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### Use of Empirically Supported Interventions for Psychopathology: Can the Participatory Approach Move Us Beyond the Research-to- Practice Gap?

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Running Head: EMPIRICALLY SUPPORTED INTERVENTIONS

Use of empirically-supported interventions for psychopathology:

Can the participatory approach move us beyond the research-to-practice gap?

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Abstract

Dissemination, or distribution, of empirically-supported interventions (ESIs) for psychopathology remains a significant challenge. This paper reviews the principles of community-partnership research (CPR) and explores why CPR might improve distribution of psychological ESIs. Benefits of CPR include building trust, pooling resources and knowledge, and better serving a community by directly involving its members in the design and implementation of research. In addition, after establishing a community's trust using CPR, researchers are likely to be better positioned to partner with communities in the further distribution of ESIs via community networks. This paper reviews the case of dissonance-based eating disorder prevention interventions to provide an example of how CPR can facilitate the adoption and distribution of an ESI by a community, in this case, sororities. CPR also presents a number of challenges, however, because it is time consuming and does not always align with funding mechanisms and research designs used in randomized controlled trials. Further, CPR does not necessarily solve the challenge of training providers, though it may help with problem solving. Ultimately, we suggest that the benefits of CPR far outweigh the challenges, and hope that more researchers will adopt these practices so that more individuals can benefit from empirically supported psychological interventions.

Keywords: Community research, prevention interventions, eating disorders, dissonance.

## 1.1 Introduction

Psychopathology intervention research has produced marked advances over the last few decades. Perhaps most significant has been the development of empirically-supported interventions (ESI). To date, rigorous clinical research has determined that several interventions reliably reduce symptoms, risk factors, and/or risk for onset of psychopathology. Despite these advances, it also is clear that use of ESIs in everyday clinical practice and real world settings remains limited. Surveys regarding the use of ESIs such as cognitive behavioral therapy (CBT) for bulimia nervosa and exposure for posttraumatic stress disorder (PTSD), obsessive compulsive disorder (OCD), and panic disorder – all of which are backed by a substantial evidence base – indicate that only a small subset of clinicians use ESIs on a regular basis (e.g., Becker, Zayfert, & Anderson, 2004; Freiheit, Vye, Swan, & Cady, 2004; Pederson et al., 2000; Rosen et al., 2004). In short, most ESIs are rarely used in clinical practice (i.e., there is a gap between research and practice). Several excellent articles have reviewed this research-practice gap and the lack of progress distributing ESIs from research to clinical practice (e.g., Barlow, Levitt, & Bufka, 1999; Crits-Christoph, Wilson, & Hollon, 2005; Westen, Novotny, & Thompson-Brenner, 2004; Young, Connolly, & Lohr, 2008).

This article explores the viability of alternative approaches to disseminating ESIs. Specifically, we examine the potential benefits and challenges of community-based participatory research for health, which we refer to as community-partnership research (CPR), in expanding clinical utilization of ESIs. Although participatory approaches such as CPR are well recognized in health psychology, nursing, social work, and public health fields, this approach typically has not been used to disseminate ESIs for psychopathology, despite recognition that partnerships between clinicians and researchers might be fruitful (e.g., Chorpita & Nakamura, 2004; Kendall, 2002; Westen, Novotny, & Thompson-Brenner, 2005). Thus, we review CPR methods and principles in the context of disseminating ESIs and argue that CPR could improve use of ESIs in clinical settings. As part of our discussion, we will provide a case example involving the

dissemination of dissonance-based interventions (DBIs) for eating disorder (ED) prevention. We then discuss some benefits and challenges of using CPR, and offer general observations about what we have learned during our efforts to disseminate DBIs for EDs. The authors of this paper include both researchers and a member of a community partner promoting DBIs. Because this paper is written for researchers, however, we largely write from a researcher perspective.

It is important to note that we are not arguing for abandonment of traditional efficacy or effectiveness trials. Similarly, we recognize that other researchers have used CPR to develop other ED prevention programs (e.g., see Piran, 2001). As can be seen below, however, ED prevention DBIs are unique in that they are supported by an evidence-base that was constructed using CPR *and* traditional efficacy/effectiveness clinical trials. Thus, we suggest that although CPR is not a stand-alone solution, it is a vital piece of the dissemination process. Moreover, we suggest that CPR and traditional efficacy research, which may be viewed as quite different approaches to research, can be complimentary.

## 1.2 Community-Partnership Research (CPR)

### 1.2.1 *Defining Features*

CPR involves engaging community partners in a manner that shares power and decision making to increase and integrate knowledge about health problems and improve problem solving (Israel, Eng, Schulz, & Parker, 2005). Communities are groups of individuals who have a collective identity involving emotional connection; shared symbol systems, values, norms, and interests; and a desire to address mutual needs (Israel et al., 2005). Practically, CPR involves bringing together people from diverse backgrounds (academics, agencies, community organizations etc.) to collectively address complicated social and health problems (Shoultz et al., 2006), or in the case of this paper – to foster greater use of ESIs for psychopathology. Participatory approaches such as CPR often are employed to address health disparities in the underserved (Israel et al., 2005). Because researchers typically are from “outside” the community, CPR requires researchers to address power issues and to give up the “solo expert”

role for a position that recognizes that all partners bring expertise and legitimate goals to the process (Israel et al., 2005).

