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A Correlational Study of Self-Regulation and Fine Arts in Education

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A CORRELATIONAL STUDY OF SELF-REGULATION
AND FINE ARTS IN EDUCATION

Thesis submitted to
the Graduate College of
Marshall University
in partial fulfillment of
the requirements for the degree of
Education Specialist
In School Psychology

By:

Rachel D. Hendricks, M.A.

Approved by

Dr. Linda Winter, Committee Chairperson

Dr. Sandra Stroebel

Dr. Lanai Jennings-Knotts

Marshall University

May 2016

APPROVAL OF THESIS/DISSERTATION

We, the faculty supervising the work of Rachel D. Hendricks, affirm that this thesis, *A Correlational Study of Self-Regulation and Fine Arts in Education*, meets the high academic standards for original scholarship and creative work established by the School Psychology Program and the College of Education and Professional Development. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.

Dr. Linda Winter,
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Rachel D. Hendricks
ALL RIGHTS RESERVED

ACKNOWLEDGEMENTS AND DEDICATION

I would like to acknowledge the contributions of several individuals whose involvement and support was so vital to the successful completion of this project. First, I extend my most heartfelt appreciation to Dr. Winter, Dr. Jennings, and Dr. Stroebel for their guidance, support, and encouragement throughout this endeavor. I would also like to recognize the kindness and patience of the following friends and colleagues who assisted me in the preparation, distribution, and collection of questionnaires: Kathy Sibbett, Lydia Young, Michael Mayer, and Esther Dorsey. Finally, I give all my love and appreciation to my beautiful daughter Sara, who endured far too many hours of her childhood, patiently waiting for mommy to finish studying.

I dedicate this work to the one person who has been my pillar of strength from day one, the rock foundation that held me steady when all I could do was crumble. To my husband Joshua: Your love and support throughout this exhausting process was often the only thing that kept me standing, and I am certain that without your encouragement, this project could never have been complete. For that, I thank you a million times.

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ABSTRACT

Self-regulation positively relates to student behavior and achievement, and fine arts participation has demonstrated similar improvements in behavior and achievement. It was hypothesized that participation in school-based fine arts would positively correlate with self-regulation, and the intensity of students' fine arts participation would also correlate with self-regulation. Students aged 15 to 19 were administered a self-regulation questionnaire. Responses from students currently participating in fine arts were compared to students with no fine arts participation to find if a relationship exists between fine arts and self-regulation. This study found no significant relationship between fine arts participation and self-regulation, and no significant difference suggested that participation intensity related to self-regulation. Further research should address limitations in student response rates and distribution trends in activity participation and explore how self-regulation relates to fine arts activities outside the school environment.

Keywords: Self-regulation, fine arts, education

CHAPTER I

LITERATURE REVIEW

Student achievement and behavior at school are influenced by self-regulation, which is the ability of an individual to manage behavior and control impulses so that the individual is able to meet certain standards, achieve desired goals, or reach personal ideals. A student's capability to monitor and adjust emotions, thoughts, and actions according to environment and social context factors heavily into his or her capacity for learning. Self-regulation has been cited by early childhood educators as being the single-most important skill for predicting a child's success in school (Bodrova & Leong, 2005).

Similar academic and behavioral influences have been found with regards to student participation in fine arts courses. Students who take part in fine arts classes perform better academically, and participation in such extracurricular activities has been found to be beneficial to mental health (Fehr, 2008; Ulman, 1992). However, little research has been found that might explain why these benefits exist.

The current study seeks to explore whether a relationship exists between participation in fine arts courses and increased levels of student self-regulation.

