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ARTICLES

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This article presents a model of a practice-research network that offers benefits for clinicians working at college and university counseling centers. We briefly describe the basic components of this practice-research network, challenges in developing it, and some of the empirical studies that have resulted from this initiative. We also describe possibilities for future research that not only will foster further collaborations between clinicians and researchers, but also will enhance our ability to understand and improve mental health services for college students.

KEYWORDS practice-research network, university counseling centers

The majority of clinicians work in a stressful world. Not only are they accomplishing difficult tasks (i.e., assessing and treating individuals who experience high levels of distress and impairment), but they do so within demanding schedules and while juggling a wide variety of responsibilities (e.g., case management, paperwork, meetings, incessant e-mail, and phone calls) that frequently require substantially more than an 8-hour day. In addition to coping with these intense and challenging work demands, many clinicians are now facing increased pressure to demonstrate their knowledge of, and ability to implement, "evidence-based practices" (EBPs). Although professional organizations, such as the American Psychological Association,

have advocated for the recognition of clinical experience as one of the bases for EBP, experimental research continues to be viewed as the best source of knowledge to inform this philosophy of practice. Despite this, it is clear that a majority of clinicians are not substantially altering their clinical practice in response to empirical findings published in research journals, nor are most practitioners involved during their day-to-day work in research that is guided by and able to influence their own clinical practice. Hence, research is frequently viewed as an irrelevant or intrusive source of pressure on top of already difficult work conditions—a state that simply widens the gap between researchers and practitioners.

One could argue that this perception of research as intrusive or irrelevant is in large part due to the fact that empirical studies have typically emerged from conceptually driven research programs of university faculty members who, even when they respect clinical work, spend few hours (if any) working with clients. As such, many of the studies published in peer-reviewed journals fail to directly address questions and concerns with which clinicians are repeatedly confronted. To be sure, many of the studies conceived of and designed by academicians do involve clinicians. However, in many of these investigations the role of practitioners is often limited to answering surveys, collecting questionnaires from clients, or administrating treatment protocols. In the majority of such studies, both the questionnaires and protocols have been selected by the researchers to fit the specific variables of their interest. This unfortunate reality reflects what has been described elsewhere (see Castonguay in Lampropoulos et al., 2002) as "empirical imperialism," where the research findings of a few individuals, who see very few if any clients, are aimed at guiding the work of much more clinically experienced practitioners. In other words, researchers are determining what should be studied and how it should be studied, and the results (derived primarily from highly controlled clinical interactions) are frequently held as the ultimate source of knowledge driving our understanding of psychotherapy. Meanwhile, full-time, experienced, effective clinicians are too busy managing complex clients, coordinating care, and getting paperwork done to plan and conduct research that will influence the future of their field.

It has been argued that an optimal way for clinicians to be, or become, interested in research findings is for them to conduct, or actively participate in, research (Castonguay, Boswell, et al., 2010; Elliott & Morrow-Bradley, 1994). Needless to say, however, there are a wide variety of obstacles that stand in the way of clinicians doing so. Most clinicians do not have the time, resources (e.g., funds, space, and equipment), or help (e.g., graduate and undergraduate assistants) to generate and manage research projects. In addition, the breadth and depth of expertise (e.g., statistical analyses, research methods, empirical literature, and regulations for the protection of human subjects) that is required of psychotherapy studies make it difficult for full-time practitioners to conduct research independently.

The 1949 Boulder Conference attendees concluded that optimal training of psychologists should be based on a 50/50 split of science and practice. What the conference attendees were unable to foresee 60 years ago, however, is that external pressures would force a rift to develop within the field—a rift that distances the very ingredients required for ideal training. Today, academic researchers conduct research efficiently, publish papers as quickly as possible, and acquire grant funds—just to keep their jobs. Clinicians, on the other hand, have learned to cope with managed care panels, decreasing hourly fees, treatment limitations, and increasing amounts of unbillable time spent completing paperwork and coordinating care. They must work harder and longer to make the same living. In essence, modern demands on the field of psychology have forced its participants to become highly focused niche players without time or energy to be concerned with the activities of the rest of the team. There is a split between academic psychotherapy researchers focused on their next study or publication and clinicians coping with economic pressures, client crises, and paperwork.