Israel and colleagues (2005) have outlined nine core principles commonly associated with CPR. Israel et al. note that because all partnerships are unique, one set of principles will not be equally applicable to all projects. Generally, however, CPR involves:

1. Recognizing that communities are entities to which individuals have membership and connection
2. Building on community strengths and resources
3. Fostering collaborative, truly equitable partnerships between researchers and community members
4. Promoting co-learning and capacity building for all project partners
5. Balancing the creation of new knowledge with provision of useful intervention so as to benefit all partners
6. Focusing on the immediate relevance of health problems to communities and recognizing the multiple determinants of healthy behavior
7. Using a collaborative, cyclical and iterative process
8. Sharing results with all partners in a way that is respectful and useful
9. Making a long term commitment to the community, project and future sustainability

To illustrate how CPR differs from a more traditional research approach, we consider the following example. Using a benchmarking strategy (Wade, Treat, & Stuart, 1998), a researcher might design a study wherein masters-level clinicians deliver CBT for bulimia nervosa to determine if these professionals can produce comparable outcomes to those found in efficacy studies. This study clearly has the potential to produce useful information related to the process of dissemination. Yet, it does not dovetail with CPR values because the clinicians did not have input into the design of the intervention or research study, which might lead to unexpected problems. For example, the clinicians might know from experience that certain format or content

features of the intervention are incompatible long-term with the setting in which they wish to conduct the intervention, a factor that might be overlooked if they were not consulted at the design phase of the study. Failure to address such issues may mean that the community may not be well positioned (motivationally or practically) to continue to use CBT after the study is completed. In sum, although this study is useful because it answers some important questions, it also is limited in terms of building the types of egalitarian partnerships that we likely need to close the research practice gap.

On the one hand, it may appear as though the goal of increasing use of ESIs, which are typically manualized, is incompatible with CPR because mere use of a manualized ESI means that part of a project agenda has been set (Piran, personal communication, 2007). On the other hand, however, applying ESI with CPR methods is akin to clinicians developing the collaborative relationship needed to conduct quality CBT. The clinician explicitly states that while he/she may know something about psychopathology, the client is the expert when it comes to his/her own life/goals/skills/deficits. Similarly, in CPR, researchers, who know something about a particular ESI, explicitly recognize that community partners have equal levels of critical expertise regarding the community's current status, goals, resources, and needs.

It should be noted that many communities, like many clients, want interventions that work. In our experience, the data supporting the success of DBIs have played a key role in expanding utilization of this ESI in many settings. For example, high school principals and school nurses were receptive to offering DBIs in their schools because DBIs had been found to reduce risk for onset of EDs and improve psychosocial functioning. Thus, we remain strong advocates of traditional efficacy research. In our experience, however, once the efficacy foundation has been laid, other methods, such as CPR, also become critical. An evidence base is necessary, but not sufficient, for dissemination.

### *1.2.2 Why might CPR help with dissemination of ESIs?*

*“Clinicians do not want to be disseminated on or disseminated at. A genuine collaboration between researchers and clinicians – in which researchers bring to bear empirical methods to test not only their own best guesses about what works but best practices identified empirically in the community – seems to us the most productive way to bring researchers and clinicians together in the quest for [evidence based practice].” (Westen et al., 2005, p. 431)*

In our opinion, this quote highlights one problem with many dissemination efforts. ESI researchers often appear to treat clinicians and other communities as groups who should be accepting, passive, and possibly even grateful recipients of what researchers have found. Chorpita and Nakamura (2004) describe this as inadvertently viewing clinicians as “empty vessels” to whom we “push out” product (p. 364). Given this stance, it is understandable that we, as researchers, become frustrated when communities appear to stubbornly refuse to use what we have developed, or as Westen et al. state, treat us as “occupiers rather than liberators” (p. 431). Use of CPR methods, however, may help create the genuine collaboration to which Westen et al. and others refer. In fact, as part of our use of CPR, for the remainder of this paper we will discuss distribution of ESIs, as opposed to dissemination, so as to use the standard language of a key dissonance prevention partner, namely sororities<sup>1</sup>.

CPR methods have several strengths. First, CPR helps build trust between groups that may not historically trust one another, yet who need to work together to solve a problem (Shoultz et al, 2006). This description clearly fits the current relationship between many in-the-trenches clinicians and academic ESI researchers. We need to work together a) because clinicians do not have the resources to rigorously test what they do *and* b) because the last few decades have shown that researchers cannot successfully dictate clinical behavior to clinicians. Second, CPR allows individuals with different areas of expertise to pool their collective knowledge in problem solving. This again is likely a critical element needed to bridge the research practice gap. Finally, in CPR, resources from different sources can be pooled to create new and exciting projects that might not otherwise be possible.



CPR also has challenges, not the least of which is that it is time consuming. Moreover, it can be difficult to maintain the relationships needed to sustain this approach (Israel et al., 2005), and CPR means acknowledging that a range of goals and needs (even those that do not coincide with our academic goals) are valid. CPR also often requires a significant time commitment from researchers that extends outside the boundaries of traditional research grants and our own research interests. Because both the strengths and challenges of this approach may be best understood in the context of a specific project, in the following section we will discuss how conducting CPR was a natural research progression that followed a series of efficacy and effectiveness trials.

### 1.3 History of Dissonance-Based Eating Disorders Prevention

#### 1.3.1 *Efficacy Trials*

In DBIs for ED prevention programs, young women with body image concerns who have internalized the thin-ideal standard of female beauty voluntarily engage in verbal, written, and behavioral exercises in which they critique this ideal (e.g., voluntarily write essays and conduct role-plays that are counter-attitudinal). Theoretically these activities result in psychological discomfort that motivates them to reduce thin-ideal internalization, which decreases body dissatisfaction, dieting, negative affect, ED symptoms, and risk for future onset of EDs. DBIs usually last 3-4 hours and are conducted during 2-4 sessions.

Stice and colleagues conducted three preliminary efficacy trials and a subsequent large efficacy trial. The preliminary efficacy trials indicated that participants assigned to a 3-session DBI showed significantly greater reductions in ED risk factors (thin-ideal internalization, body dissatisfaction, self-reported dieting, and negative affect), and ED symptoms relative to assessment-only control participants, with most effects persisting through 1- to 6-month follow-up (Stice, Mazotti, Weibel, & Agras, 2000; Stice, Trost, & Chase, 2003). Another preliminary trial provided evidence that the 3-session DBI produced significantly greater reductions in risk factors (thin-ideal internalization and body dissatisfaction), but not ED symptoms, relative to an

alternative intervention that promoted healthy lifestyle changes as a means of improving body satisfaction (Stice, Chase, Stormer, & Appel, 2001).

