this with their teachers so the teachers are clear about when students will be missing class.

Student participation in this study is not mandatory. At the conclusion of the study, a summary of the group results will be made available to all interested parents. If you have any questions or concerns, you may contact me at 609-737-4003, ext. 3524. Thank you.

Sincerely,

Christine Abrahams
Please indicate whether or not you wish to have your child participate in this study by checking the appropriate statement below and returning this letter to me.

____ I grant permission for my child ______________________ to participate in this study.

____ I do not grant permission for my child ______________________ to participate in this study.

_______________________                          ________________________
(Parent/Guardian signature)                          (Date)
Appendix C

Student Log
# Student Log

**Seiki Jutsu Daily Log**  ---  
**Name**________________________

<table>
<thead>
<tr>
<th>Date</th>
<th>How long did you practice?</th>
<th>Did you use Ms. Abrahams' music?</th>
<th>If you used yours, what is the name of the music?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 9</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 10</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 11</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 12</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 13</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 14</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 15</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 16</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 17</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 18</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 19</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 20</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 21</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 22</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 23</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 24</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 25</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 26</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 27</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 28</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 29</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Nov. 30</td>
<td></td>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Pledge of Confidentiality
Pledge of Confidentiality

I ________________________________ promise to maintain confidentiality in this group. I understand this to mean whatever is said in the group stays in the group.

Signed_________________________________

Date____________________________________

Witness signature___________________________

Date_____________________________________
Appendix E

Ground Rules for Group
Ground Rules for Group

Here are a few ground rules that are important for everyone to agree to:

The privacy of individuals will be respected. What is said in group stays in group. All participants will sign a pledge of confidentiality. Although we have not had problems with breaking confidentiality in the past, the leader cannot guarantee the behavior of everyone so be aware that breaking confidentiality could be a possibility although a very slight one.

Confidentiality also requires that if two or more group members talk about group outside of group at any time -- in person, on the telephone, via the internet, etc. -- it is their obligation to report that to the group at the next meeting. This eliminates “sub-grouping” and gossip outside of group meetings.

Confidentiality will be upheld by the leaders except in cases of suicide, homicide, harm, or destruction of self or others and incidents of child abuse. In these cases, leaders may have to break confidentiality in order to ensure the safety of group members or others.

Anyone may pass at any time. We are practicing our listening skills so when one person speaks, everyone should be listening.

We will not judge, criticize, use “put downs” or verbally abuse others. Physical violence is prohibited. We will respect the diversity of opinion and style of all group members.

Weekly attendance is mandatory because your absence will affect the entire group. The group will decide what will constitute an excused absence. For example, absence from school, field trips if they cannot be changed to any other time, etc.

No one leaves the group without permission.

Each participant will return a signed parent permission form.

I, _____________________________ agree to abide by these rules. Date:___________

Witness signature:________________________________________________________

Date:_____________________________________________
Appendix F

MSCS and School Connectedness Survey Pre- and Post-Tests
### MSCS Pre- and Post-Tests

