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Asking NADA: A Needs Assessment for Training Renewal

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Abstract

The National Acupuncture Detoxification Association (NADA) provides training in "acudetox," a standardized auricular acupuncture protocol integrated with biopsychosocial models of care to support behavioral health, including emotional response to trauma and disaster. NADA has a corps of Registered Trainers, defined competencies and a Training Resource Manual, last revised significantly in 2008. The training manual and methods have fallen behind the times and are past due for revision.

This project conducted an assessment of the NADA training needs towards improving the manual materials and methods available to trainers. The study garnered information and expertise from the NADA leadership and training community, and by the process of inclusion, sought buy-in for new developments. A mixed methods study was undertaken to identify the curriculum and methods renewal needs, including brief interviews with thought leaders; a needs assessment survey of trainers; a World Café™ model work group of trainers; and a focus group of trainees. Collectively these processes yielded rich recommendations for change.

Every year, NADA trains hundreds of Acupuncture Detoxification Specialists (ADS), the designation for someone who has successfully attained competency in the protocol. International NADA affiliates use the NADA models of training to train thousands per year. This study identified training and curriculum needs to guide the next manual iteration. This study results could facilitate the creation of better materials and methods and an ongoing renewal system. The study process was consistent with what the organization calls the "Spirit of NADA," in terms of respect, inclusion and consensus.

Keywords

NADA, Acudetox, Auricular acupuncture for behavioral health, Needs assessment, Curriculum renewal, Healthcare education, World café™

Abbreviation

NADA: National Acupuncture Detoxification Association; **RT:** Registered Trainer. Person empowered by NADA to train/provide certificates; **ADS:** Acupuncture Detoxification Specialist. Person trained in the protocol; **Acudetox:** The NADA standardized ear protocol, integrated with behavioral health care; **SI:** Student Investigator; **PI**: Primary researcher; **DC:** doctoral candidate; **ADS training resource manual:** Primary content for ADS learning and reference; **World café:** Model for facilitated conversations (www.worldcafe.com); **CM:** Chinese medicine; **Behavioral health:** Overarching term for addiction and mental health.

Introduction background

The National Acupuncture Detoxification Association (NADA) was founded in 1985 to promote the integration of a standardized ear acupuncture protocol, "acudetox," within behavioral health treatment delivery systems. From the inception, training in the method and philosophy of care was at the heart of the organizational mission [1]. The primary tool for training, the Acupuncture Detoxification Specialist Training and Resource Manual: A handbook for individuals training in the NADA Five-needle Acudetox Protocol, was last revised significantly in 2008, and is in need of revision now. Although some changes to upgrade the content have continued over the years, the basic structure and content remain. No systematic or formal process has been used to capture stakeholders' input on the manual or the training methods in the past.

NADA has trained more than twenty-five thousand individuals, and the NADA organizational and training model has been replicated around the world [2]. In the context of a suffering world, as evidenced by alarming rates of addiction, mental health crises, violence, and populations vulnerable to behavioral health problems, such as veterans, refugees, chronic pain sufferers, disaster victims, etc., NADA offers a safe, simple, easily-learned and integrated tool for enhancing medical, psychosocial and humanitarian models of care. Improving NADA training has the potential to improve many, many lives.

In 1997, NADA created a set of competencies, a core curriculum, and a cadre of Registered Trainers (RT) empowered by the organization to train Acupuncture Detoxification Specialists (ADS). In response to the perceived need for a standardized training resource, NADA drafted the first ADS Resource Manual with informal input from NADA founders, leaders and experienced trainers. An overhaul in 2008 created the core of the current manual with only minor revisions and limited additions in the ensuing years.

The NADA ADS Training Resource Manual strikes a delicate balance between standardization and flexibility, and between the needs of the trainers and the ongoing resource needs of trainees from diverse backgrounds and disciplines. The NADA protocol, from a training perspective, is appropriate for a wide range of persons including medical and behavioral health professionals and acupuncturists. Other professional and community leaders may be appropriate providers where local regulations allow, including nuns, Sickle cell support group leaders, first responders, relief workers and peer mentors [3]. Therefore, NADA training materials need to be both standardized and extremely flexible in both content and style. In addition, the organization of trainings needs to be adaptable to the needs of the trainer, the trainees, and systems and situations in which the trainees practice. The manual also serves ADS practitioners as a repository of information for practice and advocacy.

NADA training, like other medical continuing education, is ultimately both clinical and didactic. While NADA focuses on competency attainment, the training is often conceived of as thirty (30) hours of didactic (with emphasis appropriate

to the trainee), and forty (40) hours of supervised clinical practicum. Many states in the United States with ADS exemption provisions have codified the NADA training or equivalent, into law [4].

Although the NADA technique and style of treatment have not changed since the late 1970's, the breadth of application and the research and outcome data have evolved considerably even since the last significant revision of the manual. Since 2008, NADA officially expanded the mission statement to reflect the growth of acudetox beyond the original, limited focus on addiction [5] (Box 1). The current reality of acudetox practice includes all behavioral health, criminal justice, disaster/trauma response, and other community wellness and humanitarian interventions.

Since 2008, significant advances in the treatment of behavioral health and disaster response, as well as advances in the neuroscience of addiction and trauma merit inclusion in training materials [6]. In addition, techniques and technologies for adult learning and medical education have advanced considerably. The Association of American Medical Colleges has proposed a model of competencies for medical educators [7]. The gaps between the extant training document and current reality call for updated content, as well as creative models of training delivery, and assessment of competency. This project seeks to provide recommendations to update and improve the NADA training materials and methods by assessing the needs of the stake-holding populations.

Literature Review

For the purposes of this project, a brief literature review sufficed to provide justification for the project and to identify appropriate models for assessment.

The review of literature consists of three distinct parts:

• Review of the current NADA ADS Training and Resource Manual for errors and obvious deficiencies.

• Review of the more recent literature regarding implementation and effectiveness of the NADA protocol for behavioral health.

