Evaluation of the Burma Art Therapy Project for Adolescent Refugees from Burma in Chapel Hill-Carrboro City Schools

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UNC Honor Pledge: We certify that no unauthorized assistance has been given or received in the completion of this work.
Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>APHA</td>
<td>American Public Health Association</td>
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<tr>
<td>ATI</td>
<td>Art Therapy Institute</td>
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<tr>
<td>BATP</td>
<td>Burma Art Therapy Project</td>
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<tr>
<td>DDS</td>
<td>Diagnostic Drawing Series</td>
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<tr>
<td>ESL</td>
<td>English as a Second Language</td>
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<tr>
<td>GSK</td>
<td>GlaxoSmithKline</td>
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<tr>
<td>HB</td>
<td>Health Behavior</td>
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<tr>
<td>HSC</td>
<td>Hopkins Symptom Checklist</td>
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<td>HTQ</td>
<td>Harvard Trauma Questionnaire</td>
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<tr>
<td>MS</td>
<td>Microsoft</td>
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<tr>
<td>NC</td>
<td>North Carolina</td>
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<tr>
<td>PHSCS</td>
<td>Piers Harris Self-Concept Scale</td>
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<tr>
<td>PTSD</td>
<td>Post-traumatic Stress Disorder</td>
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<tr>
<td>SDQ</td>
<td>Strengths and Difficulties Questionnaire</td>
</tr>
<tr>
<td>UNC</td>
<td>University of North Carolina at Chapel Hill</td>
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<td>US</td>
<td>United States</td>
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Public Health Terms

<table>
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<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Baseline</td>
<td>Information that is collected at the starting point of an intervention.</td>
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<tr>
<td>Boilerplate Language</td>
<td>Standardized language that can be included in multiple documents.</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>Numbers that are used to describe and summarize data.</td>
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<tr>
<td>Evaluation</td>
<td>Systematic investigation of the value, merit, and significance of a policy or program.</td>
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<tr>
<td>Evaluation Plan</td>
<td>A guide to conducting the evaluation, including design and methods.</td>
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<tr>
<td>Follow-Up</td>
<td>Data collected after the intervention has continued for a specified amount of time.</td>
</tr>
<tr>
<td>Inferential Statistics</td>
<td>Numbers that are used to test hypotheses and derive meaning from data.</td>
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<tr>
<td>Intervention</td>
<td>Policy or program intended to promote health in communities or populations.</td>
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<tr>
<td>Scale Up</td>
<td>An expansion of a program or plan to more people or locations.</td>
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<tr>
<td>User Guide</td>
<td>Supports the implementation, analysis, interpretation, and quality of an evaluation.</td>
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Abstract

Background: North Carolina has a growing refugee population from Burma, with an estimated 400 Burmese families living in Orange County alone. For refugee youth, coping with past hardship, immigration, and acculturation often leads to excessive stress and increased risk of mental health disorders. The Art Therapy Institute (ATI) implements an innovative, school-based art therapy program for refugee youth from Burma in Chapel Hill-Carrboro City Schools. This program, known as the Burma Art Therapy Project (BATP), uses art therapy to facilitate self-expression and alleviate mental health symptoms through non-verbal communication methods.

During the 2013-2014 academic year, a team of students from the UNC Gillings School of Global Public Health worked with ATI to evaluate BATP and increase organizational capacity through the creation of a user guide, submission of a grant proposal, and subsequent dissemination of evaluation results. Through this work, the Capstone team aimed to fill gaps in the literature regarding art therapy, to improve ATI's capacity to attract funding, and to ensure sustainability of the BATP program.

Methods: To scale-up the evaluation, we modified and added to the data collection protocol created by the previous Capstone team. We created an evaluation user guide and data management system and trained clinicians on data collection protocols. BATP clients were assessed at baseline and follow up after four months of art therapy sessions to measure impact of art therapy on mental health indicators. During the evaluation, assessments were collected, entered into the data management system, and analyzed. Findings were used to show impact and need and incorporated into a grant proposal, evaluation report, and presentation of findings. We wrote a manuscript to share lessons learned from the evaluation with broader academic community.

Results: The evaluation demonstrated that refugee clients needed access to mental health services. ATI clients experienced many traumatic events in Burma, and had higher symptoms of anxiety and depression as compared to age-matched US populations. Following 12-16 weeks of art therapy, ATI client showed significant decreases in symptoms of anxiety. Throughout the evaluation process, we noticed that the assessments were not fully capturing the strengths and difficulties of ATI clients. These findings resulted in a manuscript that we intend to submit to the Journal of Health Promotion Practice. In addition, the grant proposal strengthened ATI’s business model and created relationships with funders.

Discussion: The results from the outcome evaluation are the first step toward building ATI’s evidence base for the effectiveness of BATP and art therapy. The five deliverables produced each contribute uniquely to the sustainability of BATP and ATI. The user guide and data management system improved ATI’s capacity to conduct program evaluation in years to come. The evaluation report documented need among ATI clients, and the grant proposal contributed to the financial sustainability of BATP. Lastly, the presentation of findings and manuscript contribute to the art therapy field as a whole by demonstrating the effectiveness of this therapy for refugee populations. In the future, we recommend that ATI utilize a mixed methods approach to fully capture the benefits of art therapy and further build evidence for the positive impacts of BATP.
Acknowledgements

Our Capstone team would like to express our deepest gratitude to the following people for their guidance and support throughout the Capstone project work.

First, we would like to thank Kristin Linton and Hillary Rubesin, our Capstone preceptors, for giving us the opportunity to work with the Art Therapy Institute and the Burma Art Therapy Project. We appreciate their mentorship, support, and expertise throughout the Capstone project work and their helpful feedback on all Capstone deliverables.

We would also like to acknowledge the ATI Clinicians and Interns for their assistance and flexibility with data collection for the evaluation and Heidi Wulczyn, ATI Board Member, for sharing with us her grant-writing expertise.