The Influence of Self-Regulation on Behavior

Self-regulation exists when individuals are able to maintain control over their own thoughts, emotions, and actions. Emotional self-regulation is an individual's ability to monitor emotions and maintain control over emotional response. Better emotional self-regulation reduces the incidence of impulsive behavior and emotional outbursts (Wyman, et al., 2010). One study illustrated that children who had poor self-regulation were rated by parents and teachers as less pro-social and less cooperative (Laible, Carlo, Murphy, Augustine, & Roesch, 2014). The ability

to monitor emotions and maintain control over emotional response are important skills for children to acquire in order to display behavior appropriate for the school environment, such as maintaining attention, staying on-task, exercising good executive functioning skills, and forming positive relationships with peers and teachers (Portilla, Ballard, Adler, Boyce, & Obradovic, 2014). Studies have shown that students who do not have these skills can successfully be taught them by modeling (Wyman, et al., 2010). The results of the students acquiring these new skills yielded improvement in social skills and on-task behavior and decreased the number of student disciplinary referrals in school (Wyman, et al., 2010). These findings illustrate different aspects of self-regulation (specifically, effort control and executive functioning) and how those individual components might contribute to adaptive behavior in school settings, as well as academic performance.

The Influence of Self-Regulation on Student Achievement

Self-regulation heavily influences achievement in school. In the classroom, students who are self-regulated possess awareness of their own learning processes and choose specific strategies to complete specific tasks (Bandura, 1986; Zimmerman, 1989). In academics, self-regulation includes such processes as creating mnemonics and other memory aids, practicing techniques to hone skills, finding and setting up good learning space, setting personal standards and goals, and possessing self-efficacy (Bandura, 1986). These skills and practices are important for students to form effective study habits, filter distractions, and maximize learning and achievement. Self-regulation also has been related to teachers' reports of student behavioral and cognitive self-control, classroom work habits, and lowered incidences of off-task behavior (Rimm-Kaufman, Curby, Grimm, Nathanson, & Brock, 2009).

The quality of self-regulation, in both behavioral and cognitive contexts, appears to act as a protective factor to foster the learning process. Behavioral self-regulation in early childhood has been shown to be associated with higher academic achievement later in elementary school (Gestsdottir, von Suchodoletz, Wanless, Hubert, Guimard, Birgisdottir, & McClelland, 2014), and it has been found that good behavioral self-regulation in early childhood predicts better reading comprehension, even two years later (Birgisdottir, Gestsdottir, & Thorsdottir, 2015). Furthermore, a significant link has been found between self-regulation skills and mathematics and literacy performance in young elementary school students (Hubert, Guimard, Florin, & Tracy, 2015). One study showed that, by using social skills and problem behaviors as mediators, better self-regulation improved literacy skills in preschool aged students (Montroy, Bowles, Skibbe, & Foster, 2014).

It has also been suggested that self-regulation is positively correlated to level of interest in a particular task or project, which also contributes to improved academic achievement (Helle, Laakkonen, Tuijula, & Vermunt, 2013). Similarly, self-regulation has been found to influence both individual students' study habits and motivation, as well as students' interaction with their learning environment, mediating the relationship between the overall learning experience and student academic achievement (Ning, 2012). When the specific self-regulation components of effortful control and executive functioning were studied individually as factors in achievement, they were each found to be significant predictors of early learning and classroom adjustment in young children transitioning to the school environment (Neuenschwander, Röthlisberger, Cimeli, & Roebbers, 2012). Similarly, the underlying components of flexible attention, working memory, and inhibitory control have been found to be the most important predictors of student success in school (McClelland & Cameron, 2011). Students' perceived control over their own success (and

control by effort rather than ability) suggests that self-regulation in learning improved students' perceived control and efficacy, which, in turn, leads to an improvement in school performance (Blair, Calkins, & Kopp, 2010). To further illustrate how self-regulation relates to academic performance, preschool students who participated in an eight-week long self-regulation intervention group saw greater gains in academic achievement than did students in a control group (Schmitt, 2014; Schmitt, McClelland, Tominey, & Acock, 2015). Conversely, low self-regulation appears to predict *decreased* classroom engagement and poor teacher-student relationship quality, which thus seems to factor into poorer academic achievement (Portilla, Ballard, Adler, Boyce, & Obradović, 2014).