One way of facilitating a meaningful and fulfilling engagement of clinicians in research and, in doing so, fostering the actualization of the scientific-practitioner model is the creation of "practice research networks" (PRNs). PRNs are based on the assumption that the optimal way to conduct scientifically rigorous and clinically relevant research is to build a fully collaborative relationship between practitioners and researchers, which provides the former the opportunity to be involved in all aspects of research, including the selection of questions to be investigated, the design and implementation of the study protocols, the collection and analyses of the data, and the dissemination of the findings (Castonguay, Boswell, et al., 2010; Castonguay, Nelson, et al., 2010).

To be successful, PRN infrastructures have to address the obstacles of time, resources, and expertise mentioned above. For instance, clinicians' engagement will be facilitated if studies are not overly burdensome in time and effort (i.e., if they add minimally to, or fit seamlessly with, clinical routine; Castonguay, Nelson, et al., 2010). Optimally, PRN studies should be conducted in environments where clinicians actually work as opposed to a site removed from their day-to-day practice, but also in a context where affiliations with researchers can be easily established and maintained. In addition to these pragmatic issues, PRN infrastructures are most likely to take off, survive, and grow if the studies they foster are relevant to therapists of different orientations; if clinicians can have a voice in supporting, guiding, creating and/or developing research programs; and if practitioners feel a sense of ownership of the data collected and the questions investigated (Castonguay, Nelson, et al., 2010). We also believe that clinicians will be more motivated to collect data and conduct studies if they have assurance that the research is supported by their administrators and that results can be used to improve services. In other words, research is likely to be meaningful to clinicians if

it has both intrinsic implications for their work and advocacy value—if it informs their practice or supervision, provides evidence of their worth, and points out what needs to be done to improve services.

The goal of this paper is to present a model of a PRN infrastructure that offers the benefits discussed above for clinicians working at college and university counseling centers. We briefly describe the basic components of this infrastructure, challenges in developing it, and some of the studies that have been done so far. We also describe possibilities for future research that will not only foster further collaborations between clinicians and researchers, but also enhance our ability to understand and improve mental health services. First, however, we discuss why research conducted by and for therapists may be crucial for the health and growth of counseling centers.

CONDUCTING RESEARCH IN COUNSELING CENTERS: CAN WE AFFORD NOT TO?

Because a majority of college students are what used to be commonly known as YAVIS (young, attractive, verbal, intelligent, and successful) clients, it is frequently assumed that mental health professionals in university counseling centers are treating "easy" cases, helping students to resolve "developmental" issues (e.g., getting over a relationship breakup, dealing with body image issues, or addressing unrealistic standards of academic performance). As an example, one of the authors vividly remembers an interview for a faculty position in a clinical psychology program during which he was questioned, several times, about how his internship at a counseling center might prepare him to supervise "complex" clinical cases, involving "real psychopathology." (Sixteen years later, he is still working at this clinical program and, as far as he knows, graduate students judge his clinical teaching and supervising to be satisfactory.)

Although there may have been a time when college counseling was primarily focused on developmental issues, it is important to remember that the field of college counseling was born from the demand for services following World War II, and that today's college and university students struggle with the full range of mental illness, from major depression to schizophrenia and personality disorders. As one example of the difficult issues faced by college mental health providers each day, it is estimated that 10% of college students seriously consider suicide each year, 1.5% attempt suicide, and 1100 students nationwide actually commit suicide, making suicide the second leading cause of death among college students (American College Health Association, 2008; Suicide Prevention Resource Center, 2004).

The increase in severe and frequent psychopathology in college students was illustrated by Benton, Robertson, Tseng, Newton, and Benton (2003), who examined the rates of client concerns, as reported by counselors

in college counseling centers over 13 years, and found that the number of students presenting with depression had doubled and the number of students reporting suicidal ideation had tripled over the same period. Supporting this perspective, 80% of counseling center directors believe that there has been an increase in the number of students with severe psychological problems on their campuses and 96% believe that the number of students with significant psychological concerns is a growing concern (Rando & Barr, 2010).

