

A qualitative study of the Treatment Improvement Protocols (TIPs): An assessment of the use of TIPs by individuals affiliated with the Addiction Technology Transfer Centers (ATTCs)¹

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Abstract

This article focuses on the Center for Substance Abuse Treatment's (CSAT) Addiction Technology Transfer Centers (ATTCs) as a means of diffusion of innovations. This qualitative study was designed to determine how ATTC curriculum developers, faculty, and trainers incorporated TIPs and other CSAT products into curriculum development and/or the delivery of trainings. The results of this study show that CSAT is at the forefront of providing resources to the substance abuse treatment field. While the majority of the comments were positive, suggestions for improving the development and dissemination of CSAT products are offered. Also included is a discussion of how government agencies and community-based organizations can facilitate adoption of best practices and provide enhanced services.

Keywords: Treatment Improvements Protocols (TIPs); substance abuse; substance abuse treatment; diffusion of innovations theory; diffusion theory; Addiction Technology Transfer Centers (ATTCs); best practice guidelines; qualitative evaluation; dissemination, adoption, and implementation of best practice guidelines

1. Introduction

This study, also referred to as the ATTC Study, was the second major study under the Treatment Improvement Protocols (TIPs) Evaluation Project. It was a qualitative study designed to determine how Addiction Technology Transfer Center (ATTC) curriculum developers, faculty, and trainers have incorporated TIPs into curriculum development and/or the delivery of trainings. Using the diffusion of innovations theory (Rogers, 1995) as its theoretical framework, this study examined the process by which TIPs and other products developed by the Center for Substance Abuse Treatment (CSAT) may be implemented and adopted into the substance abuse treatment system through dissemination and technology transfer provided by the ATTCs. Information obtained through this study was intended to assist CSAT in its efforts to enhance knowledge application efforts through improved dissemination, promotion, and use of existing products as well as through the development of new products. By way of introduction, the purpose and function of the ATTCs will be described followed by an explanation of how this study fits into the overall TIPs Evaluation.

¹The opinions and assertions contained in this article are the private views of the authors and are not to be construed as official or as reflecting the views of the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, or the Department of Health and Human Services.

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2. Overview

2.1. *Addiction Technology Transfer Centers*

The CSAT created the ATTCs in 1993 to provide support to substance abuse (SA) treatment professionals and to enhance research-to-practice information dissemination. The mission of the ATTCs is to increase “the knowledge and skills of addiction treatment practitioners from multiple disciplines by facilitating access to state-of-the-art research and education” (<http://www.nattc.org>). At this time, the ATTCs represent a nationwide resource network comprised of 13 centers operating in 39 States.

To achieve their collective mission, the primary focus of the ATTCs is on technology transfer. ATTCs enhance the competencies of professionals in a variety of disciplines (e.g., faculty, trainers, SA treatment professionals) by addressing the clinical needs of individuals with substance abuse problems; upgrading standards of professional practice for addictions workers in a variety of settings; and serving as a technical resource to community-based organizations and other public and private shareholders. In addition, ATTCs are responsible for developing and updating the state-of-the-art research-based curricula as well as for delivering the trainings. As part of their training function, ATTCs plan, sponsor, organize, and coordinate the delivery of courses designed to increase the competency level of individuals who work with, or intend to work with, substance-abusing individuals. Courses vary in content area, from adolescents to the elderly, and in length, ranging from an 8-hour workshop to a 15-week university semester. Finally, the ATTCs provide feedback from the field to CSAT regarding the development of a comprehensive agenda for learning about, and applying, state-of-the-art treatment approaches.

ATTCs are responsible for developing curricula on, and applying state-of-the-art treatment approaches; therefore, TIPs are likely to be fundamental to the work conducted by ATTCs. This study offered CSAT the first opportunity to assess: (1) how ATTC-affiliated curriculum developers, faculty and trainers incorporate TIPs into their work; and (2) the impact of the ATTCs’ use of TIPs on the SA treatment field.

2.2. *The ATTC Study as part of the TIPs Evaluation Project*

The TIPs Evaluation Project was a multi-study endeavor with the overall purpose of assessing the impact of TIPs on practices within the SA treatment field. This study built on results obtained from the TIPs Evaluation Project’s Retrospective Study.

Quantitative results from the Retrospective Study (Hubbard & Mulvey, in press) suggested that ATTCs could be valuable dissemination mechanisms for TIPs, and that ATTCs have the potential to help CSAT assist treatment professionals in the application of the information contained in TIPs. Although results from the Retrospective Study were encouraging, the extent that ATTCs have incorporated TIPs into their curricula, courses, and trainings was still unknown. Furthermore, the reasons for the success of ATTCs in the dissemination and implementation of

TIPs were unclear. Thus, this study was undertaken to obtain a more comprehensive understanding of the use TIPs by the CSAT sponsored ATTCs.

Given that a primary goal of the TIPs Evaluation Project was to determine ways to improve the development, dissemination, and implementation of *all* CSAT products, the scope of the present study was expanded to include an understanding of how the ATTCs incorporate other CSAT products into their curriculum and trainings. One such product is the Technical Assistance Publications (TAPs). TAPs are publications, manuals, and guides developed by CSAT to offer practical responses to emerging issues and concerns in the substance abuse treatment field. With the expansion of the scope of this study to include TAPs, this evaluation effort contributes to CSAT's overall knowledge of technology transfer that includes yet goes beyond the implementation of TIPs.