• Review of the medical education literature for similar projects, in order to elucidate tested methodologies.

1) The manual: The Student Investigator (SI) performed a cursory review and found glaring needs for improvement. For example, the extant manual had no research or program outcome information dated after 2008. The manual had outdated information regarding acupressure trends in the field. Likewise, the manual does not reflect trends in the behavioral health field in terms of neuroscience and treatment modalities. Lastly, the manual had errors in content and tone, and is difficult to navigate. The review also identified a need for additional information about treating the effects of trauma, but that has since been addressed.

2) The NADA protocol: For the purposes of this study, several recent papers provide insight on both the history and current state of acudetox applications, clinical outcomes and

research, making the case that the NADA protocol is supported from the practice-based evidence and is an evidence-based practice [3, 8].

Until recently, reviews have confounded types of acupuncture, i.e., not necessarily just the NADA protocol. For example, a systematic review of acupuncture for addiction by White discussed the "mismatch" between the accepted and sustained clinical practice of acupuncture for addiction, and the limited research evidence in the literature [9]. White concluded that research may have missed effects because of design flaws and proposed different methodology for future research. A non-systematic review of the literature exclusively related to the NADA protocol highlighted the breadth of applications studied and the trend towards using non-sham controls, such as "usual care," and other comparison interventions [8]. A 2016 systematic review focused on the NADA protocol specifically for opioid use disorder, concluding that, based on the four trials that met their inclusion criteria, there was tentative evidence that acudetox-supported treatment improved retention and program completion, which could "indirectly improve morbidity and mortality" [10].

3) Healthcare education curriculum development and methodology: A search for similar projects yielded fruitful models for using needs assessment surveys to inform curriculum development. U.S. military researchers used survey-identified needs to develop medical education curriculum for humanitarian assistance [11]. Bogetz and co-authors used an open-ended survey with modified grounded theory to identify continuing medical education needs [12].

Hagino outlined a six-part process for creating self-report surveys using concepts that simplify and improve the resultant survey [13]. Smith demonstrated that the survey and consensus process can be used successfully to develop acupuncture protocols [14]. Jandial, Stewart and Foster developed medical curriculum by putting interview and focus group-derived content through a Delphi process to reach expert consensus [15].

Fishman and colleagues utilized a literature review followed by a World Café™ group as an interprofessional process of arriving at pain assessment and pain management competencies [16]. The World Café™ promotes a unique model for engaging people in creative and problem-solving conversations [17]. Dawkins and Solomon described using the World Café™ model with doctoral nursing students to create advanced practice nursing policy recommendations [18]. Researchers in Germany used the World Café™ method, along with a focus group, to assess the complementary and alternative therapy use and health care needs of seniors [19].

Several healthcare education articles elucidated different mixed-methods approaches. Coates et al. [20] used a breakout session in a medical educators' conference, and tasked participants with constructing a needs assessment, comparing and contrasting with other programs, and identifying core curriculum items. The bold strokes work of this "consensus conference" was then refined by another working group which proposed an official curriculum [20]. Muramoto used an

interactive process: exploratory interviews; survey of relevant community; demonstration with debrief and critique session; adaptation and revision of existing curriculum; advisory panel giving expert review feedback and advice; and lastly a pilot test [21].

Several articles argued for elaborate, mixed-method, sequential studies to avoid the limitations of expert opinion or consensus processes, or else suggested a practice-based needs assessment [22-24]. For example, Gonsalves et al. conducted an initial survey phase, followed by a limited practice-based audit of clinical skills to identify curricular topics, then a focus group process phase, followed by a modified Delphi survey to achieve consensus [22].

Making change to curriculum that is inclusive and effective can be challenging given limited researcher resources. A paper outlining a rapid (one-year) curriculum renewal by deliberative inquiry, recommended that "members of purposefully constituted groups reach curriculum decisions through processes of deliberation" [24]. Concepts from Reid et al. that are relevant to the current NADA project included: parallel processes that engage relevant stakeholders, iterative work/design teams, and the use of technology via blogs and other web-based update systems.

Selby and colleagues used a rubric to assess on-line smoking cessation treatment trainings [25]. They outlined best practices in instructional design such as: cohesiveness of material, linearity of design, practice exercises, problem-solving, and ongoing evaluation to improve existing courses and to design new online learning opportunities [24].

A random controlled trial of Australian medical students confirmed the effectiveness of "blended learning education" in achieving competencies in medical education, assessed by validated questionnaires [26]. Frank et al. made a strong argument for competency-based education in medical training and shifting teaching methods and assessment tools accordingly [27]. These studies highlighted the importance of asking the NADA training populations about their needs in those domains.

Methodology for the interviews and on-line survey was informed by Mann and Stewart's handbook for conducting qualitative research with computer-mediated communications [28]. Relevant issues included ethical practicalities of consent, data protection and destruction, as well as proper "netiquette" when using the internet for interviews and surveys.

The methodology of the current study in terms of conducting and analyzing qualitative data from focus groups and other sources relied upon guidance from qualitative methodology experts [29]. Modified grounded theory approaches came primarily from Glasner [30].

Lastly, to test this research question, the SI applied the FINER criteria, developed by Hulley and colleagues, as outlined by Farrugia et al. [31].

Feasible: This project was doable within the constraints of the SI's doctoral program. The NADA leadership endorsed this project, which assured free access to the study populations.

Interesting: The SI is deeply invested in the project, having developed the two prior iterations of the training and resource manual, and as an active trainer who wants improved materials/methods. The SI saw this project as supportive of her mission and within her sphere of influence.

Novel: There was no historical process of assessing needs or surveying NADA trainers in this fashion. The SI hoped to mine considerable information.

Ethical: Because the interventions were non-invasive, simple and designed to support the work of the participants, the SI expected and received no resistance from IRB review. Although the SI does at times conduct and charge for trainings, she was not paid for this project and therefore did not have a conflict of interest.

Relevant: The evidence of need for effective behavioral health interventions is vast. Improving NADA training has the potential to impact community wellness on a large scale. It is the SI's hope that this project will also forward the field of medical education research.

