Depression and Rural School Mental Health: Best Practices

11

Carissa M. Orlando, Abby Albright Bode, and Kurt D. Michael

Introduction to the Chapter and Depressive Symptomology

As most mental health practitioners can attest, depression is an impairing, ubiquitous disorder that affects individuals of all ages. With an onset in youth, practitioners working with children and adolescents must obtain the requisite knowledge of how to effectively treat depression among youth. However, in rural areas, provider shortages and barriers to mental health care can keep youth from receiving the treatment they need, requiring community members in rural areas to seek alternative solutions to meeting the mental health needs of depressed youth. The goal of this chapter is to illustrate the usefulness of utilizing schools as a platform for reaching children and adolescents at risk for depression and as a medium for implementing evidence-based practices for youth. The chapter begins with a brief description of depression and the barriers to receiving mental health care for rural youth. The bulk of the chapter is dedicated to describing the

C.M. Orlando (⊠) • A.A. Bode University of South Carolina, Columbia, SC, USA e-mail: corlando@email.sc.edu

K.D. Michael Department of Psychology, Appalachian State University, Boone, NC, USA evidence-based treatment of depression within a school mental health context, including screening, evidence-based treatments for depression, and treatment modifications/considerations that may be unique to rural areas. The chapter concludes with an exemplar rural school mental health program, as well as a vignette that illustrates the treatment of depression within a rural school mental health context.

Depression is one of the most prevalent mental health disorders. While approximately 7% of the general adult population experience major depressive disorder (American Psychiatric Association, 2013), the prevalence rate of depression is much higher among adolescents, with 11.4% of youth aged 12–17 experiencing a major depressive episode within the past year, 72.6% of whom reported severe impairment as a result (Hedden et al., 2014). Depression rates are equal in male and female children, but starting in adolescence females begin to exhibit rates of depression up to three times higher than males. Although symptoms of depression peak in young adulthood (ages 18 through early 20s), childhood onset of symptoms is associated with a chronic, persistent course of depression (American Psychiatric Association, 2013).

Sad or depressed mood is the most recognizable symptom of depression, but the experience of depression includes a variety of other symptoms, including anhedonia (diminished interest or enjoyment in most activities); marked changes

in appetite resulting in weight loss or gain; insomnia or hypersomnia; psychomotor agitation or retardation; loss of energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; and recurrent thoughts of death or suicidal ideation. Five or more symptoms must be present during the same 2-week period to be considered a major depressive episode, although symptoms can last anywhere from a few weeks to several years. Symptom presentation differs somewhat in youth: children and adolescents are more likely to experience irritability rather than a sad or depressed mood, fail to meet weight benchmarks expected for their age as a result of appetite changes, and may experience excessive sleeping and eating habits (American Psychiatric Association, 2013).

Diagnostic Prevalence and Mental Health Services in Rural Areas

While the rates of adolescent depression in rural regions are generally similar to those of non-rural regions (Jameson & Blank, 2010; Rost, Fortney, Fischer, & Smith, 2002), individuals living in rural areas may be exposed to higher rates of poverty (United States Department of Agriculture, 2015) and lower family education level, both of which are associated with an increase in psychological problems and risk factors for depression in youth (Costello, Keeler, & Angold, 2001; Dubow, Lovko, & Kausch, 1990). Further, individuals in rural areas may experience worse levels of mental health overall and are more likely to rate their mental health status as fair to poor (Hauenstein et al., 2007; Ziller, Anderson, & Coburn, 2010). Rates of suicide are also markedly higher in rural areas, most notably for males (Eberhardt & Pamuk, 2004; Singh & Siahpush, 2002), with suicide rates for rural youth found to be anywhere from nearly double (Fontanella et al., 2015) to 84% higher than suicide rates for youth in urban areas (Singh, Azuine, Siahpush, & Kogan, 2013).