Based on these findings, Stice and associates initiated a large efficacy trial in which adolescent girls with body image concerns were randomized to a 3-session DBI, 3-session healthy weight intervention, expressive writing control condition, or assessment-only control condition. Relative to assessment-only controls, DBI participants showed greater reductions in thin-ideal internalization, body dissatisfaction, dieting, negative affect, and ED symptoms at posttest and 6-month follow-up, and in thin-ideal internalization, dieting, and ED symptoms at 1-year (Stice, Shaw, Burton, & Wade, 2006). Compared to expressive writing, the DBI also produced greater reductions in thin-ideal internalization, body dissatisfaction, dieting, negative affect, and ED symptoms at posttest; in body dissatisfaction, dieting, negative affect, and ED symptoms at 6-months, and in dieting at 1-year. Relative to healthy weight, the DBI produced greater reductions in internalization, body dissatisfaction, dieting, negative affect, and ED symptoms at posttest and in negative affect at 6-month and 1-year follow-ups. DBI and healthy weight participants were also at lower risk for obesity onset by 1-year follow-up compared to expressive writing and assessment-only controls. A report on the longer-term effects (Stice, Marti, Spoor, Presnell, & Shaw, 2008) indicated that DBI participants showed significantly greater decreases in thin-ideal internalization, body dissatisfaction, negative affect, ED symptoms, and psychosocial impairment, and lower risk for eating pathology onset through 2-3 year follow-up than assessment-only controls. The DBI also produced greater decreases in internalization, body dissatisfaction, and psychosocial impairment compared to expressive-writing. Further, DBI participants showed a 60% reduction in risk for ED pathology onset relative to assessment-only controls through 3-year follow-up.

A separate report examined mediators hypothesized to account for the intervention effects of the two interventions in the large efficacy trial (Stice, Presnell, Gau, & Shaw, 2007). The DBI produced significant reductions in outcomes (body dissatisfaction, dieting, negative affect, ED

symptoms) and the mediator (thin-ideal internalization). In addition, change in the mediator predicted, and usually occurred before, change in outcomes and intervention effects became significantly weaker when change in the mediator was controlled. Thus, results provided support for the hypothesized mediator of the DBI.

Several independent researchers have conducted efficacy trials that provided evidence that different versions of the DBI produce greater reductions in ED symptoms and risk factors relative to assessment-only control conditions and that DBIs significantly outperformed two alternative interventions (Becker, Smith, & Ciao, 2005; Green et al., 2005; Matusek, Wendt, & Wiseman, 2004; Mitchell, Mazzeo, Rausch, & Cooke, 2007; Roehrig, Thompson, Brannick, & van den Berg, 2006). Although not all of the effects observed in the trials conducted by Stice and associates replicated in these independent trials, these findings are noteworthy because effects for other ED prevention programs have not been independently replicated to date.

### *1.3.2 Effectiveness trials*

After intervention effects have replicated in several efficacy trials, it is important to conduct effectiveness trials to test whether the program produces positive effects when delivered by endogenous providers in an ecologically valid way (Hoagwood et al., 1995). Recruitment for a large effectiveness trial of an expanded 4-session version of DBI was recently completed. This study tested whether DBIs produce effects when school counselors, nurses, and teachers are responsible for recruitment and intervention delivery in real world high school settings under ecologically valid conditions using minimal exclusionary criteria. Three hundred and six female adolescents with self-identified body image concerns were randomly assigned to 4-session DBI or a psychoeducational brochure control condition and are being followed over a 3-year period. Analyses indicate that DBI participants have shown significantly greater reductions in thin-ideal internalization, body dissatisfaction, dieting, and ED symptoms than control participants from pre to post (Stice, Rohde, Gau, & Shaw, 2009). The effects for body dissatisfaction, dieting, and ED symptoms persist through 6-month and 1-year follow-up. The effects from this trial compare

favorably to the average effects observed in our large efficacy trial (e.g., the effect for eating pathology at 1-year follow-up [ $r = .17$ ] is similar to the effect from our efficacy trial [ $r = .16$ ]). Results suggest that DBIs produce meaningful effects when endogenous providers recruit participants and deliver the intervention under real-world conditions.

### 1.3.3 *Reflections Body Image Program: Sororities, Dissonance and CPR*

Because the sorority adaptation of DBIs was developed in a manner that fits with the principles of CPR, this section describes the empirical support for this variant of DBIs, as well as the process that allowed this project to progress, without grant support, from a small pilot study conducted with members of a local sorority system at one university to a nationwide distribution effort that seeks to improve use of all versions of this ESI.

#### 1.3.3.1 *The Start: Trinity University Sorority Body Image Program*

The sorority project began in 2001, when Becker and an undergraduate student decided to attempt to replicate Stice et al.'s early work. Consistent with CPR, the decision to approach sororities came from the student, who was a sorority member. As an insider, the student also played a critical role in obtaining the sororities' cooperation. In this pilot study, Becker, Jilka and Polvere (2002) randomly assigned 24 sorority members with body image concerns to either two 2-hour sessions of DBI or a media advocacy (MA) intervention. One aim of the study was to tease apart the content of DBI from its theoretically dissonance-producing nature. Thus, MA content was similar to that of DBI, but replaced dissonance activities (e.g., role plays) with videos targeting the role of the media in maintaining the thin-ideal. Becker and two sorority research assistants (RAs) led the groups. Compared to MA, the DBI significantly decreased thin-ideal internalization and body dissatisfaction at 1-month. Both interventions also significantly reduced dietary restraint, eating pathology, and body dissatisfaction.

It is important to highlight that Becker et al. (2002) began working with sororities not because of *a-priori* beliefs about sororities increasing eating pathology, but rather because their organizational structure and community values (e.g., service) made them valuable partners.