#### MSCS Pre-Test

<table>
<thead>
<tr>
<th>Student</th>
<th>Social</th>
<th>Competence</th>
<th>Affect</th>
<th>Academic</th>
<th>Family</th>
<th>Physical</th>
<th>Total Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80</td>
<td>94</td>
<td>63</td>
<td>93</td>
<td>72</td>
<td>79</td>
<td>72</td>
</tr>
<tr>
<td>2</td>
<td>126</td>
<td>103</td>
<td>110</td>
<td>107</td>
<td>81</td>
<td>111</td>
<td>105</td>
</tr>
<tr>
<td>3</td>
<td>85</td>
<td>81</td>
<td>80</td>
<td>74</td>
<td>78</td>
<td>87</td>
<td>76</td>
</tr>
<tr>
<td>4</td>
<td>118</td>
<td>105</td>
<td>113</td>
<td>95</td>
<td>97</td>
<td>117</td>
<td>109</td>
</tr>
<tr>
<td>5</td>
<td>99</td>
<td>97</td>
<td>101</td>
<td>102</td>
<td>89</td>
<td>103</td>
<td>117</td>
</tr>
<tr>
<td>6</td>
<td>94</td>
<td>86</td>
<td>92</td>
<td>100</td>
<td>88</td>
<td>104</td>
<td>94</td>
</tr>
<tr>
<td>7</td>
<td>106</td>
<td>92</td>
<td>124</td>
<td>90</td>
<td>89</td>
<td>103</td>
<td>101</td>
</tr>
<tr>
<td>8</td>
<td>109</td>
<td>61</td>
<td>63</td>
<td>96</td>
<td>98</td>
<td>95</td>
<td>104</td>
</tr>
<tr>
<td>9</td>
<td>103</td>
<td>97</td>
<td>87</td>
<td>91</td>
<td>59</td>
<td>84</td>
<td>72</td>
</tr>
<tr>
<td>10</td>
<td>115</td>
<td>77</td>
<td>80</td>
<td>100</td>
<td>78</td>
<td>77</td>
<td>82</td>
</tr>
<tr>
<td>11</td>
<td>83</td>
<td>78</td>
<td>70</td>
<td>82</td>
<td>85</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>12</td>
<td>97</td>
<td>90</td>
<td>88</td>
<td>78</td>
<td>88</td>
<td>81</td>
<td>73</td>
</tr>
<tr>
<td>13</td>
<td>81</td>
<td>77</td>
<td>80</td>
<td>93</td>
<td>84</td>
<td>74</td>
<td>77</td>
</tr>
<tr>
<td>14</td>
<td>84</td>
<td>80</td>
<td>80</td>
<td>68</td>
<td>64</td>
<td>103</td>
<td>72</td>
</tr>
</tbody>
</table>

| 1p      | 85     | 94         | 80     | 84       | 73     | 78       | 76         |
| 2p      | 111    | 100        | 88     | 85       | 87     | 100      | 94         |
| 3p      | 96     | 102        | 98     | 98       | 86     | 85       | 92         |
| 5p      | 97     | 100        | 101    | 104      | 89     | 91       | 96         |
| 6p      | 94     | 72         | 75     | 75       | 81     | 93       | 77         |
| 7p      | 83     | 92         | 85     | 84       | 86     | 90       | 84         |
| 8p      | 114    | 106        | 18     | 90       | 97     | 90       | 102        |
| 9p      | 71     | 70         | 85     | 83       | 82     | 64       | 70         |
| 10p     | 111    | 96         | 61     | 73       | 63     | 87       | 72         |
| 11p     | 79     | 86         | 90     | 86       | 86     | 82       | 82         |
| 12p     | 77     | 99         | 87     | 102      | 86     | 96       | 89         |
| 13p     | 87     | 80         | 85     | 91       | 75     | 89       | 80         |
| 14p     | 97     | 90         | 98     | 96       | 86     | 90       | 92         |
| 15p     | 118    | 90         | 97     | 95       | 79     | 111      | 96         |
| 16p     | 126    | 100        | 93     | 80       | 72     | 107      | 91         |