Further complicating the experience of depression in rural regions compared to more urban areas is a shortage of appropriate mental health

services. Rural areas are over four times more likely than urban regions to have a shortage of mental health professionals (Merwin, Hinton, Dembling, & Stern, 2003), and approximately 60% of mental health provider shortages are within rural regions (Bureau of Health Workforce Health Resources and Services Administration, 2016), leaving rural residents to lean on primary care for mental health concerns. However, primary care physicians may not always meet the standards for adequate evidence-based treatment for mental health issues (Wang et al., 2005), with studies finding that rural general practitioners infrequently screen for or identify/diagnose depression, use validated screening measures, or refer patients to mental health services (Frank, Hiskamp, & Pincus, 2003; Jameson & Blank, 2010; Tudiver, Edwards, & Pfortmiller, 2010). In addition to overreliance on primary care, individuals in rural areas tend to rely more on pharmacological than psychotherapeutic treatment of depression (Fortney, Harman, Xu, & Dong, 2010). Unfortunately, the efficacy for treating youth with antidepressants remains unclear (Jureidini et al., 2004), and there are documented instances of increased suicidality in a small percentage of adolescents taking antidepressant medication (U.S. Food and Drug Administration, 2013). A solution to mental health provider shortages in rural areas is needed, specifically one that does not further rely on primary care or pharmacological treatment for depression.

Aside from provider shortages, individuals in rural areas may be reluctant to seek care due to perceived stigma associated with having and receiving care for a mental health condition (Elliott & Larson, 2004; Robinson et al., 2012). Although stigma is a pervasive barrier to mental health care, there is evidence that stigma is greater in rural areas (Hoyt, Conger, Valde, & Weihs, 1997), especially for males and individuals with lower levels of education (Jones, Cook, & Wang, 2011). Augmenting the impact of stigma is rural residents' perception of less anonymity when seeking care (Dubow et al., 1990; Elliott & Larson, 2004; Owens, Watabe, & Michael, 2011), yielding a sense of embarrassment and fear about seeing somebody they know

in the process of seeking care (Elliott & Larson, 2004; Hernan, Philpot, Edmonds, & Reddy, 2010). These personal barriers (e.g., perceived stigma, embarrassment) may be more influential to forgoing service utilization than logistical barriers, such as transportation difficulties (Hernan et al., 2010).

In summary, adolescents in rural areas experience rates of depression and other mental health issues that are equal to or may even exceed those in urban areas. Unlike adolescents in urban environments, rural adolescents have less access to adequate mental health care due to provider shortages and a plethora of additional barriers. Work is needed to ensure that this population receives the mental health care they need, and providers may need to think outside of the proverbial box in order to do so.

School-Based Treatment of Depression in Rural Areas

Because of the implications of reduced access to mental health services among youth in rural settings, one promising solution is to provide care for adolescent depression within the school system. Schools serve as an innovative environment for mental health treatment circumvents many common barriers to mental health, such as transportation difficulties. Additionally, schools provide several resources beyond the scope of general education for students (e.g., meal services, vocational planning, physical health screenings) and youth spend the majority of their time in schools, making schools a perfect network to integrate evidence-based strategies for improving mental health outcomes in rural youth. Although schools have served as mental and physical health providers for youth for years (Weist & Murray, 2007), there has not been systemized focus on evidence-based treatment and assessment of depression in schools, topics that could serve to bridge the treatment service gap for those in rural regions. Therefore, this section serves to discuss the potential that screening and treatment of depression in schools can serve in rural settings.

Identification of Students with Depression

Identifying students struggling with depression within the school system is difficult, as internalizing disorders such as depression and anxiety are less "visible" when compared to externalizing disorders. While some students are identified for treatment via parent referral or teacher concerns, many remain undetected. Students in need of mental health treatment for depression are therefore placed in a situation where they need to seek out treatment on their own, which may be difficult in rural environments due to many of the aforementioned barriers. Thus, schools should implement a process for school-wide screenings for students with internalizing disorders (Warner & Fox, 2012). For instance, record review—attendance, grades, disciplinary actions, and student demographics-was assessed in one study as a possible means of identifying students in need of intervention for depression in lieu of time-consuming individual screening, but was found to be less effective than individual screening, failing to identify anywhere between 50 and 75% of students at risk for depression. Thus, it is not recommended that record review be relied on as a sole means of identifying students with depression, and individual screening measures should be used instead of, or in addition to, record review. However, school record review may be helpful in targeting groups of students who may require further screening for depression (Kuo, Vander Stoep, Herting, Grupp, & McCauley, 2013).