Although many believe that sorority members are at increased risk for EDs, existing data are equivocal in comparisons of sorority members with other collegiate populations (Allison & Park, 2004; Cashel, Cunningham, Landeros, Cokley, & Muhammad, 2003). The rationale for partnering is important because communities may be more likely to partner with researchers when the underlying rationale is empowerment and respect (i.e., your values and community structure empower you to make a difference) rather than blame (e.g., sororities contribute to EDs – or – community clinicians are unwilling to take time to read research).

At the end of the pilot study, Becker and the RAs held a voluntary focus group with study participants to solicit feedback about their experience. Participants requested that the program be expanded and agreed to communicate their interest to their elected leaders. The following fall, Becker and a new sorority RA met with elected officers. During this meeting, results from the first study were presented and a second study was collectively designed. Becker agreed to insure that RAs were sorority members, so that community members benefited academically from the project. One advantage of this approach was that sorority RAs understood the priorities, values, and governance structure of the community. Thus, study logistics were designed to avoid conflicts with the community. Also, as insiders in the community, RA's often could informally and quickly negotiate solutions around logistical problems.

In the second study, 161 members were randomly assigned to DBI, MA, or waitlist (Becker, Smith & Ciao, 2005). Becker and sorority RAs facilitated all groups. Results indicated that, compared to controls, both DBI and MA produced greater reductions in dieting, body dissatisfaction, and ED symptoms at one-month follow-up. Only DBI, however, produced significantly greater reductions in thin-ideal internalization relative to controls. DBI did not produce significantly larger effects relative to MA, and results supported the use of both interventions with lower- and higher-risk members.

During the second study, the research team held focus groups with participants who had completed their follow-ups. These community members suggested that, as a next step, the

“sorority body image program” (SBIP) should be made mandatory for new members. On this basis, a preliminary meeting was held with officers, who endorsed this plan. Next, the research team, which largely consisted of community members, used insider knowledge to design a specific proposal for the sororities, which was subsequently approved after problem solving a few concerns with officers. Key factors in achieving approval were a) grass roots initiative from community members, b) study co-designed with the researcher and community members, c) increasing trust of the researcher who was now viewed as a community ally, d) ongoing emphasis on empowerment (e.g., “As the largest body of organized women on this campus, you have the power to create change,”) and e) the researcher’s willingness to negotiate design and logistical issues with community leaders.

In the fall of 2003, the sororities made plans to incorporate the SBIP into new member orientation. Because community members wanted to continue to mix members from different sororities in the small groups that comprised the interventions, they agreed to coordinate their orientation schedules so that all new members could attend the program simultaneously. This is an example of the effects of CPR. Because the need to run members simultaneously arose from a grass roots request, leaders were willing to make substantial changes to a major community event after a member (i.e., sorority RA) stated this was necessary. It is unlikely this change would have occurred using traditional approaches. Also, because officers wanted the program run on a semi-mandatory basis (i.e., participation required unless granted an excused absence), we conceptually distinguished between the study and the program so that members could attend the program and opt out of the study. Finally, officers requested that the waitlist control be dropped because this was incompatible with mandatory attendance. Thus, although a waitlist control was ideal from a research perspective, we eliminated it to respect community goals.

Because the research team lacked sufficient clinical providers, a major component of the third study was the use of trained peer-leaders. Sorority peer-leaders who had previously participated in the first or second study underwent nine hours of experiential training (see

Becker, Ciao, & Smith, 2008; Becker & Stice, 2008 for details). All decisions regarding use of peer-leaders, training schedule, training method, recruitment methods, and gifts to thank peer-leaders were generated collaboratively by Becker and community members. The use of peer-leaders conveniently coincided with another key sorority value, leadership. Interestingly, likely due to the use of CPR, the SBIP had developed into a program that matched the four key values of sorority life: service, leadership, scholarship and sisterhood. To further build on this, intervention manuals were modified in an iterative process aimed at tailoring the DBI to the community's language and values. Given that prior to this work Becker had no experience with sororities, learning the community values and language was another CPR element.

The third study (Becker, Smith, Ciao, 2006) evaluated the effectiveness of DBI and MA when administered by peer-leaders on a semi-mandatory basis to new members (N = 90). New members were randomized to MA or DBI. Participants in DBI showed significantly greater reductions in thin-ideal internalization, body dissatisfaction, and dieting compared to MA at 8-month follow-up; both interventions significantly reduced ED symptoms.

After completion of the new members study, the research team met with community officers to review the process and preliminary results. A consensus agreement was reached to run the program and an associated study annually. Key elements of this agreement included a) continued staffing by sorority RAs so that members of the community benefitted academically, b) annual review of results by and a study proposal for newly elected officers so that they could have input into the research design for the next year, c) annual solicitation of feedback from participants and peer-leaders, d) ongoing support from the research team in helping the community obtain credit for their work on this project so as to improve their public relations image, e) support from the research team whenever a member was identified as having an ED and when the community wanted to engage in related activities that would not generate data (e.g., holding a body image event), and f) giving priority to the community in sustaining their program before starting other programs as a way of recognizing their contributions.

To date, sorority members have conservatively contributed over 12,000 unpaid hours to the study and implementation of DBIs, and a follow-up new-members study replicated the viability of using peer-leaders to deliver DBIs (Becker, Bull, Schaumberg, Cauble & Franco, 2008). In addition, results from a study of three cohorts of peer-leaders suggest that peer-leaders who run the groups show greater reductions in risk factors (Becker, Bull, Smith & Ciao, 2008) than participants who just complete the program. Finally, the SBIP has led to the development of a pilot program in athletics, which also was developed using CPR. This co-designed study examines the relative effectiveness of DBIs versus the healthy weight intervention designed by Stice and associates when interventions are administered by peer-leaders on a semi-mandatory basis in athletic teams. Consistent with CPR goals, we modified the interventions to address the specific concerns of female athletes. All study decisions, including manual modifications, were collaboratively made by Becker, a former collegiate Trinity athlete, and the head athletic trainer, in consultation with the director of athletics and coaches. This expansion provides evidence that the CPR strategies that worked well with sororities appear to generalize to a quite different community (e.g., athletics).