p = control group
### MSCS Post-Test

<table>
<thead>
<tr>
<th>Student</th>
<th>Social</th>
<th>Competence</th>
<th>Affect</th>
<th>Academic</th>
<th>Family</th>
<th>Physical</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>106</td>
<td>90</td>
<td>101</td>
<td>96</td>
<td>125</td>
<td>69</td>
<td>96</td>
</tr>
<tr>
<td>3</td>
<td>117</td>
<td>111</td>
<td>113</td>
<td>116</td>
<td>84</td>
<td>111</td>
<td>109</td>
</tr>
<tr>
<td>4</td>
<td>88</td>
<td>78</td>
<td>79</td>
<td>71</td>
<td>67</td>
<td>85</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>97</td>
<td>109</td>
<td>111</td>
<td>90</td>
<td>85</td>
<td>84</td>
<td>95</td>
</tr>
<tr>
<td>6</td>
<td>97</td>
<td>97</td>
<td>101</td>
<td>88</td>
<td>89</td>
<td>103</td>
<td>95</td>
</tr>
<tr>
<td>7</td>
<td>99</td>
<td>78</td>
<td>56</td>
<td>75</td>
<td>82</td>
<td>79</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>97</td>
<td>84</td>
<td>119</td>
<td>80</td>
<td>88</td>
<td>89</td>
<td>92</td>
</tr>
<tr>
<td>9</td>
<td>115</td>
<td>100</td>
<td>114</td>
<td>98</td>
<td>91</td>
<td>94</td>
<td>102</td>
</tr>
<tr>
<td>10</td>
<td>88</td>
<td>99</td>
<td>81</td>
<td>93</td>
<td>67</td>
<td>82</td>
<td>78</td>
</tr>
<tr>
<td>11</td>
<td>124</td>
<td>97</td>
<td>73</td>
<td>106</td>
<td>81</td>
<td>80</td>
<td>88</td>
</tr>
<tr>
<td>12</td>
<td>103</td>
<td>90</td>
<td>88</td>
<td>91</td>
<td>100</td>
<td>89</td>
<td>95</td>
</tr>
<tr>
<td>13</td>
<td>84</td>
<td>88</td>
<td>92</td>
<td>80</td>
<td>88</td>
<td>81</td>
<td>83</td>
</tr>
<tr>
<td>14</td>
<td>84</td>
<td>78</td>
<td>66</td>
<td>63</td>
<td>76</td>
<td>74</td>
<td>66</td>
</tr>
<tr>
<td>15</td>
<td>73</td>
<td>80</td>
<td>91</td>
<td>71</td>
<td>70</td>
<td>92</td>
<td>98</td>
</tr>
</tbody>
</table>

| 1p      | 91     | 81         | 80     | 85       | 72     | 82       | 76    |
| 2p      | 105    | 100        | 96     | 84       | 89     | 103      | 95    |
| 3p      | 85     | 81         | 83     | 84       | 72     | 89       | 77    |
| 4p      | 93     | 88         | 98     | 96       | 80     | 86       | 87    |
| 5p      | 54     | 90         | 80     | 78       | 88     | 91       | 85    |
| 6p      | 79     | 92         | 88     | 83       | 91     | 82       | 81    |
| 7p      | 114    | 111        | 121    | 96       | 95     | 98       | 106   |
| 8p      | 70     | 68         | 75     | 58       | 86     | 69       | 65    |
| 9p      | 112    | 97         | 83     | 84       | 77     | 90       | 86    |
| 10p     | 96     | 86         | 94     | 91       | 89     | 90       | 90    |
| 11p     | 81     | 90         | 85     | 100      | 91     | 59       | 79    |
| 12p     | 80     | 86         | 75     | 86       | 77     | 100      | 78    |
| 13p     | 91     | 97         | 100    | 90       | 88     | 93       | 92    |
| 14p     | 103    | 88         | 84     | 91       | 78     | 98       | 86    |
| 15p     | 114    | 94         | 100    | 90       | 63     | 91       | 85    |
| 16p     |        |            |        |          |        |          |       |

* p= control group
<table>
<thead>
<tr>
<th>ID</th>
<th>Pre-Test</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Post Test</th>
<th>PQ1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td>2</td>
<td>4</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>4</td>
<td>2</td>
<td>4</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>5</td>
<td>3</td>
<td>1</td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>5</td>
<td>3</td>
<td>1</td>
<td></td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1p</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2p</td>
<td></td>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3p</td>
<td></td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5p</td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6p</td>
<td></td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>7p</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8p</td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9p</td>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10p</td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>11p</td>
<td></td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12p</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>13p</td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14p</td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15p</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16p</td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
School Connectedness Survey
Pre-Test

<table>
<thead>
<tr>
<th>ID</th>
<th>Q15</th>
<th>Q16</th>
<th>Q17</th>
<th>Q18</th>
<th>Q19</th>
<th>Q20</th>
<th>Q21</th>
<th>Q22</th>
<th>Q23</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1p</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2p</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3p</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5p</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6p</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>7p</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>8p</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>9p</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>10p</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>11p</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>12p</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>13p</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>14p</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>15p</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>16p</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Q15</td>
<td>Q16</td>
<td>Q17</td>
<td>Q18</td>
<td>Q19</td>
<td>Q20</td>
<td>Q21</td>
<td>Q22</td>
<td>Q23</td>
</tr>
<tr>
<td>----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>26</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>