

CHAPTER FIVE

Summary and Discussion

This research study began with three questions to be investigated, and four objectives to answer those questions. Each of these was altered and transformed as the study focus was modified from a remediation of dysfunction approach to a more holistic view of promotion to normal developmental levels.

Study Focus Modifications

When this research study was designed in 1998, three questions were to be investigated and four objectives to be utilized in this process. The study began with 74 young children, but only 14 were identified as demonstrating art skills below an age appropriate level.

During the quantitative data analysis, the inability of this study to successfully address question one became clear. The TASS (1992) had been designed "to incorporate art into the IEPs of disabled children in a special school for children with health impairments and orthopedic disabilities" (Troeger, as cited in Anderson, 1992). This instrument was able to document the mastery of specific art skills for children through age 6, but not ascertain which visual-perceptual skills were effected.

Due to this study limitation, question two was modified. The pretest imagery created by study participants provided evidence of below age appropriate art skills and delayed visual perceptual development, rather than graphic indicators of learning disorders. Therefore, research question two was transformed into an hypothesis that stated a therapeutic art program targeting behaviors associated with learning disorders will contribute to an increase in age-appropriate art skills; sound gestalts, figure/ground discrimination, and detail elaboration. Uhlin's (1972) research to improve perceptual experiencing using reversed

field/ground art materials provided structure for this inquiry. Cheyne-King's (1990) theory that "surface-oriented art activities can help remediate perceptual dysfunctions, or at least help compensate for them" was utilized.

As the TASS (1992) was unable to identify young children with learning disorders, research question three could not be successfully addressed. Instead of focusing on the study participants' self-perceptions, the researcher conducted a content analysis of each subject's field notes, artwork, and corresponding stories for common emotional themes. The analysis revealed that after participation in the art therapy promotion program, the majority of study participants experienced reduced distractibility, lessened need for individualized therapist attention, were less easily discouraged, developed an increased tolerance for frustration, and decreased expressions of anger in artwork and stories. As a result, the lessening of emotional concerns, combined with improved art skills, may have contributed to increased self-perception for study participants, but there was no data gathered to provide evidence of such improvement.

Objectives & Results

There were four objectives stated for this study. The first objective was transformed from the original goal of identifying young children in a public school setting who were at risk for learning disorders, to identifying young children demonstrating delays in visual perceptual development. The identification team consisted of a school administrator, an elementary guidance counselor, a primary level classroom teacher, and an art therapist. The TASS (1992) was administered as a pretest. The results of this identification process were 14 out of 74 young children being classified as having visual-perceptual abilities which were below age appropriate level in at least two art skill

areas.

The second study objective was modified from developing an art therapy intervention program to remediate perceptual dysfunctions to developing a therapeutic art program to promote visual perceptual development. Resources utilized to design the therapeutic art experiences were based on research by Anderson (1992), Cheyne-King (1990), Drachnik (1995), Henley (1992), and Uhlin (1972). Research has shown that figure/ground discrimination problems can be improved by the use of white chalk to draw a human figure on black paper (Cheyne-King, 1990; Uhlin, 1972). A therapeutic art program which emphasized both two-dimensional and three-dimensional skills was designed to help promote visual perceptual development in the study participants. Weekly therapeutic art experiences included both an age-appropriate art goal and a visual-perceptual goal for each student (see Appendix D).

The third study objective was altered from a remediation through art program to the promotion of visual perceptual development through a therapeutic art program. A twenty-week therapeutic art program was conducted with elementary school children experiencing for visual perceptual delays and possibly at risk for nonverbal learning disorders. A team of art therapy graduate students (3 doctoral students and 8 masters' level students) implemented the VPTAP for children with art skills developmentally below age appropriate level.

Weekly therapeutic art sessions lasted forty-five minutes. No more than four children were included in a group, with one therapist assigned to each set of participants. Qualitative information was collected based on a portfolio of student artwork, written responses to art making, and teacher interviews. Art activities included drawing, painting, cut paper collage, loom weaving, and clay

projects which utilized a reversed field-ground experience.

Study participants were cooperative with both the art making process and dictating stories to the therapists about the artwork created each session. Each student's portfolio contained documentation of improving art skills in each of the four skill areas. Included in the portfolio was an ongoing evaluation procedure, which was a tool for the art therapy team to identify when a student had mastered each task, and treatment was complete (see Appendix C).

The fourth study objective was to analyze data and observations regarding student artwork and behaviors to determine if changes had occurred on an individual basis. Teacher interviews (Seidman, 1998), observed student behavior, case studies (McLaughlin & Carolan, 1992), and the children's stories created with each art project provided the qualitative aspect of this research study. The quantitative aspect included the comparison of student pretest and posttest scores, broken down into the four categories assessed by the TASS (Troeger, 1992). The results, compared between the pretest and posttest scores of the primary level students, aided in determining the level of achieving research study objectives.

Posttest results provided evidence that the VPTAP might be helpful in increasing age appropriate art skills. In this research study, 10% of the participants demonstrated an improvement in drawing skills, 14% improved in painting skills, 15% increased in scissors skills, and 15% improved in clay skills. Therefore, the study hypothesis was supported.