Increasing prevalence and severity of mental illness on college campuses, at least in counseling center directors' perceptions, seems to be a clear trend. What is much less clear is how the field will cope with this issue in the future: how it will proactively monitor trends, adjust services in advance of overwhelming demand, compare services and clients among counseling centers, and effectively train staff members. A wide variety of other questions can and need to be asked to help counseling centers effectively meet the need for their services. For example, are counseling center services underutilized by culturally diverse students? Are therapists fully aware (or accurate in their understanding) of the psychological and social difficulties experienced by members of different ethnic or sexual minorities? Are therapists effective in reducing the clinical problems of their clients? How should services be allocated? Do some clients really need more sessions while others would benefit from a long-term referral? How and where should therapists get training on the populations they serve? How else can treatment be improved?

These questions are of utmost interest to counseling center clinicians, not only because they address directly what they are doing but also because they focus on ways that can help them do a better job. Answering these questions with valid instruments and rigorous research strategies is likely to demonstrate the positive impact of their work, justify their demands for more resources, and provide evidence-based recommendations for counseling centers to improve the reach and quality of their services. In the current context of accountability and restricted budgets, research can become a strong ally of clinicians in their efforts to make their work more effective and meaningful. Unfortunately, because much of the currently published statistics on college student menial health are retrospective, anecdotal, based on surveys with low response rates, and difficult to generalize, they cannot be used to accurately describe the nature of students in treatment, inform the training of practitioners, direct resource allocation efforts, educate public policy efforts, or evaluate the effectiveness of various treatments. Something substantively different is needed.

The Center for Collegiate Mental Health (CCMH) was created to resolve these problems. CCMH represents a collaborative, long-term, multidisciplinary effort blending the expertise of mental health treatment providers, psychological researchers, university administrators, information science and technology leaders, and industry partners to pursue the related goals of

accurately describing college student mental health at a national level, conducting large-scale psychotherapy research, and improving the range of clinical tools available to practitioners in the higher-education setting. As a PRN, its ultimate goal is to create mutually beneficial and interdependent relationships between a large number of collaborators, all of whom are invested in data collection and research that will enhance the mental health services provided to college students.

CCMH: BUILDING A COMMUNITY OF RESEARCH AND PRACTICE

CCMH grew from the ground up as a grassroots organization built on passion for a vision. This meant many years of shoe-string operations without a budget and the slow and gradual recruitment of counseling centers, researchers, and funding support. CCMH was formally established in 2005 after a year of dialogue among interested colleagues led to conceptual and financial support from the Association of University and College Counseling Center Directors (AUCCCD) to support the creation of a multidisciplinary research center at Penn State University tasked with coordinating interested counseling centers on behalf of the field. Importantly, administrators at Penn State University in both the counseling center and Division of Student Affairs endorsed the project's goals and permitted the staff member who initiated CCMH to have dedicated time to develop the project. With local and national support in hand, CCMH was able to begin work in earnest.

What to Measure and How to Measure It?

As a practice research network, it was crucial for CCMH to create a sense of community and shared ownership that spanned the field. Considering our goals of accurately describing and ultimately improving the services provided at counseling centers, it was particularly important to develop a true sense of collaboration when deciding what should be measured and how to do so. To achieve this, CCMH gathered and synthesized intake materials from more than 50 counseling centers and created a proposed Standardized Data Set (SDS), which provided the basis for an inaugural working conference in 2006, attended by more than 55 counseling centers. Two days of intensive small- and large-group work produced enough progress and momentum to establish in the summer of 2007 a 12-member Advisory Board composed of staff from member centers and permission from the membership to finalize the SDS. The SDS measures client and counselor demographics, institutional characteristics, and client mental health history. Although the creation of the SDS was challenging and painstaking, CCMH founders believed that it was also imperative to achieve consensus around a psychometrically sound,

multidimensional assessment instrument to both enhance clinical services and open up research possibilities