Hypothesis and Objectives

A deliberative inquiry process can assess the needs, and garner support for a medical/professional continuing education curriculum renewal for the National Acupuncture Detoxification Association (NADA), Acupuncture Detoxification Specialist (ADS) Training.

The primary objectives of the study were: 1) to identify the needs of the organization (NADA), the Registered Trainers, and ADS trainees in terms of curriculum and method modifications, and 2) to assess the NADA RT needs for teaching tools and competency assessment tools, 3) to attain the support of the NADA community by soliciting participation and recommendations for change.

Secondary objectives of the study were: 1) to identify and suggest an ongoing quality improvement process, and 2) to assess interest in developing a system for broad collection of outcome information.

Study Design, Methods and Results

This study employed a mixed-methods, qualitative and quantitative design. Information from each phase informed the other phases, and the phases collectively provided a comprehensive needs assessment that generated recommendations for training material and method revision. The triangulation strategy gathering information from leaders, trainers and learners protected against biasing influences. Using survey and facilitated conversation tools at different times, the project generated descriptive and creative input from the Trainer community. To facilitate clarity, the methodology and results for each phase are reported together.

Phase 1-A: World Café™ of Registered Trainers.

Phase 1-B: Focus group of ADS trainees.

(Phase 1 groups were conducted May 05, 2016 at the annual NADA conference.)

Phase 2: Brief, semi-structured interviews of NADA training thought leaders.

Phase 3: Needs assessment survey of Registered Trainers.

This project was reviewed by the AOMA Graduate School of Integrative Medicine's Institutional Review Board (IRB), and determined to be exempt.
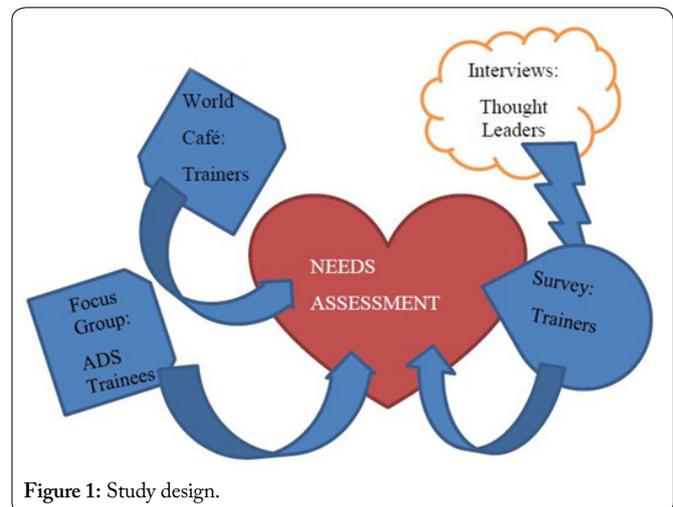

Figure 1: Study design.

Phase 1 group process : methods and results

Phase 1-A: World Café™ Work Group with Registered Trainers (RT) and

Phase 1-B: Focus Group with Acupuncture Detoxification Specialist (ADS) trainees

Using a convenience-sampling approach, all attendees at the annual RT day-long meeting (36 in person and 27 on-line) were invited to participate in a working group, and all ADS trainees completing the preconference training were invited to participate in a focus group. This study presented no more than minimal risk of harm to subjects and involved no procedures for which written consent is normally required outside of the research context; therefore, participants were provided with an oral statement regarding the research and asked for oral consent. Participation was voluntary, with no consequences for refusal. Groups were facilitated by the Student Investigator (SI). No names or identifying material are reported in the study.

Phase 1-A registered trainers world café™ work group: specific aim and methods

The researcher used an RT conversational process to generate group-realized ideas on training needs and possible training improvements. Utilizing a modified World Café™ process, RTs were divided into self-selected workgroups and tasked with answering a question per 20-minute session. The model encourages all participants to draw and write as they discuss. Each group picked a scribe to compile recommendations to relay to the group at large. Participants rotated through multiple, topic-focused "cafes" with a designee staying behind, as others left, to seed ideas to the subsequent

conversation. All participants reconvened collectively to "harvest" the ideas (Figure 2). A webinar group of RTs functioned as a separate group, and their ideas were added to the overall mix by an in-room representative. The groups were not audio recorded. A modified grounded, qualitative approach was used to organize and find commonality in the "harvest," i.e., the post-café group discussion and recommendations phase notes, and the café table notes.

Figure 2: NADA RT world cafe™ "harvest" 05/16.

Phase 1-A registered trainers world cafe™ work group: results

The RTs generated ideas about their preferred revisions to the manual—updates, additions, edits, and reorganizations. They had much to share about teaching methods, especially their desire for more and more current videos and visual aids. They suggested ways to use technology, such as social media pages, phone apps, on-line training evaluations and webinars. They had specific suggestions about how NADA, the organization, could support RTs with consistent policies, a dedicated subcommittee, CEU approval, and help with marketing language. Table 1 summarizes the RT recommendations from this group process. One trainer wrote: "It's all about helping others in the sincere way!"

Considerable time was spent on discussion about the tension between standardized and customizable content, with many RTs recommending some version of a standard, consistent (albeit condensed) content with additional articles/inserts depending upon the trainee population and its needs. The alternate position was also asserted, that is, having a standard manual as required reading for all, but customizing the training focus, dependent upon the trainee class composition and needs. At tension seems to be the camp that wants to customize content and those who feel the pull to have consistent NADA approved content while emphasizing particular information for particular populations.

To understand the importance of this topic, it will help to remember that NADA trainees range from unlicensed peer support workers to highly educated and trained practitioners of conventional medicine, Chinese medicine and behavioral

Table 1: RT world cafe™ work group recommendations - common themes.