Effects of Fine Arts Education on Behavior

Public education academic achievement standards in the United States have focused primarily on core academic skills: science, mathematics, and literacy. Efforts to streamline teacher accountability have necessitated standardized testing in these core subjects, which often leaves little time for extracurricular or enrichment programs (Beveridge, 2010). Despite this focus on core academics, research has illustrated benefits of fine arts education in public schools.

There are several previous studies that explore the psychological benefits of artistic expression (Van Lith, Schofield, & Fenner, 2013). It is not uncommon for art-based therapies to be included in the treatment plans for mood disorders, anxiety, and post-traumatic stress. Pretorius and Pfeifer (2010) treated 25 South African girls with art-based group therapy for sexual abuse trauma and found that the group improved significantly with regards to anxiety and depression symptoms. Expressive arts therapies in pediatric psychological treatment have also been found to yield positive results for children from abusive home environments in the United States (Brillantes-Evangelista, 2013; Chamilleri, 2007; Malchiodi, 1997). Research is now

beginning to explore similar benefits in other settings, and studies are finding that fine arts programs in the public school setting have comparably positive effects on student behavior and mental health (Ulman, 1992). When prompted for their professional opinions regarding the outcome of a performing arts program on depressed teens, most clinicians agreed that such a program would be psychologically beneficial for the participating students (King, Grieves, & Opp, 2007). In the United Kingdom, art-based therapeutic interventions are being implemented within the educational setting to address other student problems such as classroom behavior issues, academic difficulties, stress, and crisis interventions (Karkou & Glasman, 2004). Additionally, students who are active in the arts have also been shown to be less likely to drop out of school (McNeal Jr, 1995).

Effects of Fine Arts Education on Academic Achievement

Fine arts education has an academic benefit, as well. It has been found that students who participate in fine arts courses perform better academically than students who are not enrolled in fine arts programs, regardless of socioeconomic status or ethnicity (Fehr, 2008). A 2013 meta-analysis of research published between 1995 and 2011 examined the impact of integrating fine-arts programs on disadvantaged students' success and found positive effects for integrating dance, visual arts, and general fine arts for students with disabilities, and that integrating fine arts into the general curriculum improved the overall school environment (Robinson, 2013). Susan Baum (1997) studied the behavior of academically at-risk students who excelled in the arts and concluded that many of the self-regulatory behaviors these students displayed in their arts classes could be transferred into the academic setting as well, simply by integrating certain arts activities into the regular classroom. Studies show that active participation in integrated fine arts education programs changed the achievement trajectory for all students who participated, but more so for

students identified as disadvantaged or at-risk (Ingram & Seashore, 2003), although some research seems to suggest that parents' involvement in their children's arts-related activities may have more academic influence than participation in arts programs alone (Melnick, Witner, & Strickland, 2011). One Finnish study found that a structured fine arts program motivated students and improved their interest in studying and improved listening skills (Nevanen, Juvonen, & Ruismäki, 2014). Middle school students who participated in an after-school fine arts program showed an improvement in both math and spelling scores on the Wide Range Achievement Test-Third Edition (WRAT-III) after participating in the program (Respress & Lufti, 2006). A study which offered a summer fine-arts enrichment program for low-achieving, low-income kindergarten students yielded positive results in language arts; students who participated in the program scored eight points higher than control group peers on letter naming tests, and six points higher in dictation tests (Borman, Goetz, & Dowling, 2009).

Previous research illustrates that self-regulation plays an important role in overall behavior and academic outcomes. Studies also suggest similar positive academic and behavioral effects from participation in fine arts programs. However, little research exists which explores a possible link between these two conclusions. The current study will examine a relationship between fine arts education and self-regulation in high school-age students. The study hypothesizes that student participation in fine arts courses will have a positive relationship with higher levels of self-regulation.