#### *1.3.3.2 Expanded Distribution: Tri Delta Reflections Program*

In 2005 the Delta Delta Delta Fraternity (i.e., Tri Delta sorority) learned of the SBIP via its alumnae network. During a series of phone meetings, CPR methods were used to explore how an organization such as Tri Delta, which has approximately 13,500 collegiate members and 136 chapters in North America, could implement the SBIP. Examination of existing programs in the Greek community showed that no template existed for large scale distribution of a program like DBI. Becker identified two non-negotiable factors: the program could not be watered down and data had to be collected to determine if the program continued to work under the new circumstances. All other features (training procedure, where, when, how, who) were open for discussion and decided collectively.



We should note that Tri Delta receives multiple programming proposals from outsiders on a continual basis, and almost all of these proposals are rejected. Key factors in Tri Delta's decision to pilot test the SBIP included a) program was identified by a community member (i.e., alumna) who used her insider knowledge regarding the community's commitment to addressing key women's issues b) clear evidence from the Trinity project that the researcher would respect their community and understood their values, and c) quality data supporting both efficacy and effectiveness (drawn from both Stice et al. and Becker et al.). Tri Delta also appreciated that its staff's opinions and knowledge of their community were respected during early discussions. These factors highlight the important role that both CPR and classic efficacy/effectiveness research played in the success of this dissemination effort.

The first pilot study consisted of sending Becker to 2 chapters to conduct 8 hours of peer-leader training with members who had no prior experience with the program; letting the peer-leaders run the program with limited on-campus faculty/staff supervision; and assessing outcome and adherence. Because this research was not grant funded, both parties (i.e., the community and researcher) invested their own resources to move the project forward. For instance, Tri Delta underwrote required expenses for the program (travel and materials costs). Becker contributed her time (i.e., trainings, phone meetings, consultation, program planning, IRB applications, supervision of undergraduates at the data sites etc.). It is not uncommon for CPR projects to require participants to pool resources and move forward without external research grant support.

Results from this initial two campus open pilot study (Becker, Bull et al., 2006) indicated that although the SBIP produced positive results, effect sizes were smaller than in Becker et al. (2006) and adherence was reduced. Thus, results were promising, but suggested that a different model was needed. Brainstorming sessions yielded a plan to expand the program to five chapters by training and deploying Tri Delta BA-level field consultants (FCs) to run groups, train peer-co-leaders, and oversee implementation. Two chapters were chosen as data sites to

test outcome. A junior researcher also was recruited to help oversee data collection at one site. This researcher was assured that she would have the right to be first author on papers based on data collected from that site. Five month results from this site, pre-post results from the second data site, and review of audiotapes supported the viability of the FC distribution model (Perez et al., 2007). The program also had the benefit of helping Perez launch several related projects.

On the basis of the second pilot, Tri Delta decided to begin the project in earnest. Over the next year, Becker, Stice, Oxford University Press (OUP), and Tri Delta leaders worked together to address copyright issues and create a manual that could be widely distributed (note: much of the SBIP content had recently been published by OUP as *The Body Project*, but the manual by Stice and Presnell [2007] did not meet the needs of this community). Tri Delta assumed all financial risk, with leaders first agreeing to raise \$100,000 for this effort, and subsequently deciding to simply underwrite publishing of sufficient materials for 20,000 collegiate women to speed up the process. Several other universities and national sororities also began pilot testing, and Tri Delta committed to making SBIP available to all sorority members nationwide, not just its members. Tri Delta also decided to use this project to increase utilization of other variants of DBIs (e.g., *The Body Project*), and expanded the range of staff involved by including public relations, marketing, and licensing staff in discussions aimed at resolving logistical issues related to distribution, marketing, and quality control. Ongoing use of CPR resulted in the name being changed to *Reflections: Body Image Program*. CPR also was used to problem solve training issues and strategies for sharing the program with universities and other sororities. Recently, Tri Delta successfully launched both a week long advocacy effort aimed at building grass roots interest (*Fat Talk Free Week*) in DBI, and also *Reflections: Body Image Academy*. Designed using CPR, the academy provides 18 hours of training to individuals interested in bringing *Reflections* to either their chapter or campus, and includes both student and professional (i.e., counselors, Greek advisors, Student Affairs staff, community ED therapists and researchers) tracks. Finally, additional researchers have been recruited to add data sites for

ongoing evaluation, perform quality control checks, and to further Tri Delta's mission to enhance scholarship among its members, undergraduate and graduate students generally, and junior faculty. One ongoing challenge is balancing momentum with maintenance of quality.

#### 1.4 Benefits and Challenges of CPR

As noted, there are many benefits and challenges in using CPR. Below, we explore some of these in detail with a focus on our experiences with CPR and distribution of DBIs.

##### 1.4.1 *Benefits*

##### 1.4.2 *Building Trust and Partnerships*

To create goals and methodologies that are mutually beneficial, researchers must first overcome barriers to gaining the trust of communities. For instance, some communities (e.g., in-the-trenches clinicians, underserved populations, sororities) may perceive researchers as wanting to "use" them, or having disregard for their welfare, goals, and values. Further, it is important to recognize that such fears or concerns are not always unfounded, and in some cases may rest on substantial negative history with past research endeavors. In addition, researchers are rarely trained in the skills and methods needed to create and sustain partnerships with communities (Wallerstein, Duran, Minkler, & Foley, 2005), and may in some cases mistakenly assume that communities will inherently value our work and be ready to partner (Abela, personal communication, 2008). Finally, communities often have a limited understanding of the constraints and imperatives of academic life (Wallerstein et al., 2005). Despite these barriers, we have found that meaningful dialogue can build community trust and both researchers and communities can realize many benefits to working together.