Among the intake materials from 50 counseling centers that were reviewed to create the SDS, there were over 35 assessment instruments in current use. After reviewing all these instruments, the executive director of CCMH (Benjamin D. Locke) identified a handful of instruments for consideration by member counseling centers. Each instrument was reviewed and discussed in the 2006 conference and the CCMH Advisory Board reviewed feedback from over 100 centers. After extensive discussion and debate, the Advisory Board selected the Counseling Center Assessment of Psychological Symptoms (CCAPS; Locke et al., 2010) because it was (a) multidimensional, (b) psychometrically sound, (c) created by counseling center staff specifically for college students, and (d) open for future refinement. Ultimately, the CCAPS was donated to CCMH for continued development on behalf of the field. In brief, the CCAPS contains 62 items that measure eight concerns common to college students: depression, anxiety, academic distress, eating concerns, social anxiety, family concerns, alcohol use, and hostility. Factor analytic, reliability, and construct validation studies suggest that the CCAPS accurately and consistently measures these eight constructs. (For a full discussion of the CCAPS' development and psychometric properties, please see Locke et al., 2010). Furthermore, to facilitate assessment of treatment progress and outcome, a 34-item version of the CCAPS has been developed using item-response theory, input from counseling center staff about critical items, factor analysis, and correlations with subscales from the CCAPS-62. Preliminary evidence from a nonclinical sample of college students indicates that the CCAPS-34 subscales are internally consistent, stable across time, and correlate highly with established measures of similar constructs. Work remains to validate the CCAPS-34 with a clinical population and to demonstrate its sensitivity to change over time.

How to Collect and Share What We Want to Know?

The Achilles' heel of conducting research in a clinical setting is the burden imposed by data collection tasks, which often force a research effort to be short-lived and, more often than not, resented by practitioners and administrators who view it as interfering with clinical service. CCMH sought to avoid this problem by choosing to standardize the data gathered during routine clinical practice. Once each counseling center makes the initial changes to their forms to become consistent with standards, research-related data collection becomes a part of "business as usual."

It's worth noting that data standardization is not a new concept and has been tried before in the counseling center field. The most notable attempt was the "Common Intake Form" developed by a group of counseling centers in the mid-1990s. The problem with prior efforts is that independently

managed data standards erode rapidly over time as a result of staff turnover, loss of focus on standardization, and the gradual accumulation of major and minor changes to paperwork over time. To secure data standards while also planning for the eventual pooling of data from participating counseling centers, CCMH partnered with Titanium Schedule, the leading provider of software to counseling centers, to build the SDS and CCAPS directly into their software and hence allow existing and future customers to have instant access to both. The integration of data standards into the software used for day-to-day business provided assurance that SDS's and CCAPS's questions and answers cannot be changed or edited, which is key to the aggregation and sharing of data. However, participating counseling centers made it clear that flexibility was needed as well as standardization, so the implementation in Titanium allows for the addition of center-specific items and for standardized items to be turned on or off and/or rearranged. This balanced approach allows for both standardization and flexibility. As a result, each participating center gathers high quality, standardized data as part of routine clinical service without any additional research burden and without restriction in terms of additional variables that can be measured. Not only can this data infrastructure be refined and added to, it can also support future large-scale, time-limited, research initiatives with relatively minor additional effort. The SDS and CCAPS were made available via Titanium Schedule in January of 2008, and participating CCMH counseling centers gradually converted to using the standardized materials by September of 2008.

Testing the System and Exploring Clinically Relevant Questions

In order to assess data standardization efforts and explore the usefulness of CCAPS and SDS data, a pilot test of the CCMH infrastructure was conducted in January, 2009. Anonymous, standardized data from the prior semester were pooled for more than 28,000 students from 66 universities. The majority of students (65%) were women, with 44 individuals identifying as transgender. International students comprised 4% of the sample and represented 169 countries. Among domestic students, 8% were African American, 6% were Asian American, 70% were European American, 6% were Latino, 3% were multiethnic, 5% were of some other ethnicity, and 2% did not report their ethnicity. Approximately 18% of the students were in their first year of college, 19% were sophomores, 22% were juniors, 23% were seniors, and 15% were graduate students; class standing was not reported by or applicable to 3% of students. Heterosexuals comprised 89% of the sample, 2% were gay men, 1% were lesbian, 3% were bisexual, 1% reported questioning their sexual orientation, and 3% opted not to self-identify. The sample was predominantly Christian (53%), with 13% of students expressing no religious preference, 10% identifying as agnostic, 5% as atheist, 3% as Jewish, 1% as Muslim, 1% as Hindu, 1% as Buddhist, and 11% preferring not to identify