Depression screening measures can be completed by students themselves, provided that the measure is age appropriate; research has shown that children as young as 8 years old are able to reliably report on their own internalizing symptoms (Michael & Merrell, 1998). Administration of screening measures can be conducted by teachers, school counselors, or nurses; however, the individual scoring and interpreting the measures should receive proper training in the measure, and it is preferred that this individual have some background in mental health. Only psychometrically sound screening measures should be used to identify students with depression. In addition to

psychometrics, school personnel should consider cost, time required for use, and extent of training required when selecting a measure to administer (for a review of psychometrically sound and feasible measures, see Carnevale, 2011).

Identification of students at risk for depression can also be made via awareness of symptoms that can serve as indicators or predictors of current or future depression. Seeley, Stice, and Rhode (2009) reported that aside from symptoms of depression themselves, poor school and family functioning, low levels of support from parents, symptoms of bulimia, and delinquency served as significant predictors of depression in 10th- and 11th-grade females. Kuo et al. (2013) noted that students eligible for a depression intervention had a higher number of absences, lower grade point averages, more disciplinary actions taken, and were more likely to be in a special education program. Similarly, a screening of rural adolescents revealed that depressive symptoms were significantly related to conflict with parents, peer difficulties (especially losing a close friend), trouble with the police, and a death in the family (Puskar, Tusaie-Mumford, Sereika, & Lamb, 1999).

Regardless of the means of student identification, it is helpful for schools to have a process in place whereby referrals can be made. A single staff member or small group of staff members—such as school counselors or nurses—can be designated as the "gatekeeper" for mental health referrals if they do not provide services themselves. This individual can meet with students identified as struggling with depression, more thoroughly assess the student's symptoms and any potential risk of harm to self, and present the student and his or her parents with options for treatment. This individual can also check in with the student periodically throughout treatment to ensure that the student's needs are being met and to maintain a good relationship.

Evidence-Based Interventions for Depression: Cognitive-Behavioral Therapy

Although adolescent depression can be treated with medication, studies suggest that adding an

evidence-based psychosocial therapy (i.e., cognitive-behavioral therapy [CBT]) to the treatment of depression increases the effect and safety of the medication, with a combination of psychosocial treatment and medication producing a high percentage of treatment response (the TADS Team, 2007). Although there are a number of psychosocial treatments for child and adolescent depression available to practitioners, cognitive-behavioral therapy has the most empirical support for reducing symptomatology in youth and is considered the front-line treatment for depression (for review, see Compton et al., 2004).

CBT aims to help children, adolescents, and adults overcome adverse symptoms by investigating and targeting change in their thoughts and behaviors. CBT for depression has been incorporated into school-based mental health in both group (e.g., Lewinsohn, Clarke, Hops, & Andrews, 1990) and individual (e.g., Shirk, Kaplinski, & Gudmundsen, 2009) formats, with both formats demonstrating significant decreases in depressive symptoms. In fact, Shirk et al. (2009) found that 64% of adolescents who received a 12-session treatment of CBT in a school setting no longer met the criteria for any depressive disorder. Although it is possible to tailor this treatment to the needs of the individual client and the rural environment, CBT generally consists of a series of core features. This chapter briefly reviews core and optional components of CBT; this information is based both on evidence-based treatment manuals of the cognitive-behavioral treatment of depression and the authors' own experiences incorporating CBT into a rural school-based treatment environment. Readers interested in learning more about CBT are encouraged to read one of many excellent treatment manuals, such as Beck's (2011) Cognitive Behavior Therapy: Basics and Beyond or Creed, Reisweber, and Beck's (2011) Cognitive Therapy for Adolescents in School Settings.