We would like to thank our faculty advisor, Dr. Geni Eng, for her helpful advice and technical assistance on our Capstone project deliverables, especially the GSK grant application, manuscript, and conference abstract. Additionally, we appreciate the encouragement and support of the Capstone teaching team, Meg Landfried, Christine Agnew-Brune, and Melissa Cox, throughout the entire Capstone project.

A special thanks to the 2012-2013 ATI Capstone Team for their thoughtful and through design and documentation of the pilot evaluation.

Finally, we would like to dedicate this work to the memory of Ilene Sperling, Clinical Director and ATI Founder, a strong and caring woman who put so much of her professional and personal effort towards helping others.
Introduction

The purpose of this report is to provide an overview of the work completed for the ATI Capstone project, including the rationale for the project, methods used to complete project deliverables, and the significance of the work. Capstone is a year-long, mentored project in which a team of graduate students from the University of North Carolina (UNC) Gillings School of Global Public Health collaborates with a community organization to provide technical assistance and support toward the completion of a set of project deliverables. In conjunction with the deliverables, this report replaces the Graduate School’s Master’s thesis requirement and meets the program requirements for the Health Behavior Department. All work for the Capstone project was completed during 2013-2014 academic year by a team of students from the UNC Gillings School of Global Public Health, in partnership with the Art Therapy Institute of North Carolina (ATI).

Description of the Art Therapy Institute

ATI is an organization of mental health professionals with the mission of “empowering clients to develop their identities through the art-making process” (ATI, 2013). ATI seeks to improve the physical, mental, and emotional well-being of clients through the healing power of the arts and prevent the need for more intensive interventions such as pharmacotherapy. As part of this mission, ATI clinicians provide art therapy services to diverse populations and individuals of all ages in Orange County, North Carolina (NC). The American Art Therapy Association defines ‘art therapy’ as a method by which clients "use art media, the creative process, and the resulting artwork to explore their feelings, reconcile emotional conflicts, [...] reduce anxiety, and increase self-esteem" (AATA, 2013). Since 2009, ATI has organized and implemented the Burma Art Therapy Project (BATP) in partnership with Chapel Hill-Carrboro City Schools and the refugee community in Orange County. As part of this project, ATI provides counseling services to refugee youth in schools that include clinical assessments, individual goal setting, art therapy, and follow-up assessments.
Background of the ATI Capstone Project

In 2012, ATI requested a Capstone team to develop an evaluation plan for their school-based art therapy program from refugees from Burma. In accordance with this request, the 2012-2013 ATI Capstone team selected and piloted instruments to measure project outcomes among art therapy clients in middle and high school. ATI requested a second Capstone team in 2013 to scale up and implement the evaluation plan with all clients during the 2013-2014 academic year. The full-scale evaluation was requested in order to understand the impact of the program on clients and provide data for grant applications. The 2013-14 Capstone team was asked to continue the work of the previous Capstone team in identifying and applying for funding to help make ATI and BATP more financially sustainable and expand services to additional clients.

Description of ATI Capstone Work

Our Capstone team completed a full-scale evaluation of BATP to demonstrate the effectiveness of art therapy for adolescent refugees from Burma living in Orange County. This evaluation served three primary purposes: 1) to fill gaps in the literature regarding art therapy and mental health interventions among refugee populations, 2) to improve ATI's capacity to respond to the needs of refugee clients, and 3) to increase ATI's potential to attract funding.

In order to achieve these aims, the Capstone team wrote a program evaluation user guide, created a data management system, and summarized and disseminated findings from the evaluation. A complete list of activities associated with the Capstone project work can be found in the logical model in Appendix A. The evaluation results were used to support a grant proposal to increase funding for BATP, an evaluation report, and a presentation of evaluation findings. Finally, lessons learned from the evaluation informed our final deliverable, an academic manuscript. Ultimately, the aim of these deliverables was to increase financial and organizational sustainability for ATI and BATP.
Overview of the Summary Report

The remainder of this report describes in more detail the methods used to produce Capstone project deliverables, the results of the Capstone project work, and the significance of this work for the Art Therapy Institute and the field of art therapy.

Background

This section of the report describes the refugee population in NC, reviews the significance of mental health issues among refugee youth, and discusses the use of art therapy as an intervention for this population. As this Capstone project built upon the work of the previous ATI Capstone team, their research and literature reviews were used as a guide to write the background section of this report.

Burmese Refugee Population in North Carolina

North Carolina (NC) is a common destination for refugees seeking asylum in the United States (US). According to the Office of Refugee Resettlement, over 14,000 refugees have been resettled to NC in the past decade (Linville, 2013). During 2012 alone, approximately 2,203 of the 58,000 refugees arriving in the US were resettled to NC and over one-fourth of these people came to reside in the region of NC that includes Raleigh, Durham, and Chapel Hill (NCDHHS, 2013).

Since 2011, the Burmese community has made up the largest percentage of NC’s growing refugee population (Anderson & Bouloubasis, 2012). The country of Burma has experienced ongoing civil strife since 1962, causing hundreds of thousands of people to flee to refugee camps due to poverty, food scarcity, political violence, and severe human rights violations (BBC News, 2013). Through the U.S. Refugee Resettlement program, over 14,000 Burmese refugees have been resettled to NC over the past 10 years, with an estimated 400 Burmese families coming to live in Orange County (Anderson & Bouloubasis, 2012; Walker, 2011). For refugees from Burma, particularly children and adolescents, coping with past hardship, immigration, and acculturation
often leads to excessive stress and increased risk of mental health disorders (Schweitzer, Brough, Vromans, & Asic-Kobe, 2011).

**Mental Health of Refugee Children**

Research has consistently shown that exposure to trauma through the refugee experience is correlated with mental health issues. Additionally, refugee children face a number of challenges upon resettlement that can exacerbate these issues. Studies indicate that up to 40% of refugee children may have psychiatric disorders, including post-traumatic stress disorder (PTSD), depression, anxiety-related difficulties, sleep problems, conduct disorder, attention problems, generalized fear, hyperactivity, difficulties in peer relationships, and separation anxiety (Hodes, 2000). Furthermore, adjustment difficulties can impact a child’s sense of security, self-worth, and identity, which can negatively affect job readiness and lead to issues with substance abuse and truancy (K. Linton, personal communication, November 2013). These mental health disorders may stem from unique stressors affecting young refugees during resettlement, such as “managing new school environments, navigating new roles as translators and cultural brokers for parents, and balancing cultural identity concerns” (Mershon, DeTrizio, Emmerling, & Kowitt, 2013).