their religion or identifying some other religion. This pilot test effectively produced the largest dataset on college students in treatment, and it did so with just four months of data collection. Though substantial, this accomplishment represents only one quarter of the current theoretical capacity of CCMH's collaborative research network, because one half of schools participated for one half the academic year. Thus, the pilot study underscores the potential of this research model to quickly and accurately gather vast amounts of data related to college student mental health and its treatment.

A key characteristic of the 2009 pilot study that differentiates it from other survey research in the field is that the dataset represents the *population* of students seen at 66 counseling centers, whereas survey research is typically based on a small random sample of the population, with a large majority (70–80%) not responding. Although survey results with high non-response rates are important and of interest, findings must be interpreted cautiously, because it is impossible to know if nonresponding students are systematically different from those who responded (e.g., experiencing less distress and therefore unmotivated to respond). Our pilot study findings, and future data collection efforts, are based on near-population level statistics and are, therefore, more robust and generalizable once setting specific effects are explored. Further, analyses conducted on the pilot data show that institutional characteristics accounted for less than 5.3% of the variance across the CCAPS subscales (McAleavey, Locke, Hayes, Castonguay, & Boswell, 2009). Thus, although there is some variation in the average level of client distress across counseling centers, it is also true that counseling centers are serving clients with broadly similar levels of distress. Consequently, findings should be meaningful for all counseling centers. The generalizability and applicability of CCMH findings will only strengthen over time as the number and variety of participating counseling centers increases.

This pilot study allowed the exploration of a number of questions related to the well-being and psychological functioning of individuals seeking help from counseling centers. One question is whether students who represent a double minority status (both racial/ethnic and sexual-orientation minorities) experience more intense or specific types of clinical problems compared to students who are members of only one minority group (Hayes, Chun-Kennedy, Edens, & Locke, in press). The results showed that members of each minority group reported generally higher levels of clinical problems than their respective majority counterpart. Specifically, individuals from racial/ethic minority groups experienced more depression, academic distress, hostility, and family distress than Whites, and lesbian/gay/bisexual/queer (LGBQ) students experienced greater anxiety, depression, eating concerns, hostility, social anxiety, and family distress when compared to heterosexual students. Yet in contrast to what might be expected based on minority stress theory (Meyer, 2003), LGBQ students of Color generally did not evidence additive distress for having double

minority-group status. The only exception was that LGBQ students of Color experienced more distress than heterosexual students of Color in the area of alcohol use. All other differences between LGBQ students of Color and either heterosexual students of Color or White LGBQ students could be accounted for by main effects for race or sexual orientation.

In another study, we investigated whether eating disorder and body image problems, both predominant foci of psychological services provided at college counseling centers, should really be viewed as "White heterosexual women's diseases—as they commonly are" (Nelson, Locke, & Castonguay, in press). The analyses indicated that no ethnic or sexual-orientation status is immune to these problems. In fact, many individuals not fitting the stereotypical clients with eating disorders (i.e., minority women, bisexual and questioning women, and gay men) showed similar and at times higher scores on the CCAPS eating-concerns scale than White heterosexual women.

In a third study (McAleavey, Castonguay, & Locke, in press) we found that different groups of sexual minorities experience different types of psychological distress or difficulties. For example, bisexual clients reported more general anxiety and hostility than heterosexual clients. In contrast, students questioning their sexual orientation demonstrated higher levels of depression, eating concerns, and social anxiety compared to heterosexual clients. Interestingly, both bisexual and questioning clients evidenced higher levels of family distress than heterosexual clients.