CHAPTER II

METHOD

Subjects

Participants were ninth, tenth, eleventh, and twelfth grade students from the only two public high schools in a rural West Virginia county. Of the 1,100 students invited for participation in this study, five percent responded. There were a total of 55 student participants (22 males, 33 females), which consisted of 24 ninth grade, 14 tenth grade, 6 eleventh grade, and 11 twelfth grade students, ranging in age from fifteen to nineteen years. Participation between schools was extremely unequal, with 48 of the total participants coming from one school and seven from the other. Students were informed that they were participating in a study about self-regulation and school-based fine arts activities and were invited to complete a short survey measuring their current levels of self-regulation. Informed consent and assent were obtained from students and their guardians prior to administering the survey. All subjects voluntarily participating in the current study were administered the survey for self-completion.

Instruments and Materials

The full version of the Adolescent Self-Regulatory Inventory (ASRI, see Appendix) was utilized in this study. This is a 36-item self-report, paper-based questionnaire which measures short-term and long-term emotional self-regulation in teens. Developed by Moilanen (2007), this tool poses hypothetical questions for individuals to answer using a five-point Likert scale, with one being equivalent to a “Not at all true for me” response and five being “Really true for me.” Scores of the ASRI are calculated by summing the item scores (Items 1, 2, 5, 6, 7, 8, 12, 13, 14, 15, 16, 18, 19, 21, 34, and 35 were reverse-scores items). A higher score indicates a better ability to self-regulate. A 2007 study involving 169 sixth, eighth, and tenth grade students showed that

the ASRI demonstrates concurrent and construct validity and that the internal consistency of the long-term and short-term factors was satisfactory (Moilanen, 2007). Supplementary questionnaire items were added to the full-length ASRI survey to supply information regarding participant demographics such as grade, sex, and respondents' involvement in one or more school-based fine arts activities, rated by a three-point scale of intensity.

Procedure

Subjects were informed that they were invited to participate voluntarily in a study that will investigate how participation in school-based fine arts activities may benefit students. After obtaining informed consent, subjects were administered and individually self-completed the ASRI survey to measure their current self-regulation levels. Students did not provide their names; however, they were instructed to indicate on the form their participation in any school-based fine arts activity, as categorized by type of activity: instrumental music performance, vocal music performance, general music, general visual art, three-dimensional visual art media (ceramics/pottery), two-dimensional visual art media (drawing/painting), and dramatic arts (theatre/drama) during the current (2015-16) school year. Students were also instructed to rank, on a three-point scale of “not very involved” to “very involved,” the intensity of their involvement in any activity in which they participated.

Analysis

The IBM SPSS Statistics software program was utilized in the data analysis of this study. For the purpose of creating indexes for statistical analysis, demographic information for each participant was encoded as follows: Sex was coded 1 for male and 2 for female; Grade level was coded from 1 (for ninth grade) to 4 (for twelfth grade); Activity participation intensity levels were coded from 0 (for no participation in the specified fine arts activity) to 3 (for “very

involved” participation in the specified fine arts activity). Descriptive statistics examined demographics and trends of central tendency and variability of the subjects’ performance on self-reported assessments. Independent correlated-groups t-tests were used to determine if a significant relationship exists between fine-arts activity participation and student self-regulation levels.

CHAPTER III

RESULTS

This study hypothesized that 1) Students who participate in school-based fine arts activities are better self-regulated than students who do not participate in school-based fine arts, and 2) a greater level of involvement in fine arts activities will show increased levels of students' self-regulation. A total of 55 students (22 male respondents and 33 female) participated in the study by voluntarily submitting the ASRI questionnaire and supplemental survey. Surveys were individually scored, and each participant survey received a total ASRI self-regulation score. Reported scores were normally distributed (see Figure 2), ranging from 90 to 143, with an overall mean total ASRI score of 120.70. Student participants' responses regarding their involvement in school-based fine arts activities were also coded according to the intensity of their involvement in each activity, and an overall total participation intensity score was summed for each individual respondent. The lowest possible involvement score for each individual respondent is 0 (indicating no involvement in any fine arts activity), to a possible 21 points (indicating "Very much involved" in all offered activities). Reported total involvement scores followed a somewhat left-skewed distribution (Shapiro-Wilk sig. =.018), and ranged from 0 (for students who reported no involvement in any fine arts activity) to a maximum 20, with a mean involvement score of 7.73 (Median = 8.00, SD = 5.05)(see Figure 1).