**Mental Health Interventions with Refugee Youth**

The large burden of mental health disorders among refugee children indicates a need to develop services for these populations within their resettlement communities (Lustig et al., 2004; Murray et al., 2008; Schweitzer et al., 2010). However, the evidence base for effective mental health interventions with this population is limited. Systematic reviews have found few interventions that have been developed for refugee youth, and of those published studies, almost all focus exclusively on PTSD (Birman et al., 2005; Lustig et al., 2004). In addition, these studies have less rigorous designs and small sample sizes that make it difficult to draw definitive conclusions about the impact of these interventions on the mental health of adolescent refugees.

Studies indicate that refugees in the U.S. often “underutilize traditional mental health care
services due to lack of language-appropriate translators, limited financial resources, and lack of mental health care screenings and services” (Mershon et al., 2013). Researchers have proposed strategies to combat these barriers, including mental health interventions that are tailored to cultural norms and target many levels of the socio-ecological model (Lustig et al., 2004). A handful of studies have evaluated the effectiveness of school-based mental health interventions for refugee children. Findings from these studies suggest that implementing services in schools improves accessibility and psychosocial outcomes among refugee adolescents (Fazel et al, 2009; Layne et al, 2000). Therefore, mental health interventions utilizing school or community structures may serve as a means to reach this population.

Evidence for Art Therapy Interventions with Refugee Youth

One promising strategy for improving the mental health of adolescent refugees from Burma in North Carolina is through art therapy (Carthout, 2007; Lustig et al., 2004). The arts have been shown to facilitate self-expression and alleviate symptoms of stress, anxiety, and depression for those with whom verbal communication is difficult due to language barriers or speech disabilities (Breslow, 1993; Councill, 2012)

Despite evidence of the benefits of art therapy, literature on its use with refugees is somewhat scarce. Two studies with refugee children have suggested that expressive art therapies can reduce emotional and behavioral problems (Baker & Jones, 2006; Rousseau et al, 2005). An evaluative study by Rousseau et al. (2005) showed that group art therapy improved self-esteem among young refugee children in Canada. Music therapy, another form of expressive therapy, was utilized during a 10 week pilot study with refugee high school students in Australia, and led to significant decreases in hyperactivity and aggressive behaviors (Baker & Jones, 2006).

Moreover, there exists a small body of literature on the impact of art therapy on symptoms of trauma, which may be used as a proxy to anticipate the impact of expressive therapies on the refugee population from Burma in NC. Eaton et al. (2007) conducted a literature review to explore
the use of art therapy as a method of treating traumatized children. Twelve peer-reviewed papers were evaluated and showed that art therapy helped children successfully cope with trauma. Many of the studies also reported improvements related to mental health, including reduced symptoms of PTSD and anxiety, and improved emotional stability. In essence, art therapy offered a mechanism through which refugee children could communicate their experiences and process their thoughts and feelings (Eaton, Doherty & Widrick, 2007).

Though studies are limited, art therapy has been shown to be an important and effective treatment modality for refugee youth as it circumvents language barriers and addresses PTSD symptoms (Rousseau et al, 2005). Research has also suggested that art therapy allows children to develop positive relationships with their therapists, alleviates negative psychosocial consequences of childhood trauma, and offers a way for children to communicate grief and loss (Eaton et al, 2007). The triangulation of these study findings reveals strong evidence to support art therapy as a tool “to address both the mental health disorders present among refugee children and the insufficiency of existing mental health services to meet these needs” (Mershon et al., 2013).

**Capstone Rationale**

Our literature review has shown that refugee youth suffer disproportionately from mental health issues such as PTSD, depression and anxiety. In addition, this is a particularly vulnerable population as they are less likely to seek traditional medical care and there are few alternative therapy options available. Art therapy is a promising and appropriate treatment modality to help refugee youth cope with mental health issues; however, literature on the effectiveness of this therapy with refugees is sparse. To add to the evidence base on the benefits of art therapy for refugee youth, our Capstone team undertook an evaluation of ATI’s Burma Art Therapy Project (BATP) with the aim of disseminating results to a larger mental health and art therapy community.

Additionally, as available funding for mental health shrinks, the onus is being placed on organizations to show the value and impact of their work to compete for grants. The sustainability
of BATP depends on its ability to attract funding from outside donors and agencies; however, until this year, BATP had never been formally evaluated. Therefore, we conducted the evaluation of BATP to generate data and wrote a grant proposal to request additional funding for ATI.

Methods

This section of the report explains the methods used to produce project deliverables. In it, we discuss the ways in which we became familiar with ATI and its stakeholders, the activities that we undertook to conduct the evaluation and disseminate results, and the skills that we applied and acquired during the Capstone project work.

Orientation to ATI

We became oriented to ATI and the Capstone project work by talking with the 2012-13 Capstone team and meeting with ATI preceptors. In the spring of 2013, we met with the previous Capstone team to hear about their experience working with ATI. At this meeting, they shared with us their final deliverables, including the evaluation plan, evaluation report and funding guide, and the methods that they used to create these deliverables. By familiarizing ourselves with these deliverables, we were able to learn about BATP and the pilot evaluation.

Once the project work was underway, we continued to have regular meetings with our preceptors. We began each of these meetings with an art project and then moved into Capstone-related agenda items. The act of making art helped us become familiar with the structure of an art therapy session and facilitated rapport-building between Capstone team members and preceptors. Over the course of the year, we became more familiar with ATI by attending community art walks, meetings with ATI clinicians and interns, and fundraising events sponsored by ATI.