2.3. Theoretical framework and purpose

The diffusion of innovations theory (Rogers, 1995) provides the theoretical framework for the TIPs Evaluation Project in general and this study in particular.² The theory helps explain the process by which TIPs (and/or TAP and other CSAT products) may be implemented and adopted into the substance abuse treatment system through dissemination and technology transfer provided by the ATTCs. Inherent to the diffusion process are the steps individuals go through that ultimately determine the extent to which adoption of an innovation occurs. The steps of particular interest in this study were a) the extent of participants' awareness (or knowledge) of an innovation, in this case the TIPs; b) the attitudes they developed towards the TIPs, and c) the use of the innovation (or practices).

Using diffusion theory as the theoretical framework, information obtained through this study was intended to assist CSAT in its efforts to enhance knowledge application efforts through improved dissemination, promotion, and use of existing products as well as through the development of new products. Specifically, this study was designed to answer the following four research questions:

- (1) What TIPs (and/or TAPs and other CSAT products) have been/or are being used by ATTCs?
- (2) What do ATTC curriculum developers, faculty and trainers perceive as the relative advantages and disadvantages of TIPs (and/or TAPs and other CSAT products) in developing and delivering curricula? And/or What impressions do ATTC curriculum developers, faculty, and trainers have about the content and format of TIPs (and/or TAPs and other CSAT products)?
- (3) To what extent have TIPs (and/or TAPs and other CSAT products) been incorporated into ATTC curricula, courses, and methods? And/or How do the ATTC curriculum developers, faculty and trainers use TIPs or TAPs?
- (4) What recommendations do ATTC curriculum developers, faculty and trainers offer for improving or enhancing TIPs (and/or TAPs and other CSAT products) for use by them?

² For a detailed explanation of diffusion theory as it relates to the TIPs Evaluation Project, please see the first article in this special issue, *Use of Diffusion of Innovation Theory to Drive a Federal Agency's Program Evaluation*.

In addition, it is hoped that the findings from this study will have broader applicability to other federal agencies, as well as community-based organizations, that develop and disseminate products to a diverse user audience.

3. Method

A representative sample of six of the 13 CSAT sponsored ATTCs were selected for this study. Purposive sampling was used to select both the ATTCs and ATTC curriculum developers, faculty and trainers. In their roles as curriculum developers, faculty, and/or trainers, participants generally served as contractors and/or consultants to the ATTC with which they were affiliated. In some cases the individuals worked exclusively for an ATTC. In-person interviews, that averaged one hour, were conducted with a sample of 57 ATTC curriculum developers, faculty, and trainers from the six representative ATTCs. Those selected were asked questions regarding their use and impressions of TIPs (and/or TAPs and other CSAT products). The number of participants interviewed from each of the six participating ATTCs ranged from 7 to 12 people. The final sample yielded 55 participants for data analysis. Two participants' interviews were eliminated from the analysis due to an inability to interpret or transcribe the taped interviews.

Although this study was primarily qualitative in nature, quantitative data collection procedures were also employed. After completing the in-depth interview, study participants were asked to complete and return a background survey and a matrix of ATTC products. The purpose of the background survey and product matrix was to obtain basic demographic information (e.g., education, race, gender) about the ATTC curriculum developers, faculty and trainers; and to collect information about their work and their level of exposure, awareness, and use of TIPs (and/or TAPs and other CSAT products).

3.1. Data analysis procedures

An inductive content analysis was used to analyze the qualitative data corresponding to the four main research questions. As a first step, the verbatim transcripts were proof read for accuracy of transcription. The analyses that followed involved a number of steps including the extraction of raw data themes, the development of lower order themes, the development of higher order themes, and the development of major categories. For each step in the analysis, two researchers conducted their analysis independently and came to a consensus on the labeling of lower order themes, higher order themes, and major categories. According to Denzin & Lincoln (1998), using multiple observers can enhance the validity of the data by cross-checking findings and eliminating inaccurate interpretations. This process is known as triangulation and involves two or more independent researchers analyzing the same qualitative data set and then comparing their findings (Quinn Patton, 1990). As a final step in the analysis process, two external research analysts independently examined all the results.

In addition to using qualitative data analysis procedures to analyze the interview data, quantitative data analysis procedures (e.g., descriptive statistics) were used to examine data from the background survey and the product matrix.

4. Results

The results from this study are presented as answers to each of the four research questions. Specifically, results are organized according to ATTC curriculum developers, faculty and trainers' knowledge (i.e., research question 1), attitudes (i.e., research question 2), and practices/uses (i.e., research question 3) with regard to TIPs/TAPs. Recommendations for enhancing TIPs/TAPs for use by ATTC curriculum developers, faculty and trainers (i.e., research question 4) are presented at the end of this discussion.

The presentation of result focuses on the major categories and higher order themes (see note regarding lower order themes). Higher order themes and major categories are discussed and displayed in terms of the number of respondents who provided comments and the number of responses provided by the respective group of respondents (e.g. 34 respondents provided 45 responses (34 respondents/45 responses)). Many participants' responses covered multiple topics, and each topic covered was coded as a separate comment. The total number of responses may be greater than the total number of participants, because participants often provided multiple responses for each research question.

These results represent participants' comments for both the TIPs and TAPs. Although different processes are employed for the development of TIPs and TAPs (i.e., TIPs are developed through an expert panel process while TAPs are developed by an expert with firsthand experience with the topic), participants generally did not differentiate between the two products. In cases when participants referred to a specific TIP or TAP, those comments were analyzed separately and were not counted as overall comments on TIPs/TAPs.