For researchers, there are many benefits to collaborating with communities that could help with distribution of ESIs. For instance, we estimate that there are over four million sorority members worldwide including alumnae, and EDs and/or body image disturbance are a significant issue for most women. Thus, sororities have the potential to be valuable allies in increasing utilization of ESIs for EDs and other problems *if* we can build true partnerships.

Furthermore, they and other communities understand this. For example, the Executive Board of Tri Delta approved the funding to publish Reflections with the aim of not only markedly increasing use of DBIs for EDs, but also of becoming a model for the field of clinical psychology in demonstrating the power of atypical partnerships to increase use of ESIs more broadly.

CPR values (e.g., principles 3, 4, & 9) help foster the behaviors needed to move beyond distrust so that we can effectively partner with communities in expanding the use of ESIs in a sustainable and mutually beneficial manner. For example, in Reflections, we explicitly refer to sororities as our partners. Maintaining this partnership means that we also strongly encourage all researchers and university staff to become familiar with the sorority culture, emphasize the community's right to identify what is feasible given their resources, and respect their right to co-direct the project and veto proposals. For example, Tri Delta is committed to supporting the research component of Reflections. Yet, it does not always have the resources to collect data at every chapter that wants the program. In addition, with a few exceptions, we are unable to continue to use randomized designs and have to accept that we are no longer conducting controlled trials, we're simply assessing generalizability and benchmarking back (Wade et al., 1998) to better controlled research that we have already conducted.

Several of the CPR principles outlined by Israel et al. (2005) focus on having researchers contribute to the community beyond their academic agendas (e.g., principles 4, 5, 6, & 9). In many ways, this could be viewed as giving back to the community to further create trust and build a long-term partnership. For example, we have found that our willingness to donate our time or even, in a number of cases, forgo the chance for publishable data, has facilitated the development of a trusting relationship.

Abela, in his work with schools and school boards on the etiology of depression, has created a more systematic plan for building long term relationships (personal communication, 2008). He and his graduate students offer schools free 12-week depression prevention workshops for at-risk students. They also run free day-long workshops on depression for parents and educators,

and provide free community talks on the results of research findings. These are run with the simple and straightforward purpose of giving back to and building a relationship with the communities that are relevant to his work. We recognize that many psychologists volunteer time for various projects. Some researchers, however, may assume that bringing grant support and practical interventions to the community should suffice, and may not recognize the value of tying volunteer work to communities with which they can partner in expansion of ESIs. Giving back also may mean being willing to make contributions to these communities (by offering free training, helping with fundraising etc.) long after data collection has ended to help the community continue the long-term use of ESIs. Although this will not benefit us academically– it may bring us closer to the widespread utilization of ESIs.

#### 1.4.1.1.1 *Working Collaboratively*

In her 2007 keynote address at the annual meeting of the Eating Disorders Research Society, Striegel-Moore discussed steps needed to reduce suffering from EDs. Among these steps, was a challenge for people to “play nice.” We concur with Striegel-Moore that working together has moved us a lot further than defending territory or maintaining stereotypes about other groups. For instance, despite not knowing each other at the start of this work, Stice and Becker have shared manuals, training ideas and more to the benefits of both The Body Project and Reflections. Others have commented that it would have been easy to set the programs against each other to compete, instead of using Reflections to increase distribution of the Body Project and research on the Body Project as efficacy data for Reflections. Yet, we share the same goals: to reduce the prevalence of body image and eating disturbances, so working together has led to positive gains for everyone.

Tri Delta hopes Reflections will model for other communities the advantages of partnering with academics and the advantages of reaching across traditional student affairs and academic affairs lines in universities – lines they believe are maintained by both sides. Such partnerships could help expand use of a range of ESIs – given that depression, anxiety

disorders, sleep problems and substance use disorders are a significant problem for many college students. We also have a goal of using this project to help more junior researchers in the ED field become established, as long as they are willing to use CPR principles and respect our attempts to collaborate with each other.

Willingness to collaborate has led to other important and unexpected partnerships. For example, as part of the week long advocacy effort aimed at building grass roots interest in our ESI, we recruited the Academy of Eating Disorders (AED), National Eating Disorders Association, National Organization of Women, and Seventeen magazine as partners. Moreover, AED has endorsed Reflections – providing a stamp of approval that has greatly facilitated distribution efforts in working with specific universities. Of note, AED endorsed Reflections not just for its research base, but for “research-practice integration and community collaboration.” We suspect that similar endorsements by appropriate organizations (e.g., the Association of Behavioral and Cognitive Therapies) might also facilitate distribution of other ESIs. We encourage such organizations to consider AEDs carefully scripted statement, which recognized the role that both traditional research and CPR have played in the development of DBIs. In sum, distribution of DBIs has involved the collective effort of hundreds of people, many of whom have not historically worked together. Our experience suggests that we have far more to gain in the distribution of ESIs by collaborating and abandoning our stereotypes than we have to lose.

#### *1.4.2.1 Pooling resources and knowledge*

As noted by a member of the Tri Delta Executive Board, there are things academic clinical psychologists know how to do (e.g., developing ESIs) and there are things about which we understand less (e.g., distributing ESIs). We suspect we are at the tip of the iceberg in terms of learning what Tri Delta has to teach us about distributing ESIs. But several lessons have already emerged. Because we suspect that readers will know what skills academic researchers bring to a CPR relationship, we will focus on discussing aspects of distributing ESIs that we have learned directly from our experience partnering with Tri Delta.