Baseline Data Collection Methods

In order to scale-up the evaluation, we first modified and added to the data collection protocol created by the previous Capstone team. These modifications were based on feedback from
our preceptors and lessons learned from the pilot evaluation conducted by the 2012-2013 ATI Capstone team. Second, we researched each assessment tool used in the evaluation and wrote step-by-step instructions for clinicians to follow while administering assessments to clients. These protocols became the content of the data collection section of the program evaluation user guide. We then trained seven clinicians and interns on the data collection protocols in the guide. The goals of the training were to discuss the purpose of the evaluation and promote consistent administration of assessments across clinicians. We also engaged clinicians and interns through email communication throughout the evaluation and a focus group at the end of baseline data collection.

At baseline, 30 of ATI’s middle and high school clients in BATP were included in the evaluation. Out of 30 clients, 20 (67%) were male, 18 (60%) were in high school, and 24 (80%) were in English as a Second Language (ESL) classes. The average age for clients was 15 years (range: 11-20 years) and the average time in the United States (US) was five years. Evaluation data were collected using four quantitative assessments: the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), the Piers Harris Self-Concept Scale (PHSCS; Piers, 1969), the Hopkins Symptom Checklist (HSC; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), and the Harvard Trauma Questionnaire (HTQ; Mollica & Caspi-Yavin, 1991). Collectively, these tools measured emotional and behavioral difficulties, self-esteem and self-concept, depression and anxiety, and history of trauma (Ibid). ATI clinicians administered the PHSCS, HSC, and HTQ to their clients during their scheduled art therapy sessions in Chapel Hill-Carrboro City Schools. Teachers and school social workers who were familiar with clients completed the SDQ.

Through implementing the evaluation plan, we gained skills in communication, group facilitation, data management and analysis, writing evaluation protocols, and providing technical assistance. Additionally, we learned how to tailor data collection tools, train data collectors, manage an evaluation team, and write and communicate clear instructions for evaluation.
Data Management Methods

To organize and analyze the data from the assessments, we created a data management system that included a spreadsheet, code dictionaries, and a code book. The data management spreadsheet was created in Microsoft Excel 2010 and served as the primary storage and analysis tool for the assessment data. The code dictionaries included the variable name and possible response codes for each assessment, and the code book defined the constructs measured and methods of calculation. Referencing these tools, we wrote a section on data management and analysis for the user guide that explained response coding, data entry, and analysis. We then collected the completed paper assessments, assigned response codes using the code dictionaries, and entered the codes into the data management spreadsheet.

We analyzed the assessment data by calculating descriptive statistics in Excel. In the data management spreadsheet, we summed the sub-scales within each assessment for each client and interpreted the scores based on average scores or percentiles in the published literature. We also calculated the demographics of the study population. The demographic information and the findings from each assessment were configured to automatically populate within Excel, providing an easy way to view descriptive statistics from the evaluation.

At the end of baseline data collection, we conducted two focus groups (n = 5 and n = 2) with clinicians to assess their experience with the assessment process and incorporate their feedback into the user guide. We took notes on the focus groups and wrote memos to compare and synthesize our findings across participants and groups. These memos were incorporated into revisions of the user guide and helped to inform the final version of the guide.

Grant Proposal Methods

While clinicians were collecting baseline data for the evaluation, we began to seek out potential funding sources that matched ATI’s mission and prepared to write the grant proposal. First, we researched local foundations in the Raleigh-Durham-Chapel Hill area and eventually
expanded to foundations on the state and local levels. We added foundations that focused on issues related to mental health, community-based health, refugee populations, and high-risk groups to a list of potential funders that had been assembled by the previous Capstone team. We then called local foundations to inquire about funding opportunities and the process of submitting applications. Additionally, we sent a letter of inquiry to the Nan Gray Monk Foundation, as this foundation seemed to be a promising source of funding for ATI.

Our next step was to narrow down our list of promising funding opportunities and select a grant for which to apply. We selected the GSK Ribbon of Hope Grant as our main grant deliverable. Drawing on the boilerplate grant language developed by the previous ATI Capstone team, we drafted the sections of the grant proposal with the assistance of an ATI board member with experience in grant writing. We incorporated the findings from the pilot and baseline evaluations to show need among refugee youth for art therapy, write the objectives for BATP, and illustrate the positive impact of BATP.

In addition to the Ribbon of Hope Grant, we assisted our preceptors in drafting sections of the application and gathering supporting documentation for the Outside Agency Grant awarded by the City of Chapel Hill, City of Carrboro, and Orange County. For this grant proposal, baseline evaluation results were used to provide evidence that the program included a plan for evaluation. Through the exercise of identifying, selecting, and writing a competitive grant, we learned more about sources of funding for non-profits and the importance of securing funding to sustain programs.

Follow Up Data Collection Methods

At three months of art therapy, data were collected using the Strengths and Difficulties Questionnaire (SDQ), Piers-Harris Self-Concept Scale (PHSCS), and Hopkins Symptom Checklist (HSC). The Harvard Trauma Questionnaire was not administered at follow up to avoid making clients repeat traumatic experiences in Burma and Thailand. Out of the original 30 clients, four
were lost to follow-up. One client was uncomfortable with the assessment process, one client’s parent revoked consent for participation in the evaluation, and two dropped out of the program.

Our Capstone team coded and entered the follow up assessment data in the data management spreadsheet and calculated inferential statistics using SAS analytic software (SAS Institute; Cary, NC) to determine if client scores on assessments were significantly different before and after art therapy. The results from the evaluation were presented in two deliverables; the evaluation report and a PowerPoint presentation. The purpose of these deliverables was to disseminate results to key stakeholders and potential donors.

Much of our work in the second semester of this Capstone project revolved around writing and disseminating the results of the evaluation. Through these activities, we developed skills in scientific writing, tailoring written reports for different audiences, and presentation of data.

*Manuscript Development Methods*

At the outset of the Capstone project, we had intended to write a manuscript with the results of the evaluation for publication. As we analyzed the data from the evaluation, however, we felt that the assessment tools that we used had not fully captured all of the benefits of art therapy. Therefore, in collaboration with our preceptors, we decided to focus the manuscript less on the evaluation findings and more on the process of the evaluation. We explored alternative assessments to measure the impact of art therapy that were more congruent with BATP’s positive, growth-focused approach and settled on two art and growth based assessments.