4.1. Study participants

A survey that obtained background information from study participants was completed, and returned, by 47 of the 55 (85.5%) ATTC faculty and curricula developers. Slightly more than half were male (55.3%) and nearly all the participants were Non-Hispanic (89.1%). Of the Non-Hispanic participants, 97.6% were White. Participants were well educated with 95.8% of them possessing post-baccalaureate degrees and most had a variety of professional experiences. The three most frequently selected types of professional experience (other than that at the ATTCs) were as clinicians/providers (85.1%), as trainers/technical assistance providers (78.7%), and as researchers (48.9%).

In addition, study participants were asked about their experience working with the ATTC. Forty-four of the 47 participants worked a median of 3.54 years (medians were used instead of means because of the skewed distribution). Approximately 6.0% of the participants worked exclusively as faculty or teaching consultants (6.4%); 27.7% of participants worked exclusively as curriculum developers; and 48.9% of participants worked both as faculty/teaching consultants and as curriculum developers. In addition, 17.0% of participants worked with their ATTC in ‘other’ capacities (e.g., research and teaching assistants, work group participants).

5. Knowledge (i.e., awareness) of TIPs and TAPs

The first research question attempted to measure participants’ knowledge of TIPs/TAPs. ATTC affiliated curriculum developers, faculty, and trainers were asked to name the TIPs (and/or TAPs and other CSAT products) they had used in their work with the ATTC. The design of the present study required that participants have prior awareness of the TIP and/or TAP series. Interview data provided *qualitative* results, while the background survey and product matrix provided *quantitative* results with regard to the most frequently used TIPs/TAPs.

5.1. Qualitative findings

During the interview, participants were asked to identify which TIPs/TAPs were used in their work. All of the 37 TIPs published at the time of the study were used by at least one ATTC curriculum developer, faculty or trainer. See Table 1 for the top five most frequently mentioned TIPs, which represent the “most frequently used” TIPs by ATTC curriculum developers, faculty and trainers. These responses are presented by: (1) the most frequently used TIPs, and (2) the percentage of participants who mentioned a specific TIP.

...INSERT: Table 1. TIPs indicated by participants as the most frequently used

TAP 21: *Addiction Counseling Competencies: The knowledge, Skills, and Attitudes of Professional Practice* was overwhelmingly the most used TAP with 65% of participants indicated they used this TAP. The second most frequently used TAP was TAP 8: *Relapse Prevention and the Substance Abusing Criminal Offender*. This TAP was used by 22% of the participants. All but one of the 24 TAPs published at the time of the study were used by the study participants.

5.2. Quantitative findings

The background survey and product matrix provided quantitative findings regarding which specific TIPs/TAPs were used most often by ATTC curriculum developers, faculty, and trainers. Of all the TIP publications, the following TIPs³: TIP 9, TIP 35, and the Adolescent TIPs (i.e., TIP 3, 4, 31, 32) were the most recognized (95.6%, 86.7%, and 91.0%, respectively), most likely read (97.6%, 86.5%. and 77.0%, respectively), and most used (71.8%, 64.7%, and 51.6%,

³See Table 1 for the titles of TIP 3, TIP 4, TIP 9, TIP 31, TIP 32, and TIP 35.

respectively). Among the TAP publications, TAP 21 was the most recognized (93.3%), read (97.6%), and used (87.2%).

Respondents indicated they had a role in the development of, or had taught from, 261 ATTC products. Of these 261 products, 181 products used TIPs and 175 products used TAPs. The majority of participants (82.6%) served a variety of roles in developing the products produced by their respective ATTCs. Specifically, 54.3% served as primary product developers; 54.3% contributed to the development of the ATTC product but were not the lead author/developer; 21.7% were product reviewers; and 13.0% had an ‘other’ involvement (e.g., “wrote articles” or “coordinated production”) in the products’ development.⁴ In addition, the majority of products (85.1%) developed by the ATTCs had been used for teaching or were currently being used for teaching by the participants.

6. Attitudes toward TIPs and TAPs

6.1. Content advantages

All the major categories that reflect the respondents’ positive attitudes toward the content of TIPs/TAPs are organized under the label, “content advantages”. In general, ATTC curriculum developers, faculty, and trainers believed that TIPs/TAPs were useful for specific targeted user audiences; possessed good readability; were a good reference and contained useful tools; were comprehensive and complete; possessed current and timely information; were credible and research based; were good resources; and sufficiently incorporated cultural relevancy and sensitivity. The following provides a description of the major categories and higher order themes along with representative quotes.

(1) Useful for Targeted User Audiences (38 respondents/85 responses). The TIPs/TAPs were reported to be useful to a number of different audiences. The following were the higher order themes that composed this major category along with the number of respondents and responses:

- Useful for Treatment Providers (30 respondents/60 responses)
- Useful for Students (13 respondents/15 responses)
- Good Resource for Trainers (4 respondents/6 responses)
- Good Resource for College/University Staff (3 respondents/4 responses)

The following were representative quotes describing the TIPs/TAPs usefulness for targeted user audiences:

- *I want our students to be the best prepared...to elevate the standard of the treatment...this is what the TIPs and the TAPs do.*
- *TIPs and the TAPs...cut to the chase with substance abuse and it challenges those people in professional circles.*

⁴Response options were not mutually exclusive.