However, these findings must be viewed in the context of having been created through the utilization of an assessment instrument that has yet to demonstrate reliability and validity. The TASS (Troeger, 1992) has been published (Anderson, 1992; Arrington, 1992), and was the

primary instrument in several research studies conducted by Florida State University doctoral students (Byers-Floyd, 1997; Dunn Snow, 1999). However, this research study was unique in assigning a numerical value to each of the four categories assessed by the TASS (Troeger, 1992), based on the quantity of art skills demonstrated within each category. Therefore, the TASS (1992) contained neither a standardized mean nor standard deviation for the basis of statistical analysis of the quantitative data created in this study.

Implications of the Findings

An art-based assessment tool (TASS) was used to screen 74 First Grade students in a public elementary school for art skills below developmental level. Fourteen children were identified with art skills below grade and developmental level. Data generated during the pretest screening (TASS) proved to be valuable in determining each student's strengths and weaknesses in art. Pretest findings indicated that most study participants would benefit from the further development of drawing and cut paper skills, so these two skill areas were emphasized throughout the program.

The research hypothesis in this study was to investigate that a series of art experiences targeting behavior associated with perceptual delays would contribute to an increase in age-appropriate art skills. Based on Uhlin's (1972) theory of using "surface-oriented" art materials, a 20-week art therapy visual perceptual development promotion program was designed and implemented, with each child participating in weekly 45 minute sessions. The results of this study did provide evidence that a series of art experiences targeting visual perceptual development delays could contribute to an increase in age-appropriate art skills, especially drawing skills.

The quantitative data provided evidence that there was improvement in the four art skill areas for participants of this research study. However, effect sizes were small except for in the area of drawing skills, which has a moderate effect size. This result may have been due to the VPTAP placing an emphasis on fostering age appropriate drawing skills (9 sessions out of 20). In addition, the quantitative results for this research study provided some evidence of statistical significance in all area skill areas based on the significance of the *t*-tests conducted.

Limitations

One of the reasons that the effect sizes were so small for three of the four art skill areas could be due to the small sample size of young children who met the criteria for inclusion in the VPTAP. A second reason could be the inability of this study to determine the effect normal maturation would have on a participant during the 28 weeks of this research study. The third reason could be due to the inability of the assessment instrument to identify specific visual perceptual skills effecting the study subjects' ability to master age appropriate art skills. The utilization of a diagnostic tool, such as the Developmental Test of Visual Perception: Second Edition (Hammill, Pearson & Voress, 1993) designed to document visual perceptual and visual-motor difficulties, might have been helpful in identifying specific areas of concern (eye-hand coordination, spatial relations, figure ground, visual-motor speed, copying, position in space, visual closure, and form constancy), and may have provided graphic indicators from a larger sample of study subjects to participate in the art therapy promotion program.

A fourth reason could be that this study was the first quasi-experimental research design to utilize the TASS as an outcome measure. The results from this study cannot be

generalized to the overall population of young children experiencing visual perceptual development delays. Therefore, utilization of the TASS in this research study as the sole assessment tool seriously limited the quantitative results that were able to be reported on and analyzed.

The qualitative information for this study was created through interviews with the classroom teachers of the study participants, which confirmed observations of improved art skills as well as enhanced perceptual-motor skills. In addition, a content analysis of the artwork and correlate written stories documented improved self-perception, which provided evidence that the art therapy promotion program was of therapeutic value to the study participants. Case studies were provided, including pretest and posttest artwork and the related stories, to demonstrate the growth experienced by individual students.

At pretest, emotional concerns shared among the study participants were identified to include high distractibility, the need for individualized attention from the art therapist, being easily discouraged, having a low tolerance for frustration, and expressions of anger in artwork and correlate stories. The content analysis revealed that after participation in the art therapy promotion program, the majority of study participants experienced reduced distractibility, lessened need for individualized therapist attention, were less easily discouraged, developed an increased tolerance for frustration, and decreased expressions of anger in artwork and stories.

Suggestions for Future Research

One implication of the results was that further inquiry might provide additional evidence that a therapeutic art program might contribute to the alleviation of visual perceptual development delays. This study was limited to a public elementary school in the Southeastern United States.

Replication of this study in an urban setting could provide differing results.

A second recommendation from this study would be to increase the sample size. After pretest screening, the sample was reduced to less than 100 participants, which is the desirable size for a descriptive study (Frankel & Wallen, 1996). In this research study, generalization was limited due to the small sample size.

Finally, a third implication for further inquiry would be to utilize a different assessment tool to identify children at risk for nonverbal learning disorders, due to experiencing delays in visual perceptual development. A valid and reliable instrument could provide the structure to collect quantitative and qualitative data for pretest and posttest findings with this population.

The fact that the TASS (Troeger, 1992) has yet to demonstrate reliability and validity for creating quantitative data eliminated any generalization to a larger population. This study evidence must be interpreted on the basis of having made use of an assessment instrument that required further investigation to demonstrate the ability to create reliable and valid quantitative data.

Summary

In conclusion, an analysis of the quantitative data collected during a research study that utilized the TASS as the outcome measure, and the APTAP as a therapeutic art program provided evidence that a series of art experiences targeting delays in visual perceptual development might contribute to an increase in age-appropriate art skills, especially drawing, and address emotional concerns associated with learning disorders. Furthermore, the qualitative results in the two case studies provided visual and graphic evidence of improved visual-perceptual and visual-coordination skills for study participants. However,

this study evidence must be interpreted on the basis of having made use of an assessment instrument that requires further investigation into reliability and validity for the creation of quantitative data.