An independent samples t-test was performed to compare self-regulation levels of males versus females, as well as the self-regulation levels between grades. No significant difference was found between sexes, ($t(53) = -.408, p > .05$); the score difference among grades approached significance but is nonetheless insignificant ($t(33) = -1.743, p > .05$). Independent samples t-test was again employed to determine if a difference exists between the self-regulation levels of

students who do participate in school-based fine arts activities versus the self-regulation levels of students who report *no* fine arts participation. Again, no significant difference was identified ($t(53) = .878, p > .05$) (see Table 1 below).

Table 1

Student Self-Regulation Compared to Sex, Grade, and Fine Arts Activity Participation

	Sex		Grade		Fine Arts Participation	
	Males	Females	9th	12th	Yes	No
<i>N</i>	22	33	24	11	49	6
<i>Mean ASRI Self-Regulation Score</i>	120.00	121.18	117.29	124.36	121.14	117.17
<i>(SD)</i>	(9.58)	(11.12)	(12.78)	(5.85)	(9.75)	(15.82)

Self-regulation levels were highest among students who reported high involvement intensity in the visual arts (painting, drawing, ceramics/pottery, etc.), although there were relatively fewer students involved in these activities (seven total students reported being “very involved” in 3-dimensional art media, ASRI = 125.857; eight students reported being “very involved” in 2-dimensional artistic media; ASRI = 124.625). One-way analysis of variance (ANOVA) was utilized to determine if intensity of students’ participation in specific fine arts activities has a relationship to student self-regulation. In all seven activity categories, mean self-regulation scores showed a two to five point increase as activity involvement increased; however, none of these differences were identified as significant (see Table 2 below).

Table 2*Student Self-Regulation by Intensity of Participation in Specific Fine Arts Activities*

Activity	Not at all involved		Very Involved		df	Mean Square	F	Sig.
	N	Mean ASRI	N	Mean ASRI				
<u>Instrumental Music Performance</u>	18	117.778	9	120.778	3	87.12	.788	.506
<u>Vocal Music Performance</u>	20	117.500	4	122.250	3	140.53	1.31	.282
<u>General Music</u>	10	119.200	11	121.273	3	34.10	.300	.825
<u>General Art</u>	18	117.111	11	123.091	3	122.00	1.12	.348
<u>2D Media (Drawing, Painting, etc)</u>	20	117.850	8	124.625	3	110.78	1.02	.394
<u>3D Media (Ceramics, Pottery, etc)</u>	19	117.158	7	125.857	3	163.97	1.55	.214
<u>Stage Performance Arts (Theatre, Drama, etc)</u>	18	117.611	4	123.250	3	96.506	.877	.459

CHAPTER IV

DISCUSSION

The study explored the possible link student participation in school-based fine arts activities and student self-regulation. Previous research has shown the positive link between fine arts activity participation and improvements in academic achievement and behavior, and similar academic and behavior improvements have been documented in research that studied self-regulation. Based on these findings, this study hypothesized that students who participate in school-based fine arts activities will be better self-regulated than students who do not participate in fine arts. Additionally, the study hypothesized that the *intensity* of students' arts participation will positively correlate with their self-regulation levels.

Instead, what was found was that no significant difference existed between the self-regulation levels of students who participate in fine arts versus students who do not. Self-regulation levels did appear to improve slightly with increased participation in fine arts courses; the mean ASRI for students who reported no involvement in a particular activity was found to be two to five points lower than the mean ASRI score for students who reported being "very involved." However, this difference was not a significant one. So, even when considering the intensity of students' participation in various individual fine arts activities, no significant difference exists to suggest that fine arts activity participation plays a significant role in student self-regulation levels. Though previous research illustrates that student participation in school-based fine arts programs may indeed result in behavioral and academic improvements, this study's results suggest that self-regulation may not be a significant mediating factor in these improvements.