- (2) **Good Readability (22 respondents/35 responses).** ATTC curriculum developers, faculty, and trainers believed that the content of TIPs/TAPs possessed good readability. The single higher order theme was Good Readability as reported by 22 respondents who provided 35 responses.

Representative quotes about the TIPs/TAPs good readability included:

- *The reading level is great...It's very easy to comprehend...it's very direct, it's real straightforward.*
- *I think most of the time they're very succinct and their concepts are laid out very clearly.*

- (3) **Good References and Tools (19 respondents/30 responses).** Numerous comments suggested that the participants considered the TIPs/TAPs to be good references and to contain useful tools. Furthermore, participants made the distinction between the TIPs/TAPs being a good reference for research and a good reference for tools. The following were the higher order themes:

- Good References for Research (11 respondents/17 responses)
- Good References and Tools (9 respondents/13 responses)

The following quotes were illustrative of this major category:

- *One of the greatest things...is...the statistics and the...bibliographed information that I can get out of it that I know is...accurate. I can identify the source. It helps me a great deal instead of...doing a lot of digging on my own.*
- *Some of them do have very helpful attachments in the back like sample forms or...checklists.*

- (4) **Comprehensive and Complete (19 respondents/24 responses).** Of the 24 comments, there were 11 comments from respondents who felt that the content of TIPs/TAPs was “thorough” and “in-depth.” Furthermore, several respondents explained that the TIPs/TAPs were a “nice digest” of information where “it takes a lot of information and puts it in one place.” In addition, there was praise for the wide range of topics covered by the series, which the participants indicated as being “important.” The following were the higher order themes that composed this major category:

- Comprehensive and Complete Coverage of Topic (9 respondents/11 responses)
- Good Summary of Information (9 respondents/11 responses)
- Wide Coverage of Topics Across Series (1 respondent/2 responses)

- (5) **Current/Timely Information (14 respondents/21 responses).** Respondents who assessed the content as being reflective of “current research” and “cutting edge” information praised the timeliness and the up-to-dateness of the information contained in TIPs/TAPs. TIPs/TAPs were also commended for their timely topics that coincided with a demand in the treatment field for more information on specific topic areas of interest. TIP 37: *Substance Abuse Treatment for Persons with HIV/AIDS* and TIP 25: *Substance Abuse Treatment and Domestic Violence* were specifically cited by the respondents as

being the most timely. The single higher order theme was Current/Timely Information as reported by 14 respondents who provided 21 responses.

(6) Credible and Research Based (17 respondents/21 responses). According to a number of study respondents, TIPs/TAPs were credible and possessed research based information. The following were the higher order themes that composed this major category:

- Credible Source of Information (10 respondents/12 responses)
- Research-Based Information Useful (9 respondents/9 responses)

The quotes below illustrated the respondents' experience with the TIPs/TAPs as being credible and research based:

- *You've got national experts that have reviewed the material. So...it's a standard of practice...that carries some weight with it.*
- *CSAT...has a good reputation to all of us in the field. We spend a lot of our time on the Internet seeing what they have available, checking out for things they recommend as far as workshops that I can send my professors to. So they have got some validity to them.*
- *[Having] the back up literature referenced...so you can see... it wasn't invented out of nowhere.*

(7) Good Resource (12 respondents/18 responses). Several respondents indicated that they believed the TIPs/TAPs to be a "good resource." These comments applauded TIPs/TAPs for being a "real valuable resource" with "so much information." The single higher order theme that formed this major category was Good Resource as reported by 12 respondents who provided 18 responses.

(8) Sufficiently Incorporates Cultural Relevancy and Sensitivity (9 respondents/15 responses). Comments assessing cultural relevancy and sensitivity ranged from not being a problem at all to being addressed well. One comment revealed that the participant "didn't have any sense that they [TIPs/TAPs] were [culturally] insensitive." The cultural relevancy and sensitivity of the publications was also described as being "covered pretty well, actually." This major category was comprised of one higher order theme: Addresses Cultural Relevancy/Sensitivity (9 respondents/15 responses).

6.2. Content disadvantages

Although the majority of the comments by ATTC curriculum developers, faculty, and trainers that addressed the content of TIPs/TAPs were positive and highlighted the advantages of the content contained in TIPs/TAPs, a number of other ATTC curriculum developers, faculty, and trainers provided comments that underscored the disadvantages of using the content contained in TIPs/TAPs. It is noteworthy that many of these comments directly contradicted the "content advantage" comments. Specifically, some ATTC curriculum developers, faculty, and trainers believed the content of TIPs/TAPs: was not useful for specific targeted user audiences;

insufficiently incorporated cultural relevancy and sensitivity; was not current or timely; was not comprehensive nor complete; had inappropriate complexity of content; and was not research based.