After reviewing the initial draft of the manuscript with the teaching team and preceptors, we decided to re-work the manuscript into a case study of evaluation with a community-based art therapy program. The manuscript included a description of the evaluation project and a discussion of the importance of choosing evaluation tools that align with the hypothesized impact pathways of the intervention. At this time, the manuscript is undergoing final revisions to ready it for submission to the Journal of Health Promotion Practice.
Results

This section of the report describes the results of the Capstone project work, including the findings from evaluation scale up, data analysis, grant proposal development, and dissemination of results.

Evaluation Results

The evaluation results showed the need and impact of BATP on adolescent refugees from Burma. At baseline, adolescent refugees in BATP reported a significant history of trauma before arriving in the U.S. Over 80% of clients had experienced traumatic events in Burma or Thailand; the most common of which were lack of food or water (n=12), serious injury (n=11), and unnatural death of family or friend (n=7). On the assessment of anxiety and depression, 20% of clients reported symptoms of anxiety and 40% reported symptoms of depression. Comparatively, a survey of U.S. adolescents found that only 11.7% of 13-18 year olds had ever had symptoms of depression (Merikangas, 2010). BATP participants also had lower scored on the self-concept assessment compared to a standard sample of U.S. students (Piers & Herzberg, 2009). Over 70% of clients scored below average in their appraisal of their intellectual ability and physical appearance and 53% scored below average in popularity. Finally, at baseline, teachers and social workers reported that 30% of clients showed signs of emotional or behavioral difficulties in the classroom.

At follow up, results showed that after twelve to fourteen weeks of art therapy sessions, symptoms of anxiety and overall distress decreased, and some measures of positive self-concept increased. Clients reported significantly fewer symptoms of anxiety and an increase in feeling free from anxiety. In addition, the proportion of participants with a positive self-concept increased at follow up. This finding reflects similar increases in the proportion of clients reporting feeling positively about their popularity, happiness and satisfaction, and physical appearance. Though improvements were made, the findings also showed an unexpected increase in the proportion of patients reporting symptoms of depression at follow up compared to baseline. Additionally, clients'
scores on assessments measuring pro-social behavior, perceived intellectual ability, and perceived behavioral adjustment declined at follow up compared to baseline, although these was not statistically significant.

**Findings from Evaluation Implementation**

Despite providing training to clinicians on data collection protocols in the evaluation user guide, we found that clinicians faced difficulties in consistently collecting data during the evaluation. In the focus group discussions regarding the process of data collection, many clinicians reported having difficulties with consistent data collection due to high absenteeism, behavioral difficulties, and language barriers among their clients. On the other hand, clinicians said they felt that administering the assessments with their clients was less disruptive than they expected. Additionally, they reported that the assessments were helpful clinically and allowed them to build trust and deeper relationships by validating their clients’ experiences.

**Findings from Dissemination of Evaluation Results**

As a result of conducting the evaluation, we found that while quantitative deficit-framed measures can assess the impacts of art therapy and trauma, additional tools that better reflect the nature and mechanisms of art therapy may be necessary. While the tools that we used have been successfully used in other evaluations, they may not be sufficient to capture the positive-framed mechanisms of art therapy or to address the language and cultural barriers inherent in working with refugee populations.

These findings resulted in a manuscript that we intend to submit to the Journal of Health Promotion Practice, in which we use the evaluation of BATP as a case study to provide insight into how to accurately measure the impacts of art therapy on refugee youth. In this manuscript, we posit that effects of trauma and the benefits of art therapy in this population could be better assessed by adding tools that avoid language barriers completely and use a growth-based approach and thus better match the mechanisms of art therapy.
Grant Proposal Results

The grant deliverable and the associated effort that went into identifying and reaching out to funding organizations increased ATI’s organization capacity to apply for grants, strengthened ATI’s business model, and created relationships with potential funders. As a result of this work, ATI has four new promising grant proposals to pursue and the boilerplate language necessary to write proposals for these organizations. Additionally, through our work developing the GSK and Outside Agency Grant proposals, we helped ATI update its organizational goals and objectives, provide evidence of programmatic need, and describe expansion plans for BATP. This resulted in a stronger business model for the organization. Finally, the submission of the GSK grant acted to reinforce ATI’s relationship with GSK as a potential funder. Unfortunately, we cannot speak to the monetary results of the grant proposals as, at the time that this summary report was written, the proposals for the Outside Agency and Ribbon of Hope grants were still undergoing review.

Discussion

In this section we reflect upon the implications of the Capstone project work for ATI and the field of art therapy. We also discuss strategies that would have strengthened the Capstone project and recommend next steps for the project deliverables. Finally, we discuss sustainability strategies for the Capstone project work.

Impact of Capstone Project Work

Our Capstone project was focused on improving the sustainability of BATP; therefore, an emphasis on producing deliverables that contributed to ATI’s organizational and financial capacity was central to our work.

The scale up of the evaluation of BATP had an impact on the sustainability of ATI, as the findings demonstrated the client need and the effectiveness of BATP in improving mental health of refugee youth. The creation of the evaluation user guide and data management tools allows ATI to
continue the evaluation with consistency and thoroughness over time. As evaluation continues, the database and sample size of ATI clients will grow, enabling more rigorous analysis. In addition, ATI clinicians have now been trained in data collection and analysis which builds their capacity to evaluate other ATI programs beyond BATP.

The results of the evaluation also build the organization’s financial sustainability by making ATI more competitive for funding. The evaluation report and corresponding presentation of findings clearly outlined the program’s impact and plan for expansion and were specifically targeted to inform and attract new funders. With these deliverables, ATI has the capacity to approach potential funders with demonstrated programmatic impact and a clear road map for future funding needs. Finally, the grant proposal contributed to financial sustainability by seeking funding in the immediate, as well as creating boilerplate language for future grant proposals.