This study has several limitations. One limitation to this study was the rate of student participation. Participation in the study was entirely voluntary for student respondents and required the consent of parents before participation. Unfortunately, the parental consent response rate was poor, and student voluntary participation in the study was low, with only five percent of invited students choosing to participate. Future research could address this issue by randomly selecting participants from the overall student population and enlisting the assistance of teachers and school staff to aid in recruiting subjects.

Another limitation to this study was the distribution of students' participation in fine arts activities. Students' self-reported participation intensity was unevenly distributed-- more students reported being less involved in fine arts than students who reported being very involved—so it is still unknown if the response sample is a sufficient reflection of the overall student population. Therefore, the question is then proposed that, had there been a more even distribution of students who participate in fine arts courses, would this have an effect on correlation significance?

Since this study sought to explore how students' participation in school-based fine arts programs relates to their self-regulation levels, individuals who partake in a fine-arts-related hobby outside the school environment were not considered as part of the participation sample. Future research could examine this relationship directly by surveying participants on their personal hobbies as well as participation in school-based arts activities.

This study also was not able to take into account the self-regulation levels of student participants before they began their participation in fine arts; thus, it was not able to determine if the observed increase in self-regulation levels were indeed a direct result of activity participation. This could be remedied by employing a true experimental design which studies student self-regulation levels both before and after participating in a newly-initiated fine arts program.