Manual Content changes:
Updated research, outcome data and application examples, including trauma.
Improve/expand Behavioral Health, including neuroscience, conventional and other treatment modalities
Expand best practice information, including successes, failures, contraindications, clinical recommendations, and chairside manner
Update Resource section. Provide access to regional laws/regulations, supervisor lists
Additional ear photos/drawings/charts
Edit and delete redundancies.
Manual Format/Style changes:
Add navigation, Table of Contents, index, summaries of key elements
Reorganize and make more accessible
Unresolved debate over making all content provided versus condensed, standardized core with modules based on trainee population
Methods/Teaching Tools
Videos: new and more accessible
Power points, better charts and blank ears as teaching tools
Competency Evaluation Tools
Final exam
ADS self-assessment tool
Social Media/IT support
Apps and social media groups for trainees
Distance learning, webinars, on-line updated information
On-line survey for ADS' evaluation of training
Policy/Procedure & Institutional Support
Consistent policy re: training time and requirements
Help with clinical access, CEUs, marketing,
Subcommittee and process for continual manual renewal & information dissemination

health. For example, a group of trainees who are licensed acupuncturists will be well aware of the concepts of Chinese medicine and philosophy (although not necessarily from the NADA understanding), and less familiar with behavioral health concepts and treatment delivery systems. Behavioral health and medical trainees may not know anything about Chinese medicine in contrast. Some NADA RTs train exclusively within a subset group, while others have training groups that span the trainee spectrum, increasing both the challenge and the richness of the training experience.

It is also important to note the current manual is physically large (225 pages), cumbersome and expensive to reproduce. Students often have varied preferences for digital or print learning material. As a reminder, the manual serves both as a training tool and an ongoing resource for practitioners and advocates.

Phase 1-B ADS trainee focus group: specific aim and methods

The student investigator (SI) conducted a focus group of recent trainees to get the recipient perspective on training

materials and needs for improvement. Another RT member of the training team attended the trainee focus group to take field notes which were analyzed and coded for themes that arose from the data. Attendance was voluntary (convenience sampling) and time limited, so data saturation was probably not achieved.

A limitation of this phase of the study was that the preconference training with this focus group is not representative of the bulk of trainings provided. It was unique in composition of the training team, diversity of participants and proportions of didactic to clinical experience. However, the group did complete all of the training at one time, making it easier to capture post-training information than in trainings delivered as separate didactic and clinical sections, and the preconference training is typically both larger and more diverse than most ADS training groups.

Phase 1-B ADS trainee focus group: results

Nine volunteers participated in an hour-long focus group with the SI and another RT (note taker) on the last day of their training. The group included behavioral health counselors, acupuncturists and one physician-- a self-selected but representative sample of the trainees. The exercise was introduced and consent received.

Most of the trainees' comments fell into one of two categories: format and content (Table 2).

Table 2: Trainee focus group recommendations: common themes.

Manual Content Changes
Corrections/Editing: Delete typos and grammatical errors. Fact-checking.
Additions: Website addresses, YouTube links, Heart Math articles, neuroanatomy, bilateral/both ears in pictures/diagrams, more recommended readings, an initial summary with history, CM, trauma, behavioral health and how acudetox has morphed over time (4-5 pgs.), the ability to add extra materials for flexible delivery/speakers, etc.
Manual Format/Style Changes
Organization: Index, colorful tabs, page numbers (maybe numbered within sections), uniform/consistent format, space for notes (separate or by double spacing), outlines of talks, highlight learning goals/key points (e.g., 5-10 per section)
Legibility: Scanned articles too difficult to read, request larger print
Form: Consider providing via E-reader, CD's, flash-drives
Training Delivery/Method
Provide power point slides used, more CM/TCM at the beginning, more emphasis on CNT (especially for non-acupuncturists)
Competency Evaluation Tools
Like online CEU courses, have test that could also be used when reading/studying

The group's comments fell into common themes regarding format. Members requested more consistency and structure that would facilitate access, such as an index and numbering, as well as structure that highlights important/key points or learning objectives in each section, and structure that facilitates note-taking. In terms of content, they asked for inclusion of specific items, and in terms of delivery had suggestions regarding emphasis and order. They wanted all of the lectures and power point presentations included in the manual, and understood that those might differ from training to training.

In addition, trainees proffered these overall statements. "The manual is like a buffet – can key into what you want to know," "I am very comfortable with the manual," and "Don't make it too much bigger."

Phase 2 thought leader interviews: specific aim and methods

The primary intent behind interviewing NADA leaders was to discover themes and language for survey question development. In addition, this phase aimed to engage the NADA leadership and influence holders in training manual revision and secondarily, in an ongoing renewal process and an outcome data collection system.

The Student Investigator (SI) developed a simple set of open-ended questions and then conducted brief, semi-structured interviews with NADA leaders in the manner most convenient to participants, including phone and email (Appendix A: Email to Thought Leaders). Interviewees represented several different stakeholder groups. The seven leaders tapped for this process included formal NADA representatives charged with training functions and senior RTs with leadership history. More specifics have been withheld to protect their anonymity, as promised them. For the universal adoption of successful training changes, the approval or support of those who most influence training policy and treatment delivery in this continent is crucial.

Data analysis: The SI reviewed the transcribed interviews for themes and common suggestions to guide survey development. No names or identifying information were reported, and all identifying information was destroyed at the end of the study.

Phase 2 thought leader interviews: results

Seven NADA thought leaders completed emailed responses (2) and phone interviews (5). The seven thought leaders answered open ended questions regarding what to ask RTs about training content, methods, evaluation/assessment, and what the thought leaders themselves would like to see changed (Table 3). Not surprisingly, the phone interviews generated longer responses. The SI organized and compiled answers from emails and phone transcripts into categories and thence into survey questions. Every effort was made to incorporate suggestions into the survey. In terms of their own feedback on the manual, the interviewees identified several content, format and process needs.

Table 3: Interviewed thought leaders suggestions for manual change summaries.