Beyond BATP, our work contributed to the field of art therapy as a whole. If the manuscript is selected for publication, it will increase the creditability of art therapy as a public health intervention for refugees. Currently, the evidence-base for art therapy is limited. Therefore, the dissemination of applied research will help improve the practice of art therapy and lead to optimal results for clients. Ultimately, demonstrating the impact of art therapy to the greater academic community will contribute to the sustainability of ATI and the larger field of art therapy.

*Capstone Project Challenges*

Though our project built the sustainability of ATI and BATP, there were some limitations inherent in the evaluation design that affected the approach that we took to disseminate results. The small sample size and absence of a comparison group limited statistical power during the analysis and weakened the generalizability of findings. The study did not have a comparison group due to ethical concerns in delaying therapy and limited evaluation capacity within the organization at present. Without a comparison group, the study design was vulnerable to threats to internal validity, including history, maturation, and testing. History and maturation threats imply that larger
events or natural maturation between baseline and follow-up assessments may account for the evaluation results in lieu of art therapy. Testing indicates that completing the baseline assessment could possibly inform the way in which clients’ respond to the follow-up assessment, without relation to the effect of art therapy. These factors threaten the validity of our evaluation results and should be addressed as the evaluation continues.

After analyzing data, our Capstone team also experienced difficulty in framing the results of the evaluation for the manuscript, evaluation report, and presentation of findings. Each deliverable had a unique target audience including the academic community, potential funders, and community stakeholders, respectively. To capture the attention of these audiences, we had to highlight the results in different ways. For the manuscript, we chose to frame the evaluation as a case study given the rigorous methods requirements among academic journals. On the other hand, the evaluation report and presentation showcased the evaluation results as a means to attract additional support. In creating these deliverables, we learned the value of health communication strategies and ways to adapt results to meet the interests of the target audience.

Additional Strategies to Strengthen the Project

While we attempted to make the evaluation and grant proposal as strong as possible given our knowledge, time, and resources, we have identified additional strategies that would have strengthened the Capstone project work. For the evaluation, these strategies include adding a qualitative evaluation component, re-evaluating the assessments used, and analyzing the Diagnostic Drawing Series (DDS).

A mixed methods evaluation of BATP that included qualitative and quantitative data would have strengthened the evaluation findings. First, the quantitative assessments chosen may not have been the most appropriate for this population as cultural and language barriers may have made it difficult to capture client’s mental and emotional difficulties. Furthermore, by solely taking clinical measurements of negative mental health symptoms, the evaluation may not have captured all of the
benefits of art therapy. Rather, we believe that including measurements of post-traumatic growth, resilience, and community network building would have been better indicators of the effectiveness of art therapy. Post-traumatic growth describes positive changes due to overcoming a challenging life event, which seems particularly fitting for the strengths-based approach of art therapy. Finally, including more tools that fit with the intent of art therapy, such as the DDS would have strengthened the evaluation. During baseline data collection, clinicians administered the DDS, a tool created by art therapists to identify psychological distress. We did not use this tool in the evaluation, however, as interpretation of this assessment required additional resources, qualitative information, and training.

We also faced some logistical challenges that could have impacted the accuracy of collected data. The baseline assessments took longer to complete than expected, thus we did not have time to clean the data. Implementing a better process for collecting the data from clinicians would have strengthened the data entry and analysis process in the evaluation. In the future, ATI could use the summer months to prepare for the evaluation by communicating with teachers, training clinicians, and organizing the assessment schedule. Additionally, the collection of data on a weekly basis would improve organization and eliminate confusion regarding incomplete or missing assessments. Lastly, the coding and transfer of data from the assessment to the data management system took approximately two weeks, with the addition of two to three more weeks to correct for missing information. This time requirement should be considered and perhaps delegated to an intern during the fall and spring semesters.

For the grant deliverable, a short academic course in grant writing would have improved the process of completing the grant deliverable. None of us had experience with writing grant proposal, and we believe that having more knowledge about the grant writing process would have given us more confidence in the process of grant selection and writing.
Next Steps

In the immediate term, the results from the evaluation can be used to show need and apply for additional grant funding for BATP to expand the programs’ services. We recommend that ATI create a plan to disseminate the evaluation findings to stakeholders, funders, and community members using the evaluation report and presentation deliverables. Clinicians can also use the evaluation findings to write clinical objectives for their clients and tailor art therapy sessions to meet their clients’ needs. Finally, the results can be featured on ATI's website and disseminated to stakeholders such as ATI board members and other interested organizations such as Chapel Hill-Carrboro City Schools, the Refugee Health Coalition, Orange County Health Department, Cardinal Solutions, UNC Gillings School of Global Public Health, and UNC School of Social Work. The Capstone team will continue to seek other publishing or presenting avenues such as conferences and meetings, webinars, and listservs.

Since the evaluation is designed to collect longitudinal data on art therapy clients, ATI will need to plan for and continue the evaluation with a cohort of clients in order to truly understand how art therapy affects refugee youth. This will involve enrolling new clients in the evaluation, adding them to the data management spreadsheet, and conducting baseline assessments. The data management spreadsheet and code dictionaries will aid in this long-term endeavor. The data management spreadsheet allows for systematic data entry and automatically calculates descriptive statistics for ATI to use for annual reporting and proposals.

The grant deliverable and the associated effort that went into identifying and reaching out to funding organizations have implications for the future financial stability of BATP. If ATI receives funding from GSK, they will be able to enroll more clients into BATP and facilitate additional social support groups, including refugee women's and vocational groups. Additionally, ATI will be able to use the funds to expand evaluation efforts to other BATP programs and offer more professional enrichment opportunities for clinicians and interns.
**Impact on Student Team**

The Capstone project had an impact on the student team both personally and professionally. We learned many lessons during this work that we will be able to take into our careers, including the importance of communication in working relationships with partners, the benefits of working with a team to accomplish project goals, and the value of celebrating team victories to boost morale. We also gained skills in applied evaluation, grant writing, literature reviews, and manuscript writing that we will be able to apply professionally. Through this Capstone project, we have confirmed our interest in evaluation, mental health, and refugee health and hope to continue working in these fields in the future.