Figure 1

Normal Distribution of Intensity of Students' Fine Arts Participation

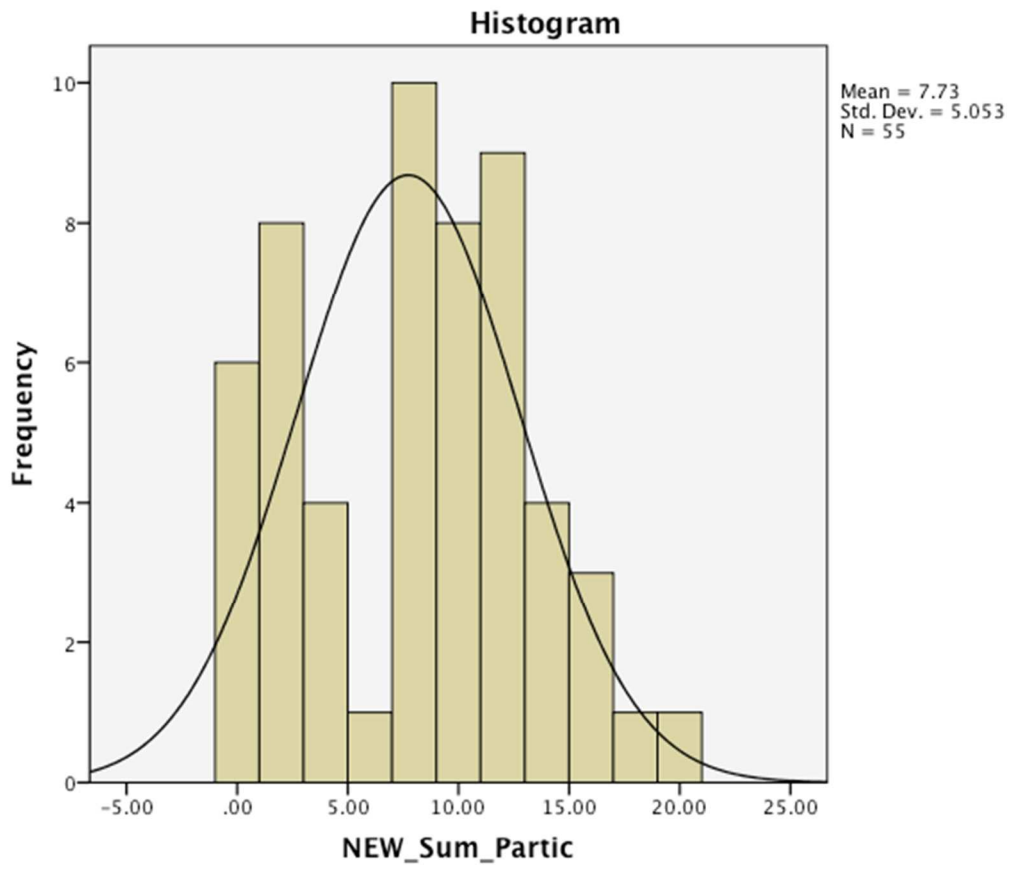
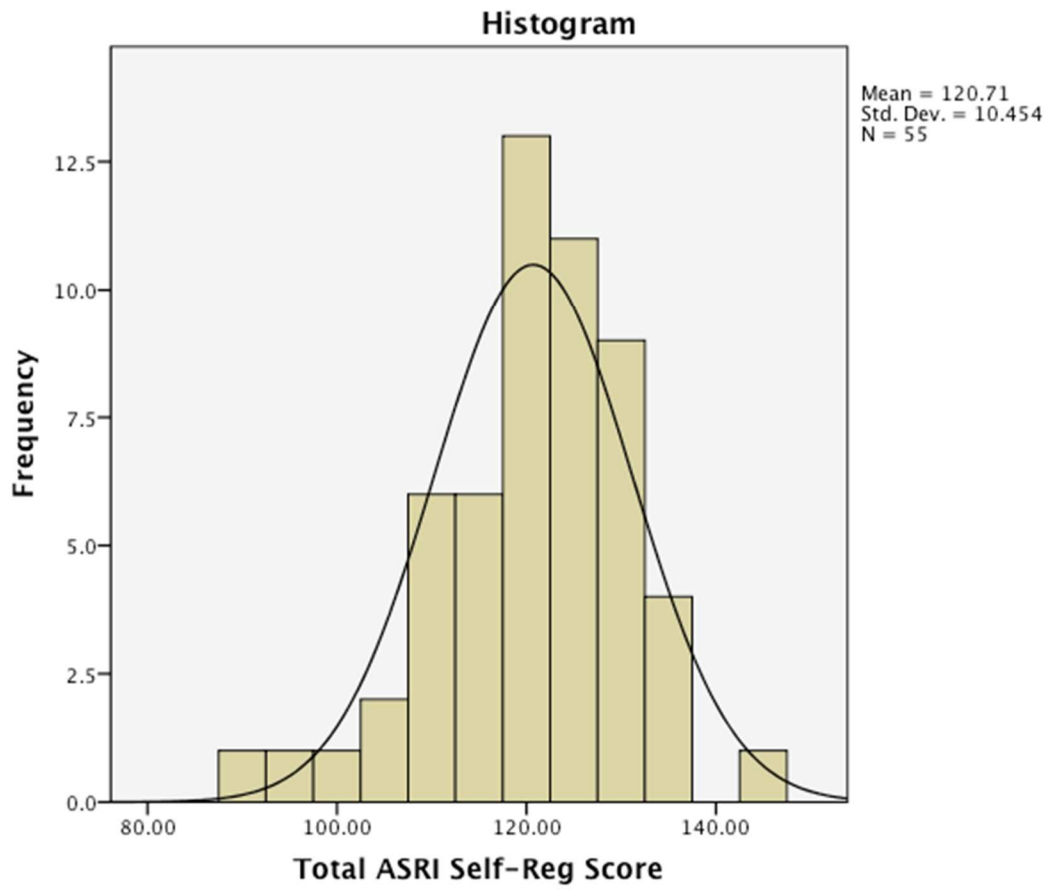


Figure 2

Normal Distribution of Students' Reported Self-Regulation Levels



APPENDIX I

Questionnaire

Student: Please complete this questionnaire and return (along with the signed parent consent form) to your homeroom teacher within one week.

Important: Do NOT put your name on this questionnaire!