Manual Content: More complete history of Lincoln; editing/streamlining/condensing; research updates/process, applications/outcomes examples
Manual Format: Section reviews/summaries/quizzes, consistency, "NADA app"
Manual Maintenance: Editorial board

Phase 3 registered trainer needs assessment survey: specific aims and methods

The study solicited RT input regarding four key areas: 1) curriculum revision needs, including gaps in materials, 2) curriculum format recommendations needs, 3) curriculum delivery/teaching methods needs, 4) competency assessment needs. The survey provided open-ended opportunities to mine RT experience. Secondarily, the study assessed RT interest in ongoing renewal and data collection systems.

Guided by the interviews above, the SI drafted a series of survey questions using recommended guidelines [13, 32]. The interviewed thought leaders were invited to provide feedback, which was used for face validity and the first round of modifications. Then the draft survey was piloted-tested with a small sample of RTs, with attention to language (wording and clarity), logic, expected results (answers match questions' intents), response time and survey burden (onerousness). From this information a final draft was created (Appendix B: NADA RT Needs Assessment Survey).

The survey itself was created in REDCap, an electronic data capture and management system (Box 3), and sent to the 101 Registered Trainers in North America. The inclusion criterion was current RT status, excluding persons mentoring to become Registered Trainers and inactive RTs. This decision represented a study limitation, as it excluded the large pool of experts who were not currently engaged in training. This pool might represent a larger percentage of persons dissatisfied with the current materials, although it seemed unlikely.

Although the focus of NADA is North America, the NADA model has been adopted worldwide. Sending the survey to the identified leaders of international organizations might yield interesting perspective and ideas. Some international trainers have adopted a simplified curriculum and even a modified, simplified three-point protocol. However, the SI chose to limit the pool to the NADA RTs as that is the organization's primary focus and sphere of influence, and doing so avoided the complication of language and cultural translation.

Original non-responders received one email reminder. Continued non-responders received a request for response from the NADA office with the survey link.

Data analysis: Using a modified grounded theory approach, the SI analyzed the survey's qualitative results looking for common themes. The SI used REDCap to generate reports of quantitative data. De-identified raw data reports from Phases 1 and 3 were provided to the NADA Board of Directors and are available upon request.

Phase 3 registered trainer needs assessment survey: results

The survey yielded twenty (20) responses, a response rate of (20%). The percentage of responses to each question/item is reported in parentheses.

Characteristics of respondents: The responding trainers self-identified as follows: acupuncturists (9, 45%), counselors (6, 30%), biomedical professionals (3, 15%), administrator (1, 5%) and educator/professor (1, 5%) (100% response) (Figure 3).
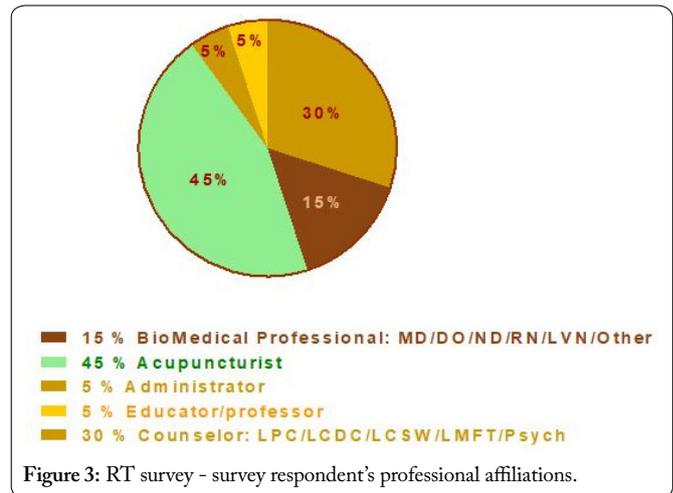

Figure 3: RT survey - survey respondent's professional affiliations.

Half of the group claimed to have been RTs for ten or more years, 30% for between five and nine years, and 20% for four or fewer years (100% response) (Figure 4).
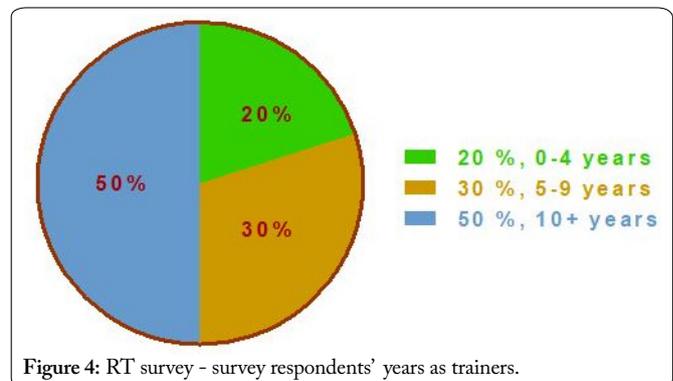

**Figure 4:** RT survey - survey respondents' years as trainers.

All, 100%, of the survey respondents said that they do NADA/acudetox work themselves currently. The RTs attested that they conduct, on average two trainings per year, with the answers as follows: one/year (7/19, 37%), two/year (7/19, 37%), three/year (3/19, 16%), five/year (2/19, 11%). One trainer did not answer the question.

Screening: Most respondents, 85% (17/20), screen trainees for appropriateness. Of those 17 who do screening, 15 (88%) responded with specifics about what method they use to screen: applications, registration, resume, recommendations (4/15), personal interview/conversation (8/15), and agency vetting (2/15). They also noted what they are looking for with this screening: the legal ability to practice, i.e., correct credentials; intended application/trainee plan of use; good professional standing; qualities of intention/compassion, etc.; and type of profession so that training content can be targeted appropriately. RTs reported clarifying limitations of practice in direct or indirect communications, such as in the marketing materials.

Ninety percent (90%) of the RTs who took the survey said they use the current manual, with two claiming they did not use the manual (100% response).

Regarding how they provide the manual to trainees, most RTs (17/20, 85%) indicated that they give the manual

in print form. One (5%) provides a disc to trainees. More than one third (7/20, 35%) give the trainees the manual as an attachment/computer file. Three (15%) said they do not give trainees the manual at all. Respondents could and did choose multiple methods (100% response) (Figure 5).