**Conclusion**

Our Capstone project work contributed to the programmatic and financial sustainability of ATI and BATP. This work will allow ATI to continue meeting the mental health needs of the growing refugee population from Burma in Orange County. As refugee youth are at increased risk of mental health disorders and excessive stress, the continued delivery of therapeutic services outside of clinical settings is crucial to helping them cope with past hardship, immigration, and acculturation. BATP has worked with refugee youth in schools for years, but had never assessed the impact of their work. Therefore, the Capstone team conducted a scale-up of the 2012 pilot evaluation, in order to fill gaps in the literature regarding art therapy, to improve ATI's capacity to attract funding, and to ensure sustainability of the BATP program.

The results of the BATP evaluation demonstrated that there is a high mental health burden among youth refugees and that art therapy was successful in reducing anxiety, improving self-concept, and decreasing emotional and behavioral difficulties. The results from the outcome evaluation are the first step toward building ATI's evidence base for the effectiveness of BATP and art therapy. By institutionalizing the evaluation, ATI will be in a position to improve their
programmatic and financial capacity. Specifically, by following clients over subsequent years, we expect that the evaluation findings will be strengthened and show even more growth among clients. The demonstrated mental health need and impact of BATP can be used to seek additional funding and support for the program.

Throughout the evaluation process, we noticed that the assessments were not fully capturing the strengths and difficulties of ATI clients. Therefore, we proposed additional tools that would be more reflective of the pathways of positive change observed among ATI clients. This resulted in a manuscript that we intend to submit to the Journal of Health Promotion Practice. Through this manuscript, we will contribute to the art therapy field as a whole by demonstrating the effectiveness of this therapy for refugee populations.

The five deliverables produced each uniquely contribute to the sustainability of BATP and ATI. In the future, ATI can build upon relationships with funders, utilize the user guide and data management system to assess BATP, and continue to disseminate results to contribute to the field of art therapy. This outcome evaluation was the first step toward building ATI’s capacity to demonstrate program results, and ideally should be expanded to encompass all BATP-related programs. Building upon this year’s work, ATI will have the tools and information needed to continue to deliver quality services to clients in BATP and expand its programs to reach more refugees in need.
References


## Appendix A. Logic Model for 2012-13 ATI Capstone Project Work

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impact</th>
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</thead>
<tbody>
<tr>
<td>• Capstone team knowledge and research skills from HB coursework and experience</td>
<td>• Develop Capstone work plan</td>
<td>• Capstone work plan Evaluation data collection, management, and analysis user guide</td>
<td><strong>Short Term</strong></td>
<td>• Increased financial and organizational sustainability of BATP</td>
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<tr>
<td></td>
<td>• Engage stakeholders</td>
<td>• Evaluation report</td>
<td>• Systematized collection, management, and analysis of data on BATP</td>
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<tr>
<td></td>
<td>• Write data collection and management guide</td>
<td>• Database of potential funding opportunities</td>
<td>• Established evidence for future funding of BATP</td>
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<tr>
<td></td>
<td>• Create data management system</td>
<td>• Grant proposal</td>
<td>• Increased capacity of ATI clinicians to evaluate BATP independently and regularly</td>
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<tr>
<td></td>
<td>• Develop training materials and train clinicians to collect and manage data</td>
<td>• Presentation on evaluation findings</td>
<td>• Increased funding for BATP</td>
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<tr>
<td></td>
<td>• Collect &amp; analyze data</td>
<td>• Academic paper</td>
<td><strong>Long Term</strong></td>
<td>• Expanded evidence base of effectiveness of art therapy in adolescent refugee populations from Burma</td>
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<td></td>
<td>• Summarize findings in evaluation report</td>
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<td></td>
<td>• Write manuscript for public health journal</td>
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<td>• Submit abstract to public health conference</td>
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<td></td>
<td>• Present findings to stakeholders</td>
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<tr>
<td></td>
<td>• Research funding opportunities</td>
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<tr>
<td></td>
<td>• Create database of potential funding opportunities</td>
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<tr>
<td></td>
<td>• Write and submit grant application to GSK</td>
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<tr>
<td></td>
<td>• Review existing literature on refugee health and art therapy</td>
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<tr>
<td>• $100 Capstone budget</td>
<td>• Guidance &amp; expertise from faculty advisor, preceptors, teaching team, consultants, and previous Capstone team members</td>
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<tr>
<td>• ATI and on-campus meeting spaces</td>
<td>• Previous Capstone team deliverables</td>
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<tr>
<td>• Guidance &amp; expertise from faculty advisor, preceptors, teaching team, consultants, and previous Capstone team members</td>
<td>• ATI financial and organizational resources</td>
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<tr>
<td>• Previous Capstone team deliverables</td>
<td>• Guidance and input from ATI clinicians, school social workers and community members</td>
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<tr>
<td>• ATI financial and organizational resources</td>
<td>• Data analysis software (Excel and SAS)</td>
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<td>• Guidance and input from ATI clinicians, school social workers and community members</td>
<td>• Data analysis software (Excel and SAS)</td>
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## Deliverable I: Evaluation Data Collection, Management, and Analysis User Guide

**Format:** 50 page narrative document, plus assessment tools, code dictionaries, codebook, and Microsoft Excel database

**Purpose:** To establish a protocol for collecting, managing, and analyzing data for the evaluation of the Burma Art Therapy Project.

**Intended Audience(s):** ATI clinicians and interns, current and future Capstone teams, other potential evaluation assistants (i.e. practicum students, interns, research assistants, etc.)