#### 1.4.1.2.1 *Marketing and Building Grass Roots Interest*

Possibly due to a lack of expertise in the area of marketing and public relations, the field of psychology has struggled to find ways to inform people about and distribute our treatments. In fact, there has been no collective call at a grass roots level by either patients or clinicians to improve access to psychological ESIs. In contrast, substantially funded marketing and lobbying efforts by the pharmaceutical industry have had far reaching effects on the field of psychology. Despite the fact that psychologists have already developed treatments like CBT that work as well or better than many pharmaceutical treatments, many psychologists appear more interested in distributing pharmaceutical treatments for panic disorder, obsessive compulsive disorder, and depression than psychological ESIs. For example, the American Psychological Association's Committee for the Advancement of Professional Practice spent over \$725,000 to help state organizations obtain prescription privileges for psychologists (<http://www.apa.org/governance/reports2004/capp.html>). This illustrates that increased collaboration with organizations and communities with more marketing experience could broaden the interest in distributing ESIs.

Our experience with Reflections has introduced us to the utility of using marketing and public relations techniques to help distribute ESIs. For example, we renamed our ESI to Reflections: Body Image Program because Tri Delta's marketing and public relations staff noted that SBIP was not a marketable name. Further, for a broader campaign, we chose not to include the word sorority, because pairing this word with body image was viewed as potentially inciting negative stereotypes regarding the sorority experience. This problem never would have occurred to us as researchers because we saw SBIP as accurately describing the intervention.

Similarly, the utility of creating meaningful logos to "brand" the program, attractive fliers and response cards with catchy phrasing, issues of licensing, media "faq" sheets and interactive websites would not have occurred to those of us who have researched DBIs, nor would we have had the expertise or resources to easily develop them. Yet, Tri Delta's marketing team identified

these issues as important because they help create and sustain grass-roots support for the program that is critical for long-term success. These efforts are also helpful in generating interest from non-academic funding sources. Again, few academic researchers are going to have the ability to address these issues on their own. Thus, this further highlights the need for new partnerships.

We have also recently learned about the need to provide our marketing people with “packageable” results, defined for us as “results that a lay person can comprehend in less than 30 seconds,” without compromising our rigorous, scientific standards. “Packageable” data are concrete and easier to interpret than what is typically found in a scientific article. For instance, instead of describing a finding in the conventional scientific way (e.g., “We found a statistically significant reduction in the eating concerns subscale of the questionnaire version of the Eating Disorder Examination.”) one would use language understandable to a non-scientific audience (e.g., “The rate of new cases of eating disorders dropped from 15% to 6%; that means that for every 100 young women who go through this program – we may get 9 fewer cases” or “48% of women at one college who said they “felt fat almost every day” before the program felt that way never or less than half the time up to 8 months after the program.”) We encourage ESI researchers to think about including a few pieces of packageable data in their publications so that partners can easily find what they need to market the programs.

Packageable results also are more easily distributed in the media, and the media has probably been underutilized in our efforts to create grassroots interest in ESIs. For instance, we are finding that doing our own press releases using positive packageable findings has been helpful in distributing The Body Project. People have independently contacted us for this manual based on articles in national magazines (e.g., *Time*), from radio ads, and other sources. Ironically, ED researchers, who have vilified the media for promoting the thin-ideal, may benefit from using the mass communication offered by the media to distribute ED programs. For instance, Tri Delta has noted that if it can generate sufficient grass roots interest in the program



then many other pieces will fall into place (e.g., grassroots interest will lead to pressure at higher levels to offer the program). Similarly, if other atypical partnerships such as this one could help us market and generate high levels of grass roots interest from patients for other ESIs and/or generate interest among everyday community therapists (possibly via the media), other aspects of ESI distribution likely would become easier.

#### *1.4.1.2.2 Getting help with models for training*

One challenge in distributing ESIs is training providers. Training providers for an empirically supported prevention program can be easier than training providers for empirically supported treatment because the interventions are typically briefer. For example, DBIs are usually delivered in 2-4 relatively scripted sessions, and are substantially less complicated than enhanced CBT for EDs (Fairburn, 2008) or CBT for PTSD (Taylor, 2007; Zayfert & Becker, 2007). In other ways, however, it is more challenging because we often have to train individuals with little clinical experience. It is beyond the scope of this paper to review methods for training providers for ESIs, and the challenges vary substantially depending on the nature of the ESI. Thus, we will limit this section to noting that partnerships generated via CPR may inspire new thinking regarding training models (principles 4 & 5). Further we encourage researchers interested in the distribution of ESIs to look outside our own field for training ideas. For example, the initial idea for the Reflections: Body Image Academy was generated by a Tri Delta staff person, and details were then worked out collaboratively. In addition, the experiential training model used throughout the development of Reflections to train peer leaders, and which will be expanded at the Academy in an attempt to train supervision skills, was borrowed from the facilitator training method used in a micro-teaching workshop run by the Associated Colleges of the South. Thus, we suspect that increasing our partnerships with new communities will help create new models for training providers of ESIs. In addition, such partnerships may make it easier to create training forums because partners may have additional resources. For instance, Tri Delta has all of the necessary knowledge, staff, and resources needed to manage the

logistical components of the Body Image Academy, which represents a major contribution. They are also highly skilled at running leadership and educational programs and workshops in a very affordable manner so that we can reach a larger population.

#### *1.4.1.2.3 Materials development*

During the course of our work with DBIs, it has become clear that one manual does not fit everyone, and we have learned that training manuals need to be tailored to different sub-groups. It may be beneficial to work with publishers to help communities gain access to custom materials and to be more creative in thinking about ways to share our interventions so that communities can customize them to their needs. While advanced clinicians may be able to contextualize ESIs on their own, it may be unrealistic to expect all providers to have this skill. We have found that the ability to contextualize our manuals to our providers has played an important role in distribution efforts.

#### *1.4.1.3 Tapping into existing networks*

An added benefit of partnering with large social systems is that there is an existing framework and infrastructure through which you can distribute ESIs. Creating a long-term sustainable plan, however, requires more than identifying a network; it also may require CPR. For instance, we readily admit that the effectiveness trials run by Stice and associates, which rely on traditional grant support, are not strongly anchored in CPR. As we note below, traditional funding mechanisms and CPR are somewhat incompatible. Further, we have observed that despite efforts to collaborate with school staff during effectiveness trials, it is typically difficult for school staff to continue to offer the program after study completion because of limited time and funding. It is possible that a program built using CPR methods could have more success in gaining outside, sustainable funding during the first wave of the program. For example, discussions between Becker and Tri Delta regarding long-term sustainability issues have been at the forefront of planning the Reflections program since the first pilot study.