Figure 5: RT survey - form of manual given to trainees.
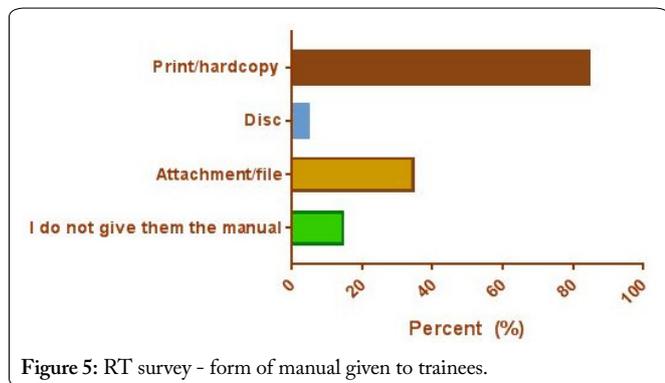
Trainers reported that they use the manual during the training (90%), and as an assignment/homework that counts towards didactic hours (75%) (100% response rate). One person chose "other," stipulating use as "resource and reference," and yet another one does not use the manual. As above, RTs could and did choose multiple answers for how they use the manual.

Responses (14/20, 70%) to "how do you know or document that the trainees did the assigned reading," yielded rich information with the following common themes: discussion/questioning (3/14), quizzes/tests (4/14), homework assignments/reports (4/14), preview/emphasis/review (3/14), and signed statements attesting to completion (2/14). One RT noted that giving the hardcopy is prohibitively expensive in terms of time and money.

Given the chance to rate how much they value the manual on a 0-100 slider, the median response was 90, with the lowest value of 16 and the highest value of 100 (x3), and three non-responses. All of the surveyed trainers, (100%), said that they teach all five points of the protocol.

RT survey regarding manual content recommendations: (Please note that for reporting purposes, responses were sometimes moved into appropriate categories.)

Thirteen RTs responded regarding content they considered not useful, that should be deleted or removed (13/20, 65%). Twelve responded to "What needs to be minimized/condensed? (12, 60%). The first set of questions regarding content evoked responses that showed diverse positions on what the manual content should include (Table 4).

The following examples represent the range of responses. "I think it is all useful in some way to somebody," and "All is valuable depending on the composition of the trainee group; some trainees need more emphasis on addiction, others more emphasis on Taoism/TCM". In contrast: "I find the manual confusing and unhelpful," and "Haven't looked at it for years. Too much content for usefulness in training."

One Trainer suggested creating a streamlined, more user-friendly "base" version with the possibility of sections that

could be added as needed.

Table 4: RT survey - recommendations for content to be deleted/removed or minimized/condensed.

Deleted/Removed Needs	Minimized/Condensed Needs
Dated research articles (although one RT liked having them included)	Redundancies
Unclear info on Chinese medicine (CM) Unhelpful, old, conflicting diagrams and pictures of ears	Sections on Trauma, addiction, history of NADA and CM ("rambling")
All is useful (to somebody) (3/16), i.e., do not delete anything	Everything, except for point locations and CM
Clean up appendices (incorporate)	Too much research and Western science (too Yang)
"It depends on trainees. I limit what I provide."	Design update: "Visually haphazard" "Unprofessional"
Manual itself is not useful and not used	Overall, make more concise and easy to navigate

The second set of questions about content were, "What needs to be expanded/updated?" (14/20, 70% response rate), and "What needs to be added?" (12/20, 60% response rate).

When prompted about content renewal and additions, RTs provided good ideas, noting especially that the manual needs to be made current regarding the following domains: research literature; neuroscience; behavioral health provision, including trauma treatment; other NADA applications; and cultural competency. Research was the area of updating need most commonly identified, specified by almost half of those who commented (6/14, 40%).

One trainer requested that NADA add, "stuff that helps us counteract the current atmosphere of evidence-based therapies." None of the respondents uploaded content to be considered for inclusion. Trainer's answers are summarized in Table 5.

RT survey regarding manual format recommendations

Fourteen (14/20, 70%) RTs answered the question about specific format, "Would you like: more consistency, section summaries or highlights, section quizzes, power point slides of content, or other?" The responses were generally affirmative, most strongly regarding power point provision, 86% of those who answered. No other format recommendations were made (Figure 6).

RT survey regarding teaching methods

Seventeen (85%) of the surveyed RTs noted what types of methods were most helpful when doing a training. Every answer (100%) indicated the use of experiential, hands-on learning and skill-building practice. All but one noted interspersed multiple teaching modalities, most commonly: acudetox treatments (receiving and providing to each other, clients and volunteers); videos, power point presentations; ear models/fruit; discussion, didactic/lecture, guest speakers; role playing; case histories/anecdotal stories/trainer experience; and quizzes, tests, homework/reading, and final demonstration.

Table 5: RT survey - recommendations for content to be expanded/ updated or added.

Expanded/Updated Needs	Added/Missing Needs
Research (6/14, 40%) Literature summary with references	Sample program Policy/Procedures, needle stick policy
Neuroanatomy/neurobiology of addiction (3/14, 21%)	Cultural competence
Trauma	Chinese Medicine (CM): 5 Elements & the 5 Points, CM Cultural application/relevance, community style acupuncture
Outcomes/Applications	Other/new applications
Resources	Case Studies
Substance abuse/Continuum of Care*	The opiate crisis
CM Cultural applications/ relevance	Add Stuyt & Voyles paper/other new articles
History of Community Involvement	Make current
N/A (2/14, 14%)	"How to" section, setting up groups Easy to access forms.
Timeline needs missing pieces of history	Taoism/Buddhism/mindfulness approaches "Addressing the subjective hidden, innate potential of healing within all human beings". "More on the philosophical, paradoxical Eastern, right brained, subjective mystery of the protocol."