These seemingly conflicting comments could be attributed to the fact that the participants were making, what they felt were, general statements about the TIPs and TAPs. Given that the respondents indicated they did not use every TIP or TAP, they may in fact have had specific TIPs and TAPs in mind when they responded. Although probes were used during the interviews to allow participants to differentiate whether they were referring to specific TIPs or TAPs with their comments or the TIPs and TAPs series as a whole, the respondents typically did not make this distinction and shared their thoughts about the publications. With these caveats in mind, this presentation of advantages and disadvantages reflect statements given by the participants in response to questions about TIPs/TAPs in general.⁵

(1) Not Useful for Targeted User Audiences (28 respondents/50 comments). Audiences who said they were not able to use the content of TIPs/TAPs included SA treatment providers, teachers, students, and clients. This major category was comprised of the following higher order themes:

- Not Useful for Providers (17 respondents/23 responses)
- Reading Level Inappropriate for Providers (7 respondents/10 responses)
- Difficult for Teachers to Use (6 respondents/8 responses)
- Not Useful for Students (5 respondents/6 responses)
- Not Useful for Patients (3 respondents/3 responses)

Quotes that described how TIPs/TAPs were not useful for targeted user audiences according to study participants included:

- *These things aren't easy reading.*
- *You give me all of the information, but you don't...help me with solutions...how do I apply it?*
- *They [TIPs/TAPs] have a solid research base, but they're not detailed enough for an academic course...they don't explain it [research based content] enough to use them in an academic classroom.*

(2) Insufficiently Incorporates Cultural Relevancy and Sensitivity (13 respondents/25 responses). Some respondents described the TIPs/TAPs as being inadequate in addressing specific cultural issues. For example, one respondent explained they “aren't gender or race specific...they don't really give me the information that I'm gonna need.” There were also several comments expressing that “most of this tends to be fairly bland in terms of its cultural relevance to different ethnic and racial and religious background.” Some believed the cultural sensitivity effort was “generic.” Specifically, comments regarding the cultural sensitivity of TIPs/TAPs reflected dissatisfaction with the extent to

⁵Analysis by specific TIPs/TAPs and by ATTCs can be found in the final study report.

which TIPs/TAPs address issues surrounding women, gender and sexuality, race/ethnicity, and other underserved populations. For this major category, the two higher order themes were:

- Does Not Address Specific Cultural Issues (13 respondents/18 responses)
- Does Not Address Specific Populations (5 respondents/7 responses)

- (3) **Not Current and Not Timely (16 respondents/19 responses).** Several respondents expressed concern about the outdated and often “*out-of-touch*” information contained in TIPs/TAPs. These comments included: “[They] *might be a little tardy in updating...certain things*”; “*They’re just not in touch with what’s happening in the field...sometimes I feel like the authors of the TAPs and the TIPs are sort of working out of their own environment but haven’t spent much time out there seeing what’s going on*”; and “*I think some of the panelists maybe [have an awareness of what’s happening in the trenches in the field], but the way it’s written, I think they miss it.*” The single higher order theme was Not Current and Not Timely as reported by 16 respondents who provided 19 responses.
- (4) **Not Comprehensive and Complete (7 respondents/10 responses).** A number of respondents also believed that the TIPs’/TAPs’ content was not comprehensive or complete. Some expressed dissatisfaction with how the topics were covered in the TIPs/TAPs. One respondent explained, “*They combined in their titles and in their topics some things that I wouldn’t think would necessarily go together.*” Other comments were critical of the narrow perspective used in writing the TIPs/TAPs. The following were the higher order themes for this major category:
- Dislike Topic Coverage (4 respondents/4 responses)
 - Narrow Perspective (4 respondents/6 responses)
- (5) **Complexity of Content Inappropriate (7 respondents/8 responses).** A small number of ATTC curriculum developers, faculty, and trainers believed that the content of TIPs/TAPs: (1) was not useful to specific audiences; (2) was not culturally sensitive; (3) was not current and timely, and (4) contained inappropriate levels of complexity. These comments ranged from one respondent who said, “*I don’t find it useful at all...it’s just rehashing and too basic*” to another respondent who explained, “*these TIPs and TAPs are way above the average reader.*” The following were the two higher order themes of this major category:
- Content Overwhelming (4 respondents/4 responses)
 - Complexity of Content Within TIPs/TAPs Inappropriate (3 respondents/4 responses)
- (6) **Not Researched Based (3 respondents/5 responses).** A few respondents were concerned about the lack of references to empirical research and the fact that the TIPs/TAPs were not original sources of information. The single higher order theme was Lacks Detailed Research as reported by 3 respondents who provided 5 responses. The quotes below illustrated this theme:

- *I had some concerns...that it was...not academic enough, not empirically based enough for me.*
- *I haven't ever used the structure of a TIP and then tried to train around that specifically...usually because they're not the original source material.*

6.3. Format advantages

In addition to providing feedback on the advantages and disadvantages of using the content of TIPs/TAPs in the development and delivery of curricula, ATTC curriculum developers, faculty, and trainers provided feedback on the advantages and disadvantages of using the format of TIPs/TAPs in the development and delivery of curricula. Participants' positive attitudes toward the format of TIPs/TAPs were reflected in their comments in the single major category: Like Specific Format Features (36 respondents/80 responses). The higher order themes that composed this major category were:

- Good Physical Features (18 respondents/34 responses)
- Well Organized for Easy Use (20 respondents/28 responses)
- Online Format User-Friendly (7 respondents/9 responses)
- Easy to Reproduce (5 respondents/7 responses)
- Like Reference Guide (2 respondents/2 responses)

The following quotes were representative of the format features that study participants liked:

- *One of the neat things is that most of these are now available with three-hole punch.*
- *To me it's been really helpful that it's up on the Web. So when I want a specific topic, I can go to the CSAT Web page and scan through all the TIPs and TAPs.*
- *They're nice outlines the way they're setup...you can just pull out pieces real easily.*