Please indicate the following:

I am: Male Female

I am in the following grade in school: 9th 10th 11th 12th

Please indicate if you participated in any of the following school-based fine arts activities during the current school year (2015-16):

Please rate the intensity of your involvement with the following school-based fine arts activities:

Instrumental Music Performance (Band, Orchestra, Jazz, etc)

Not Very Involved

Average Involved

Very involved

General Music

Vocal Music Performance (ex: Chorus, Show Choir, Voice, etc)

General Art

Ceramics/ Pottery

Drawing, Painting,

Theatre/ Drama

I DID NOT participate in ANY school-based fine arts activity during this school year.

Adolescent Self-Regulatory Inventory (ASRI)

Rate how true each statement is for you ranging from *Not at all true for me* to *Really true for me*. Mark the box under the rating that best applies to you.

	Not at all true for me	Not very true for me	Neither true nor untrue for me	Somewhat true for me	Really true for me
1. It's hard for me to notice when I've —had enough (sweets, food, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. When I'm sad, I can usually start doing something that will make me feel better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If something isn't going according to my plans, I change my actions to try and reach my goal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can find ways to make myself study even when my friends want to go out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I lose track of the time when I'm doing something fun.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. When I'm bored I fidget or can't sit still.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. It's hard for me to get started on big projects that require planning in advance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I can usually act normal around everybody if I'm upset with someone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. I am good at keeping track of lots of things going on around me, even when I'm feeling stressed.
10. When I'm having a tough day, I stop myself from whining about it to my family or friends.
11. I can start a new task even if I'm already tired.
12. I lose control whenever I don't get my way.
13. Little problems detract me from my long-term plans.
14. I forget about whatever else I need to do when I'm doing something really fun.
15. If I really want something, I have to have it right away.
16. During a dull class, I have trouble forcing myself to start paying attention.
17. After I'm interrupted or distracted, I can easily continue working where I left off.
18. If there are other things going on around me, I find it hard to keep my attention focused on whatever I'm doing.

19. I never know how much more work I have to do.
20. When I have a serious disagreement with someone, I can talk calmly about it without losing control.
21. It's hard to start making plans to deal with a big project or problem, especially when I'm feeling stressed.
22. I can calm myself down when I'm excited or all wound up.
23. I can stay focused on my work even when it's dull.
24. I usually know when I'm going to start crying.
25. I can stop myself from doing things like throwing objects when I'm mad.
26. I work carefully when I know something will be tricky.
27. I am usually aware of my feelings before I let them out.
28. In class, I can concentrate on my work even if my friends are talking.

29. When I'm excited about reaching a goal (e.g., getting my driver's license, going to college), it's easy to start working toward it.
30. I can find a way to stick with my plans and goals, even when it's tough.
31. When I have a big project, I can keep working on it.
32. I can usually tell when I'm getting tired or frustrated.
33. I get carried away emotionally when I get excited about something.
34. I have trouble getting excited about something that's really special when I'm tired.
35. It's hard for me to keep focused on something I find unpleasant or upsetting.
36. I can resist doing something when I know I shouldn't do it.

Moilanen, K. L. (2007). The Adolescent Self-Regulatory Inventory: The development and validation of a questionnaire of short-term and long-term self-regulation. *Journal of Youth and Adolescence*, 36, 835-848.



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FWA 00002704

IRB1 #00002205
IRB2 #00003206

March 8, 2016

Linda Winter, Ph.D.
School Psychology Department, MUGC

RE: IRBNet ID# 871281-1

At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Winter:

Protocol Title: [871281-1] A Correlational Study of Self-Regulation and Fine Arts in Education

Expiration Date: March 8, 2017

Site Location: MUGC

Submission Type: New Project APPROVED

Review Type: Expedited Review

In accordance with 45CFR46.110(a)(7), the above study and informed consent were granted Expedited approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair for the period of 12 months. The approval will expire March 8, 2017. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student Rachel Hendricks.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, ThD, CIP at 304-696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

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