*"Substance use disorder treatment in the context of a continuum of care and co-occurring disorders. Although there still are places providing substance only or primary treatment, many outpatient and intensive outpatient settings are expected to have a more integrated and individualized approach that addresses all concerns. Looking at how NADA is used in that context and how it is appropriate throughout the continuum of services."
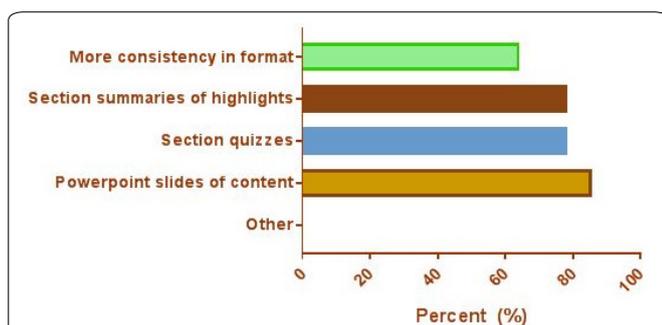

Figure 6: RT survey - manual format revision requests.

One RT noted specifically Clean Needle Technique and first insertion before lunch of the first day. One said simply, "Practice. Practice. Practice."

There was 100% response to "What teaching supports, auxiliary or supportive training materials do you use?" Every trainer reported the use of ear models and videos. Most (85%) use role playing (Figure 7).
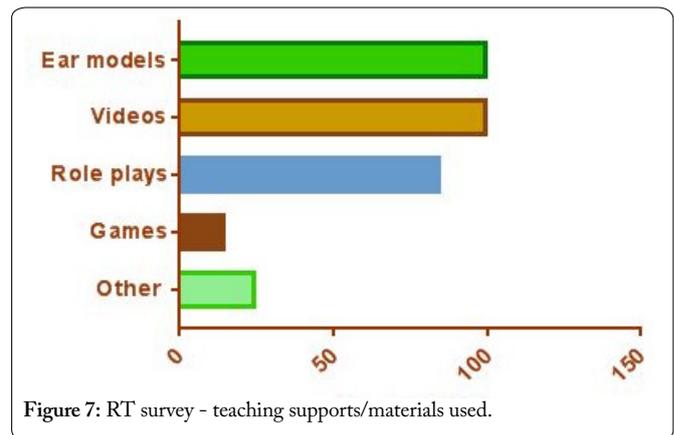

Figure 7: RT survey - teaching supports/materials used.

Five RTs (25%) shared other tools/methods as follows: presentations, guest speakers (including individual testimony/ spiritual representatives), ear posters, oranges/limes, "song and hand motions for rhythm, location and direction of points," starting each training with trainees receiving acudetox, and, again, "Practice. Practice. Practice."

To the survey question: "Would you like support with teaching methods? For example:", 13 (65%) RTs responded affirmatively, especially to having tools to facilitate sensitive issue conversations and debriefing (9/13, 69%); mentoring or training about handling difficult or sensitive issues with trainees (69%); and role play guidelines (54%). No other support needs were identified (Figure 8).
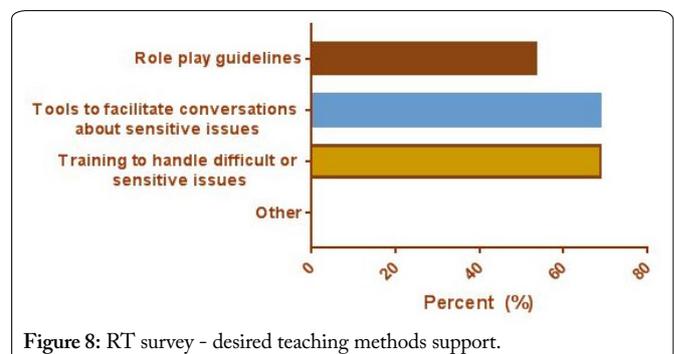

Figure 8: RT survey - desired teaching methods support.

RT survey regarding assessment/evaluation of trainees

The survey asked, "What type of assessment tools do you use to evaluate trainee knowledge, skills and competence?" (100% response). Responders could choose multiple answers and did. These are the answers about assessment tools used in highest to lowest order: "return demonstration"/performance (90%), RT clinical judgement (85%), role playing (80%), written tests/quizzes (55%), homework assignments (55%), and other (10%). "Other" responses included getting feedback from observers, and consulting with colleagues (Figure 9).

RTs were asked specifically about assessing the harder to measure "soft" or "subjective" competencies, "such as mindfulness of personal space; client-centered, empowering approach; patience/tolerance; group management skills; 'holding the space'; cultural competency; understanding of behavioral health issues; ability to describe the protocol ('schpeil'), etc." Eighty-five percent (17/20) of the RTs

responded. The most common method they reported using to assess such competencies was observation (13/17, 76%). Trainers also reported using demonstration or modelling the desired skill, discussion/dialoguing, tests and practice exams, role playing, and giving feedback/critique/guidance. Several noted that assessing these competencies proves difficult or challenging, especially within just a few days of training. One emphasized the need for "holding space" while removing, as well as inserting needles.

Eighteen of the twenty responders (90%) agreed that a checklist to evaluate ADS competencies would be a useful tool for them. One replied "no," and one skipped the question.
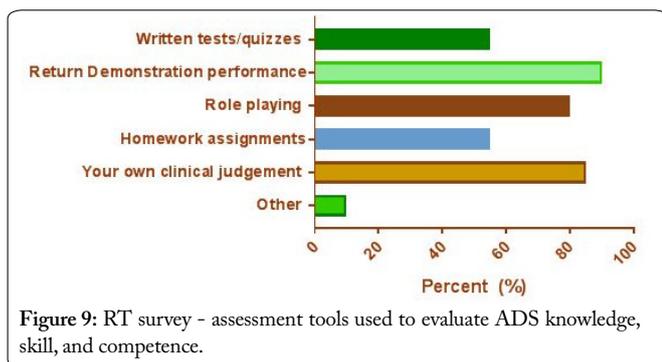

Figure 9: RT survey - assessment tools used to evaluate ADS knowledge, skill, and competence.