6.4. Format disadvantages

Although ATTC curriculum developers, faculty, and trainers identified many format features they perceived to be advantages to using TIPs/TAPs in their work, ATTC curriculum developers, faculty, and trainers also identified several format features they perceived to be disadvantages to using TIPs'/TAPs' in the development and delivery of curricula. Nineteen respondents provided 31 comments criticizing TIPs'/TAPs' format. Among the comments provided, 17 comments criticized the presentation of TIPs/TAPs. Respondents found the presentation of TIPs/TAPs to be *"unattractive...not visually appealing."* Some respondents also criticized the presentation as being *"boring," "utilitarian,"* and *"poor."* The major category was Dislike Specific Format Features (19 respondents/31 responses) and was composed of the following higher order themes:

- Dislike Presentation (12 respondents/17 responses)
- Dislike Hard Copy Format (7 respondents/7 responses)
- Web Site Difficult to Use (6 respondents/7 responses)

7. Practices: Respondents' use of TIPs and TAPs

The study's third research question attempted to determine the extent to which TIPs (and/or TAPs and other CSAT products) have been incorporated into the curricula, courses, and methods of the ATTCs. Specifically, ATTC curriculum developers, faculty, and trainers were asked how they used TIPs/TAPs in their work.

Responses to this research question covered a wide range of uses and were compiled into the following three sections: (1) uses of TIPs/TAPs; (2) individual determinants of use; and (3) contributions to distribution and awareness of TIPs/TAPs. Results are presented by the major categories that emerged from the data.

7.1. Uses of TIPs/TAPs

This section lists how TIPs/TAPs were used in the respondents' work in the SA treatment field. Each subsection represented the different professional roles (e.g., educators and as SA treatment professionals) held by ATTC curriculum developers, faculty, and trainers. In addition to using TIPs/TAPs in their professional roles, many respondents said they used TIPs/TAPs for personal enrichment. The following were the major categories that described how the TIPs/TAPs were used:

- Resource for Education (32 respondents/75 responses)
- Use of TIPs/TAPs by Substance Abuse Treatment Professionals (32 respondents/75 responses)
- General Resource (17 respondents/20 responses)
- Personal Use and Enrichment (7 respondents/7 responses)
- Consensus Panel Members and/or Bibliographies Used as a Resource (4 respondents/5 responses).

7.2. Individual determinants of use

Respondents provided numerous comments on how they used TIPs/TAPs in their work. Respondents also provided comments that explained how personal preferences could influence their decisions to use TIPs/TAPs. The major categories that described the determinants of use were:

- Relevance of Topics Determines Use (10 respondents/11 responses)
- TIPs/TAPs Unnecessary (5 respondents/6 responses)
- Prefer TIPs Over TAPs (2 respondents/2 responses)

7.3. Contributions to distribution and awareness

According to study results, ATTC curriculum developers, faculty, and trainers played an active role in disseminating of information contained in TIPs/TAPs to others. The sole major category was: TIPs/TAPs Distributed and Promoted by ATTC Curriculum developers, faculty, and trainers (42 respondents/123 responses). The higher order themes that contributed to this major category were:

- General Promotion and Distribution (22 respondents/46 responses)

- Distribute in Professional Settings (18 respondents/33 responses)
- Distribute and Promote to Colleagues (15 respondents/17 responses)
- Distribute and Promote to Students (13 respondents/17 responses)
- Encourage and Require Use in Academic (9 respondents/10 responses)

8. Recommendations for enhancing TIPs/TAPs

The final research question asked ATTC curriculum developers, faculty, and trainers to offer recommendations for improving (or enhancing) TIPs (and/or TAPs and other CSAT products) so as to facilitate use.

Based on their experiences using the TIPs and the TAPs, ATTC curriculum developers, faculty, and trainers provided a number of recommendations that ranged from improvements, which address their specific needs, to general comments, which may assist CSAT in improving all of its products.

The first major category grouping addressed recommended changes that may directly impact the use of TIPs/TAPs. The comments in this category included: providing various levels of guidance to improving the practitioner's use of TIPs/TAPs and suggestions to increase awareness and use. The second grouping of major categories addressed recommended changes to the content of TIPs/TAPs and included comments such as: more attention to specific populations; more information on special topics; and keep the information current. Finally, the third grouping of major categories addressed recommended changes to the format of TIPs/TAPs and included suggestions to develop multi-media packages and suggestions to improve the hard copy and online formats of the documents. An additional group of comments recommended changes to the development process of TIPs and TAPs.

8.1. Direct changes that may influence use

This first grouping of major categories reflected suggestions that may have direct influence on the patterns of use with respect to TIPs/TAPs among targeted audiences. The following major categories emerged from the data: Provide Guidance to Improve Application of TIPs/TAPs (35 respondents/70 responses), and Increase Awareness and Use (26 respondents/66 responses). Respondents most frequently requested assistance from the government in the form of alternative products such as "*brochure pieces*" and "*products that...are a lot faster to look at.*" In addition, respondents felt that increasing awareness in the SA treatment field may influence and increase the number of TIPs/TAPs users and offered suggestions such as "*automatically send a news release...[that] this publication is available.*"

8.2. Recommendations for improvements in content

Many ATTC curriculum developers, faculty, and trainers provided suggestions on how to improve the quality of the content of TIPs/TAPs. If the quality of the TIPs'/TAPs' content was enhanced, many respondents indicated that they would be more likely to use TIPs/TAPs in

practice. Respondents' suggestions for TIPS/TAPs content improvement were organized in the following major categories:

- More Attention to Specific Populations (24 respondents/54 responses)
- More Information on Special Topics (29 respondents/52 responses)
- Recommended Supplementary Features (24 respondents/50 responses)
- Keep Information Current (12 respondents/15 responses)
- Improve Credibility (6 respondents/9 responses)

A more detailed description of participants' recommendations within the major categories is provided below. The requests for more attention to specific populations covered two general topic areas: (1) requests for information on treating underserved populations included requests for information on geographical differences such as urban and rural specific populations, gender and sexuality such as female and Lesbian, Gay, Bisexual, Transsexual (LGBT) specific populations, and age differences such as youth and elderly populations; and (2) requests for information on cultural diversity (in general) and/or information specific to treating individuals from diverse racial and ethnic backgrounds.