Focusing on a group of individuals that rarely receives attention from researchers, a fourth study demonstrated that many transgender college students are experiencing very serious clinical difficulties (Effrig, Bieschke, & Locke, in press). Although they represent less than 1% of a college student sample, 43% of transgender college students had engaged in self-injurious behavior; 26% had attempted suicide; and 53% have been victims of harassing, controlling, or abusive behavior from others.

Taken together, these four preliminary studies suggest a number of clinical implications that counselors might want to keep in mind when working in higher-education clinical settings. For instance, it is important to remind ourselves to be vigilant about not stereotyping and generalizing. Some (if not most) clinical problems, such as eating disorders, may vary by demographic criteria much less than we may have learned to expect. Furthermore, although groups of individuals who share a general status (e.g., sexual minority) may experience common types of distress, each student comes to therapy with particular problems. Confirming clinical wisdom, our preliminary analyses also demonstrate that even if a population has a low "base rate" in terms of prevalence, this does not mean that it should be ignored during graduate or postgraduate training. As poignantly indicated by one of our studies, transgender students who consult counseling centers appear to be suffering at high rates from especially serious psychological

problems (e.g., self-mutilation) that mental health professionals have to be prepared to address. Also, very much in line with the thinking of most clinicians, our data clearly suggest that counselors would do well to pay attention to nondiagnostic issues when developing case formulations and treatment plans. For example, students of diverse sexual orientations reported high level of family distress, perhaps reflecting the painful impact of rejection from parents and siblings or the stress of anticipating the coming-out process. Being a member of a minority group also means that a client may be at risk of having been a victim of aggression, as dramatically shown by the high level of harassment, control, and abuse experienced by transgender students in our sample. An obvious clinical implication is that when working with clients from a minority status, clinicians, irrespective of their theoretical orientations, should ask about, and be prepared to deal with, clients' history of rejection and victimization. This is particularly important considering the link that has been found, in sexual minorities, between early abuse and current mental health problems, such as depression and suicidality (see Goldfried, 2001). Our pilot data also revealed that members of sexual minority groups had higher scores than heterosexual students on the CCAPS subscale of Hostility, which reflects anger, frustration, and resentment. This, needless to say, may well be a result of having been rejected, harassed and/or assaulted by others. Therefore, clinicians need to be attuned to the importance of helping clients be aware of their anger, as well as developing, if need be, ways to appropriately and safely deal with such emotions.

There is no doubt in our minds that the most important clinical implications of these results pertain to the usefulness of a valid and reliable measure to assess clients' difficulties. Accurate assessment can confirm counselors' observations or intuition, challenge our biases, remediate our blind spots, and allow us to obtain and process information that we might not otherwise have. Research has shown that people are more honest about revealing shameful aspects of themselves on a self-report instrument than in a face-to-face initial interview (Kraus & Castonguay, 2010). Counselors also recognize that systematically assessing the eight clinically important dimensions of symptoms captured by the subscales of the CCAPS, while paying attention to what is going on in the room, is cognitively challenging, to say the least. On that basis alone, using an empirically sound instrument like the CCAPS is not only a way to integrate evidence-based practice into one's work but is also an efficient strategy to get a comprehensive understanding of the client and his or her treatment needs.

When therapists use an instrument such as the CCAPS within the context of a PRN infrastructure like CCMH, they are bridging scientific gaps without necessarily being aware of it. That is, therapists are simultaneously participating in rigorous research while engaging in clinical practice. As noted elsewhere,

> We believe that clinicians truly integrate science and practice every time
> they perform a task in their clinical practices and are not able to provide
> an unambiguous answer to questions such as: "Right now, am I gathering
> clinical information or am I collecting data?" (Castonguay, Nelson, et al.,
> 2010, p. 352).

It should also be noted that the four studies described above were conducted
and/or presented at professional conferences by graduate students, thereby
demonstrating that a PRN infrastructure can synergistically and seamlessly
integrate three domains generally viewed as irreconcilable: clinical work,
research, and training (Castonguay, in press).