RT survey secondary aim

To the question of whether or not they think they would use a common collection system that allowed clients to sign on and provide treatment response, half of all 20 respondents replied "maybe," while the other half said "yes" (35%) or "no" (15%) (Figure 10).
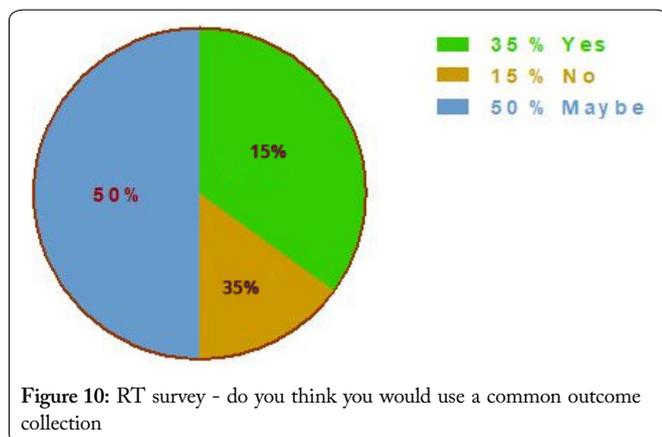

Figure 10: RT survey - do you think you would use a common outcome collection

Fourteen (70%) stated outcomes they would most like to see collected, with the caveat that data would "need to be broad enough to apply to diverse NADA settings." Of those, three answers were ruled as outliers because they pertained to the manual or trainees, not clients, which suggests that the question may not have been clear. Of the remaining eleven, the most common suggestion was to gather outcomes related to behavioral health symptoms, including substance use, anxiety, stress/distress, despair/hope, coping/empowerment, and connectedness. The second most commonly suggested

outcome to capture was sleep, followed by treatment related factors such as program engagement/completion and patient satisfaction (Table 6).

Almost half (9/20, 45%) of respondents used the opportunity to add other comments. More than half of those (67%) expressed gratitude. One offered to help, while another one requested further opportunity to discuss, and yet another reported on local changes to the state supervision of ADSs that radically limit practice and therefore training.

It should be noted that one trainer complained midway through that the survey took longer than the anticipated time. Two others indicated they would have liked more time to answer.

Lastly, eight respondents (40% of the total) said they would be willing to be on an editorial committee charged with suggesting ongoing updates to the manual, especially in regards to research, application and outcomes. A separate survey invitation was sent to those respondents as follow-up. Sixteen RTs answered this question (16/20, 80%) so the responses were half and half, i.e., eight others declined the opportunity.

Discussion

Overall the needs assessment succeeded in eliciting feedback from three different stakeholder groups using four different methods of inquiry. The results offer a rich array of suggestions for improvement in the NADA training materials, methods and processes. The common emergent themes can be summed up as: clean up the manual, update it to research and practice norms; add more images, and make it more user-friendly.

Understandably, the three groups had different perspectives and a surprising amount of common ground or similarity in responses as well. Recent trainees, having just been immersed in the training, made many recommendations regarding format and information transfer. Their naïve, new to the material, perspective was more narrow in focus, but thoughtful. The learners are the end users, and therefore their feedback is of great import. The thought leaders, had a bigger picture interest, and were tasked specifically with survey question development, as well as specific suggestions for training renewal. Their concerns are reflected in the content of the survey itself.

The Registered Trainers (RTs) arguably have the most nuanced experience of training provision as the group charged with teaching the skills and assessing the competencies. The World Café™ created an opportunity for facilitated exploration that generated interesting and useful, if sometimes conflicting, ideas. Finally, the survey allowed trainers to share more in-depth revelations about curriculum tools, methods and related needs. As such it yielded much detailed insight.

The RTs provided rich information about the multimodal training methods they employ and the ideas they have about improving those. Likewise, they made strong suggestions

Table 6: RT Survey - Recommendations for Data Collection Outcomes (raw data).

Three preferred outcomes:		
Engagement in services	Behavioral health change	Sleep improvement
Feelings of connectedness	Quality of sleep	Level of perceived stress
Intensity and/or frequency of self-identified symptom	Motivation and desire to remain in treatment and recovery	Awareness of inner self (emotions, thoughts) viewed as empowering
Ease in accessing service	Common benefits	Meaning that the group has
"Distress" amelioration	Timeframes for specific applications: SUD, smoking cessation, weight loss	Integration within specific populations
Anxiety	Sleep	Program completion*
Sleep	Smoking cessation	Patient satisfaction
Coping ability. Increased coping and hoping	Ability to say "no"	Despair
How see as part of relapse prevention plan	Anecdotal re long-term benefits: blood pressure, anxiety, Rx reduction	
Sleep	Anxiety	Level of continued substance use

*"Evaluation by staff, counselors and administrators would be useful too."

about ways to assess trainees' attainment of competency, and how applying technologies could improve all aspects of training. Trainers strongly endorsed the idea of having an ongoing assessment and quality improvement process, and nine of the twenty respondents, which represents almost 10% of the total RT pool, expressed willingness to be on such a committee going forward. Both the RT work group and the survey data revealed a community divide about the amount of standardized content to provide trainees.

In terms of the secondary aim, assessing the interest in a common passive outcome collection system, only 15% of the survey-responding RTs expressed support for the idea. Half said, "maybe," which means that collectively 75% had some interest. The NADA board of directors can review these numbers and the suggested outcomes to collect and determine if they have the organizational will to pursue it further at this time, possibly partnering with a research institute.

It is the hope of the Student Investigator that NADA will take this needs assessment, coupled with the more detailed reports and raw data, and create a subcommittee or editorial board charged with following through on significant change in the near future. It is further suggested and hoped that NADA will create systems to provide ongoing needs assessment and continual quality improvement to meet emerging needs and advances in the future.

As a RT herself, the SI will benefit and even profit from having an improved training and resource manual, but otherwise there is no conflict of interest. This project represents classwork for the SI's Doctorate in Acupuncture and Oriental Medicine (DAOM).

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