In terms of special topics, respondents suggested more information on various methods of treatment and therapies as well as motivational interviewing; faith based therapy/spirituality; harm reduction; relapse prevention; and family/relationship therapy. As for supplementary features, respondents specifically requested features such as an *“executive summary with some checklists”*, a *“little workbook area”*, and *“activities...like little questions and fill-in slots.”* Additionally, respondents offered suggestions to use supplements and addendums to keep current the information contained in TIPS/TAPs. Finally, comments that addressed a concern for the credibility of TIPS/TAPs, included a suggestion that *“everything be well cited...making sure that...they are as close to peer review as possible”* and to *“try to be a little more clear on when there's some empirical basis.”*

8.3. Recommendations for improvements in format

In addition to making recommendations on how to improve the content of TIPS/TAPs, ATTC curriculum developers, faculty, and trainers offered suggestions for improving the format of TIPS/TAPs in ways that would facilitate use. Recommendations for how to improve the format of TIPS/TAPs included the following major categories:

- Develop Multi-Media Packages (22 respondents/37 responses)
- Improve the Hard Copy Format (19 respondents/36 responses)
- Improve the Online Format (8 respondents/16 responses)
- Improve the Development Process of TIPS/TAPs (8 respondents/9 responses)

With regard to multi-media packages, participants requested videos to assist in applying TIPS/TAPs information in practice as well as distributing the content of TIPS/TAPs through a *“pre-designed PowerPoint [presentations]...with some of the charts”* on CD-ROM or on floppy disk. As for the hard copy format of TIPS/TAPs, participants recommended the use of graphics throughout the text as well as bulleting text, highlighting key points, and summarizing information in tabular format. With regard to the online format of TIPS/TAPs, respondents

explained that the website would be more useful if there were better tools and “*improve[d] search engine capabilities*”. Finally, respondents suggested improvements in the development process of the TIPs/TAPs. Specifically, these comments called for greater input and involvement from frontline treatment staff, educators, and individuals with culturally and gender/sexually diverse backgrounds.

9. Discussion

This study applies diffusion theory as a theoretical framework to understanding the process by which CSAT products are implemented and adopted within the SA treatment system. This discussion will explore how the findings from this study can be understood in terms of diffusion theory. Focus will be given to examining the recommendations provided by ATTC curriculum developers, faculty, and trainers that could serve to guide policy decisions with regard to the development as well as the continual refinement of CSAT products. That is, in addition, to providing a broader understanding of the environment and working conditions of the SA treatment field, the findings from this study can be used by CSAT to evaluate, and enhance, its current product development and dissemination plan to better assist the target user audience. At the same time, other organizations can benefit from the guidelines and lessons for product evaluation, development and dissemination.

9.1. Knowledge (awareness) of TIPs and TAPs

Although the first research question attempted to capture the knowledge stage of the diffusion process, the study design required that participating curriculum developers, faculty, and trainers have prior awareness of the TIP and/or TAP series. Thus, prior awareness of the TIP and/or TAP series was guaranteed by the study design.

Results indicate that among ATTC curriculum developers, faculty, and trainers, TIPs and TAPs are used based on their needs, with some TIPs and TAPs being used more often than others in the series. In addition, ATTC curriculum developers, faculty, and trainers reported that general knowledge, and awareness, of the TIPs/TAPs in the SA treatment field could be improved. This finding supports earlier CSAT sponsored research (e.g., the TIPs Evaluation Project Retrospective Study), which also found that awareness levels of TIPs within the SA treatment field could be improved. In addition, it helps further explain how a dissemination vehicle such as the ATTCs, through their curriculum developers, faculty, and trainers, make use of products (e.g., TIPs and TAPs) and can serve as part of larger dissemination strategy. To decide which mechanism can best increase awareness of products such as TIPs/TAPs, organizations may want to consider the findings from this study: (1) assessment of the level of awareness does not allow the determination of whether a product is being used as intended (i.e., in this case, for the implementation of best practices in the substance abuse treatment field), (2) awareness of a product such as TIPs/TAPs does not necessarily equate to product use in practice, and (3) professionals in the substance abuse treatment field are extremely diverse; thus, meeting everyone’s needs presents challenges for product development, dissemination, and use. It is important that strategies to increase awareness of products such as the TIPs/TAPs are balanced with efforts to facilitate the adoption and implementation of ideas outlined in the product (e.g.,

best practices outlined in the TIPs/TAPs) while meeting the needs of targeted user audiences. Furthermore, an organization such as CSAT may want to consider the importance of overall use in conjunction with the leadership role it maintains in the field by serving all treatment professionals.