**Activities:**
- Reviewed 2012-13 ATI Capstone team’s outcome evaluation plan, assessment tools, and evaluation report.
- Wrote introductory section of user guide and instructions for administering each assessment.
- Trained art therapy clinicians and interns on implementing evaluation assessments.
- Created code dictionaries for coding quantitative assessments and DDS drawings.
- Created codebook with constructs, question variables, coding schemes and reference information. Codebook reviewed by biostatistics expert.
- Created data management spreadsheet in MS Excel.
- Held a focus group to collect feedback from ATI clinicians on user guide and data collection process.
- Wrote instructions for data management and analysis sections of user guide.
- Complied introduction; data collection, management, and analysis instructions; and supporting materials (assessments, checklists, and clinician reaction forms) into comprehensive user guide.
- Trained ATI clinicians on managing, entering, and analyzing data for continuing evaluation.
- Archived user guide for use in future outcome evaluations of the Burma Art Therapy Project.

**Recommendations:**
- ATI clinicians should follow the user guide in subsequent evaluations in order to collect data consistently across participants and monitor changes in participants over time. By following the user guide each year, ATI will improve the reliability and validity of the data it collects.
- Before each school year, the ATI director should organize trainings for all clinicians and interns on the data collection procedures in the user guide.
- During the next data collection cycle, ATI should attempt to collect the recommended process evaluation data in the analysis section of the user guide in order to better understand the causal pathways that lead to intervention effects.
- Additional evaluation assistants (i.e. practicum students,
interns, research assistants, etc.) should familiarize themselves with the user guide before starting any data entry or analysis.
- The ATI director should review the user guide periodically to verify that it is still meeting the evaluation and data needs of the organization.

### Deliverable II: Evaluation Report

**Format:** 15 page narrative report with executive summary

**Purpose:** To report on the methods and findings of the outcome evaluation and demonstrate the value of art therapy for refugee children, especially when seeking financial support for BATP.

**Intended Audience(s):** ATI board, ATI art therapists, Chapel Hill/Carrboro school teachers and social workers, funding institutions and corporate sponsors

**Activities:**
- Created timeline for conducting outcome evaluation.
- Distributed data collection binders, including instructions for administering assessments and copies of assessments, to clinicians.
- Checked in regularly with clinicians via email to track progress on data collection and answer questions.
- Obtained completed baseline assessments from clinicians.
- Obtained client demographic information from clinicians.
- Coded completed baseline assessments and entered demographic and assessment data into data management spreadsheet.
- Programmed data management spreadsheet to automatically calculate descriptive statistics and create charts and graphs.
- Collected follow up assessments and entered data into data management spreadsheet.
- Wrote SAS programming language and ran statistical tests.
- Summarized findings and wrote evaluation report.

**Recommendations:**
- Consider adding other assessments for future evaluations such as post-traumatic growth scales.
- ATI clinicians should continue to enroll new clients into the evaluation, administer assessments, and enter data into the spreadsheet.
- ATI should seek to partner with a statistician for analysis of future evaluation data.
- ATI should formulate a plan to disseminate findings from ongoing evaluations, either through reports or presentations to key stakeholders.

### Deliverable III: Grant Proposal

**Format:** 20 page narrative grant application with tables of program results and budget

**Purpose:** To secure ongoing funding for the Burma Art Therapy Project.
### Intended Audience(s):
GlaxoSmithKline Ribbon of Hope Foundation; Outside Agency Grant Selection Committee

### Activities:
- Reviewed funding guide and grant applications from 2012-13 ATI Capstone team.
- Researched local funders and foundations and updated 2012-13 ATI Capstone team’s list of potential funders.
- Created Excel document with information on promising grants for ATI’s future use.
- Selected funding opportunities for grant proposal submission in consultation with ATI.
- Assisted ATI director with writing sections of Outside Agency Grant.
- Wrote GSK grant application.
- Final draft of the grant application reviewed by grant writing professional.
- Grant submitted to GSK.

### Recommendations:
- ATI should continue to update the potential grant lists and funding guide from 2012-13 Capstone team.
- Take steps to continue to maintain and build relationships with grant officers so that it will be easier to receive future funding from these organizations.
- Use language from the Outside Agency and GSK grant in future grant proposals.

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### Deliverable IV: Presentation of Evaluation Findings

**Format:** [##] slide PowerPoint presentation

**Purpose:** To disseminate the results of the BATP evaluation.

**Intended Audience(s):** ATI board members, clinicians, Chapel Hill-Carrboro City Schools personnel, potential funders, and other stakeholders as selected by ATI.

**Activities:**
- Created PowerPoint slides with evaluation methodology, results, discussion, and conclusions.
- Set up a time to present slides to ATI clinicians and board members.
- Presented slides to ATI clinicians and board members and fielded questions.

**Recommendations:**
- ATI should continue to seek opportunities to present the evaluation results. Possible avenues include Refugee Health Coalition Meetings, Art Therapy conferences and organization meetings, and fundraising events in the community.
- ATI should tailor slides to meet audience needs and interests for future presentations.

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### Deliverable V: Academic Paper

**Format:** 3500 word manuscript and 250 word abstract

**Purpose:** To disseminate the results of the BATP evaluation and
communicate lessons learned with public health practitioners.

<table>
<thead>
<tr>
<th>Intended Audience(s):</th>
<th>Researchers, public health practitioners, evaluation consultants, and community-based organizations wishing to conduct evaluations who read the journal of Health Promotion Practice.</th>
</tr>
</thead>
</table>
| Activities:           | • In collaboration with preceptors and mentors, decided to submit abstract on evaluation to APHA annual conference.  
                        • Wrote abstract on evaluation for APHA annual conference.  
                        • Submitted abstract to immigrant and refugee health session of APHA annual conference.  
                        • Researched potential journals for manuscript submission.  
                        • In collaboration with preceptors and mentors, decided to submit manuscript to the journal of Health Promotion Practice.  
                        • Wrote outline for the manuscript.  
                        • Conducted literature review for manuscript.  
                        • Manuscript reviewed and added to by content experts.  
                        • Incorporated edits and comments added by content experts. |
| Recommendations:      | • ATI and UNC Capstone team should start making preparations to present at APHA annual conference if abstract is selected for presentation.  
                        • ATI and the UNC Capstone team should continue to look for avenues to disseminate the results of the BATP evaluation, including poster fairs, conferences, and listservs. |