Future Research Directions

The 2009 CCMH pilot study offers an exciting peek over the horizon—
an opportunity to consider what the field might discover if clinicians,
researchers, administrators, and students collaborate in building, developing,
and using a large-scale PRN infrastructure to examine psychotherapy and
mental health in a naturalistic setting. One of the most important and exciting
questions that needs to be investigated for scientific, clinical, and advocacy
purposes is the effectiveness of psychotherapy conducted in counseling cen-
ters. Preliminary evidence of the positive impact of therapy in counseling
centers can be found in the pilot data, which included multiple administra-
tions of the CCAPS for more than 1500 students. Once again conducted by a
graduate student (Boswell, 2009), analyses of these pre–post outcome data
indicated that, with an average of approximately 6 weeks between CCAPS
administrations, student clients exhibited a statistically significant decrease
in depressive symptoms, with a moderate effect size ($d = .41$). Additionally,
students who initially presented with a higher level of self-reported depres-
sive symptoms relative to the rest of the sample exhibited an even more
pronounced improvement in depressive symptoms, with a large effect size
($d = .87$). Because CCMH has the potential to examine treatment outcome
data on hundreds of thousands of clients per year, a more definitive eval-
uation of psychotherapy in counseling centers, as well as explorations of
its predictors and determinants, can be pursued. For example, future stud-
ies are planned to investigate whether mental health professionals in higher
education settings are more effective at treating some aspects of clients' dis-
tress and functioning than others, whether their effectiveness is on par with
those of clinicians in randomized clinical trials or other naturalistic settings,
whether some client and therapist variables predict better outcome, and
whether some process factors mediate clients' improvement.

Because CCMH has the unique opportunity to assess the mental health
needs of groups who are chronically underserved, such as racial and sex-
ual minorities, international, first-generation, and returning military students,

future studies are also planned to examine obstacles to the utilization of services for these specific groups as well as the effectiveness of these services when they are used.

Based on the research expertise of CCMH team members, we also plan to conduct qualitative, descriptive, correlational, and experimental studies aimed at better understanding crucial issues in therapy that facilitate or interfere with the process of change, such as the resolution of alliance rupture (Castonguay et al., 2004) or the management of countertransference (Gelso & Hayes, 2007). We are equally excited to facilitate research studies designed and implemented by and for clinicians who are providing services, on a day-to-day basis, at counseling centers that are part of the CCMH PRN.

Keeping the Bridge Mutually Beneficial and Interdependent

A key challenge in creating and sustaining collaboration in provider-based research networks is ensuring that the network is designed not only for scientific purposes but to meet the needs of participating treatment providers (Borkovec, 2004). CCMH currently has over 150 registered counseling centers that have actively participated in its development via decision-making activities at national conferences, listserv dialogues, and an advisory board composed of counseling center representatives. In addition, CCMH strives to give back to participating centers in a variety of ways, including professional development; refined "data products" such as individualized reports (to compare institutional to national data); two free recently released CCAPS instruments (62 and 34 item versions) that utilize a normative clinical sample of 22,000 students; and relevant publications drawn directly from the daily business of practitioners. By meeting the needs of participating centers with refined products drawn from their raw data, the CCMH effort can be conceptualized as a data-driven economy that generates a mutually beneficial interdependence among practitioners and scientists.

CONCLUSION

By creating a large infrastructure of data collection, CCMH provides an optimal forum to examine crucial questions related to mental health services in counseling centers. CCMH also gives back to the clinicians who make the research possible by providing information and tools relevant to their day-to-day practice. More importantly, CCMH is providing a unique opportunity for clinicians, researchers, and administrators to work together for the purpose of generating, designing, conducting, and disseminating research that addresses issues relevant to their core practice. CCMH can empower clinicians to be directly involved in research that will drive the future of their field, while also making it possible for researchers to engage in studies that

are both scientifically sound and capable of informing clinical practice. The activities of a PRN such as CCMH can make evidence-based research and practice both meaningful and gratifying for all participants. Perhaps most important, PRN activities offer a way to repair the science-practice rupture in psychology by once again allowing both groups to work, learn, and grow together.

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