9.2. Attitudes toward TIPs and TAPs

According to diffusion theory, after individuals become aware of a product they develop attitudes towards that product. Thus, the second research question sought to examine the attitudes of the ATTC curriculum developers, faculty, and trainers towards TIPs/TAPs by asking about the perceived advantages and disadvantages of using TIPs/TAPs in developing and delivering curricula. In general, comments by the ATTC curriculum developers, faculty, and trainers focused on the advantages and disadvantages of the content and format of TIPs/TAPs. It is worthy to note that the majority of the comments were positive, although there were a number of comments that directly contradicted these positive comments. Conflicting comments create a unique challenge when attempting to improve products and services to meet user needs. The results also demonstrate how diffusion of a product may be impacted once opinions are formed, even if individuals have not used a publication series such as the TIPs and TAPs in its entirety. Other service organizations may want to consider a “lesson learned” from these results in that when dissonance emerges in the results, additional questions tapping into users’ attitudes towards a product will need to be identified in order to find answers regarding optimal product use.

9.3. Practices: Respondents’ use of TIPs and TAPs.

Actual adoption or use of a product is the final step in the diffusion process. Since all study participants were prior users of TIPs/TAPs, they were able to provide a variety of comments regarding their uses of TIPs/TAPs.

ATTC curriculum developers, faculty, and trainers used TIPs and TAPs in different ways in their work. According to the respondents, they primarily used the TIPs/TAPs as an educational resource, and used the TIPs/TAPs consensus panel member listings and/or bibliographies as a means of obtaining additional treatment information.

ATTC curriculum developers, faculty, and trainers indicated that they were active in disseminating TIPs and TAPs to others. These users have the potential to play important roles in the diffusion process as opinion leaders in the SA treatment field. One strategy would be to identify and recruit these individuals as change agents for the agency. If several ATTC curriculum developers, faculty, and trainers are effective in positively influencing the dissemination and use of TIPs/TAPs in the field, these individuals can be a valuable resource in determining how best to modify current development and dissemination plan for TIPs/TAPs in order to facilitate use of the publications.

Furthermore, based on these results, other organizations may want to consider identifying opinion leaders to help direct product development and dissemination. The results show that

substance abuse professionals play a key role in the dissemination of best practice information. As such, they are likely to have a direct impact on the adoption of best practices and the advancement of substance abuse treatment field. Thus, other organizations that have dissemination mechanisms similar to the ATTCs may want to identify their opinion leaders and to explore how they can facilitate the dissemination of information to impact the adoption of new ideas and practices.

9.4. Recommendations

Based on ATTC curriculum developers, faculty, and trainers' comments and recommendations, the following are three major areas an organization may want to consider when implementing changes to enhance best practice publications (e.g. TIPS/TAPs): (1) improve the marketing and dissemination (2) develop new and alternative products to better meet the diverse needs of treatment professionals/ practitioners, and (3) provide assistance with the implementation of the practice guidelines.

10. Conclusion

This study, as part of the TIPS Evaluation Project, serves as an example of the use of theory-based research for program and product evaluation. It is apparent from this study that not only is it possible to conduct evaluations of this nature using theory as its framework, but the results can also yield practical information that can be incorporated into future product development or improvement efforts by the sponsoring agency.

Specifically, it is clear from the comments by the ATTC curriculum developers, faculty, and trainers that CSAT is at the forefront of providing resources to the substance abuse treatment field. Although ATTC curriculum developers, faculty, and trainers gave many positive comments for the TIPS and TAPs programs, recommendations for improvements to the development and dissemination of TIPS/TAPs suggest that changes or improvements can still be made to the current program in order to better meet the needs of all treatment professionals. It has been suggested that the SA treatment field may be better informed regarding the available products through a more effective product marketing campaign. In addition, assistance with implementation of guidance contained in TIPS/TAPs is instrumental to its use in the field. Following any marketing and implementation efforts, additional research may be warranted to fully understand the use of CSAT products within the field. The organization may want to consider the identification and exploration of intended TIPS/TAPs user audiences, as well as identifying barriers to effective substance abuse treatment. When changes that meet the needs of treatment professionals are made to the TIPS/TAPs development and dissemination programs, it is more likely that these products will be adopted for use by the substance abuse treatment field.

Finally, it is hoped that the results gained from this study will contribute to the breadth of knowledge about enhancing product development and dissemination strategies that can be applied to service organizations and those served through these respective organizations. Perhaps government and community-based organizations can take lessons from this study and

take steps to explore some of the suggestions about product evaluation, marketing strategies, content development, and media options.

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Note: For detailed information on the lower order themes, please contact the first author, Susan W. Hayashi, Ph.D.

Table 1	
TIPs Indicated by Participants as the Most Frequently Used	
TIPs	%
TIP 9: <i>Assessment and Treatment of Patients With Coexisting Mental Illness and Alcohol and Other Drug Abuse</i>	40%
Adolescent TIPs	
TIP 3: <i>Screening and Assessment of Alcohol-and Other Drug-Abusing Adolescents</i>	29%
TIP 4: <i>Guidelines for the Treatment of Alcohol-and Other Drug-Abusing Adolescents</i>	24%
TIP 31: <i>Screening and Assessing Adolescents for Substance Use Disorders</i>	25%
TIP 32: <i>Treatment of Adolescents for Substance Use Disorders</i>	24%
TIP 35: <i>Enhancing Motivation for Change in Substance Abuse Treatment</i>	27%
TIP 7: <i>Screening and Assessment for Alcohol and Other Drug Abuse Among Adults in the Criminal Justice System</i>	25%