#### *1.4.2 Challenges in using CPR*

#### *1.4.2.1 Time Consuming*

If there is one overwhelming downside to use of CPR, it is its time consuming nature. CPR is a slow process and it can literally take years to develop the necessary relationships for a successful project. Even when CPR moves faster, it still requires a substantial time commitment from all partners, and for partners to learn each other's values, language, and to create trust. For example, in the development of the Female Athlete Body Project, the pilot DBI for female athletes, Becker and the department of athletics spent over five years developing a CPR partnership, addressing other ED related concerns of athletics (e.g., creating structured plans for athletes who were identified as having an ED), co-designing a prevention study, and applying for funding. Thus, using CPR to improve distribution of ESIs will likely be a slow and time consuming process, but in our experience one well worth the wait.

#### *1.4.2.2 CPR Does Not Always Fit with Academic Funding Mechanisms*

Although there are CPR grants available (e.g., from the Centers for Disease Control and Prevention; see Israel et al., 2005 for discussion), CPR methods do not fit with traditional funding mechanisms in which the researcher develops a research plan, obtains funding and then initiates the research projects and begins to recruit participants from various communities. Even if community support is elicited before the project begins, typically the research is largely defined by the researcher and the goal is to have the grant cover the cost of the project. One then has to pay lip service to the idea that community members have a say, when in fact they can do little to change the research program once funded.

Moreover, CPR projects often unfold at a pace that does not lend itself to competing for research grants, which often take years to secure in the present system. Thus, even if one tries to involve community members, they are often no longer in the same position (e.g., principals at schools change) once a grant proposal is funded. This problem also can work in the reverse direction. Having built momentum in a community to distribute an intervention, it can be risky to tell that community to wait until grant support is obtained. Thus, CPR may mean running some

distribution efforts on a shoestring budget and relying on volunteer efforts until sufficient resources can be obtained.

In addition, limited research support is available for distributing ESIs; most grants are intended to support basic research or randomized trials used to examine the efficacy and effectiveness of interventions. Finally, grant reviewers may not appreciate CPR. For instance, reviewers of the grant that ultimately supported the pilot athlete program appeared somewhat puzzled by the level of expected support by members of the athletic community. In sum, CPR projects may be difficult to fund, may require large amounts of uncompensated effort from many participants, and may require fundraising from non-traditional sources.

#### *1.4.2.3 Other potential challenges*

As noted earlier, many community partners understand little about the intricacies of academic life, and still others may place little value in data collection. Thus, one challenge with CPR is balancing the needs of the community and conducting quality research. In our opinion, Reflections easily could have hit a dead-end if we had abandoned data collection or placed less emphasis on training and accountability. Part of CPR includes teaching community partners about the importance of data collection while respecting what they have to teach us.

CPR projects may also be difficult to get past peer review, relative to traditional funded projects because compromises generally have to be made in the research design (e.g., giving up waitlist control at the request of sororities). Further, participatory research is not considered mainstream in most fields. Participatory methods also may not be considered “research methods” by reviewers and editors, and discussion about participatory strategies typically will be excluded from research reports. This has the unfortunate effect of hiding the degree to which these procedures are being used by researchers who forge successful partnerships and manage to overcome the research practice gap. We, thus, encourage researchers, reviewers and editors to recognize the importance of including CPR methods in research reports.

CPR projects also will generally require ongoing open discussion about balancing collaboration with giving appropriate credit to contributors to sustain their efforts. For example, Becker and Tri Delta have regular conversations about how to insure that Tri Delta is recognized by the broader student affairs community and potentially the media to reinforce their efforts. Although we have been able work through these concerns, we have repeatedly noted instances in which it would have been remarkably easy to allow competition to destroy our working alliance.

In our experience, CPR efforts also require committed leaders. Although we highlighted earlier the important role that hundreds of people have played in the distribution of DBIs, we also have to acknowledge that several people form the core leadership team that keeps this program organized, focused and moving forward. Moreover, leaders of CPR projects need to recognize the intensive commitment needed to sustain this type of project.

Finally, it is important to acknowledge that many of the factors that contributed to the success of this project were due to serendipity and a willingness to “run with the ball” when it was in hand. Although we believe that everything discussed here has been important to our success, there were many points along the road when we were simply assisted by good fortune.

### 1.5 Conclusion

Given research showing that use of ESIs remains limited in clinical practice, it is clear that new methods are needed to facilitate the distribution of evidence-based psychological methods. Based on our experience in distributing DBIs for the prevention of EDs, we argue that a critical missing piece of the dissemination puzzle has been CPR. Although CPR differs from traditional efficacy and effectiveness research in many of its basic underpinnings, we believe that it has much to offer in helping researchers improve distribution of ESIs. CPR is associated with many benefits and also many challenges, not the least of which is its time consuming nature. Our experience indicates, however, that these challenges can be overcome and are far outweighed by the benefits of conducting CPR. By collaborating, researchers can successfully partner with

communities in a way that benefits everyone. This avoids creating divisions between researchers and practitioners, and ultimately creates constructive bonds between researchers, practitioners, and communities who share the goal of preventing and treating psychopathology.

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Footnotes

1. Sororities are social organizations for female students, typically at the undergraduate level. They are largely a North American institution, and also have stated values of service, leadership, scholarship, and sisterhood. Often identified by a series of Greek letters, they may be referred to as “Greek” organizations and on campuses typically are overseen by a Greek judicial system. Local sororities exist only at a single university, whereas national sororities have chapters at multiple universities and are overseen by an executive office or headquarters.

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