Core Components of Cognitive-Behavioral Therapy

Psychoeducation

Early in treatment, practitioners should give students developmentally appropriate information about depression and typical symptoms. Practitioners should be sure to list symptoms not automatically associated with depression, such as sleep and appetite disturbances, as well as symptom presentations that may be more apparent in youth, such as irritability and failure to gain weight. Students should be encouraged to share if or how they have experienced these symptoms. Practitioners should also orient students to the process of treatment via CBT and the roles/ expectations of both the student and practitioner. If family involvement in treatment is indicated, the expectations of the student and the family members should be reviewed at this time. Oftentimes, discussing a treatment contract that outlines treatment goals and expectations of the student, therapist, and family is completed.

Mood Monitoring

Mood monitoring should start early in treatment to give the practitioner a baseline for student mood. The student is given a chart or calendar and instructed to rate their mood on a numerical scale (e.g., 1–10). Younger students can use smiley faces to describe their mood, if needed. Some students may benefit from anchor points; here, the practitioner asks the student to recall a time during which their mood was a 1, a 10, etc. Students can either provide a single rating for their daily mood or note changes in their mood during different times of day; the latter is helpful for noting patterns in mood fluctuations tied to certain times of day. The student and practitioner should review the chart and discuss the student's mood for the past week, as well as any extreme fluctuations. Mood monitoring can be continued throughout treatment as a helpful way to chart changes in mood, especially when using new skills, such as pleasant activity scheduling. Technology can be utilized for monitoring; there are several free smartphone applications that allow individuals to track daily moods. Pacifica is an example of a free smartphone application that can be used for both depression and anxiety. This application can be used to track and monitor moods over time, provides options for relaxation activities, and allows users to complete thought records, identify thinking traps, and reframe maladaptive thoughts.

Additionally, mood monitoring information can be shared with a therapist if the student wishes. More information about useful smartphone applications that can be used with a variety of internalizing disorders can be found on the website for the Anxiety and Depression Association of America (ADAA; ADAA, 2016).

Behavioral Activation

Youth struggling with depression tend to have a restricted range of activities and lack motivation to engage in pleasant activities. However, a lack of pleasant activities correlates with a lack of positive reinforcement, which contributes to depression (Lejuez, Hopko, & Hopko, 2001). Practitioners can work with students to help them brainstorm and plan to engage in pleasant activities during their week, which increases the amount of pleasure and mastery the adolescent experiences on a daily basis. This is especially helpful for students who present with anhedonia (commonly described by youth as "boredom"), social withdrawal, and a limited number of activities in which they engage. In fact, for students presenting with mild-to-moderate symptoms of depression that manifests largely in restriction of activities and anhedonia (as opposed to a primary manifestation of negative cognitions), behavioral activation may serve as the sole treatment of depression, and has been shown to reduce symptoms as a stand-alone treatment for rural adolescents with depression (e.g., Wallis, Roeger, Milan, Walmsley, & Allison, 2012). Behavioral activation is also a well-liked component of treatment for youth—in interviews with adolescents receiving treatment for depression, 71% reported that behavioral activation was the most effective intervention strategy Eckshtain, & Weisz, 2015).

Pleasant activity scheduling should begin with an assessment of the student's baseline level of weekly activities. This can be accomplished by providing the student with a blank weekly calendar with specific times listed down the side of the page and asking him/her to fill in the activities in which he/she was engaged during each time. Technologically savvy students may enjoy completing this calendar on their phone. As the

practitioner and student review this together in the following session, the connection between mood and pleasant activity (or lack thereof) can be observed and reflected upon. The practitioner and student then brainstorm pleasant activities in which the student can engage. Activities chosen should (1) produce some level of positive emotion and/or (2) give the student a sense of mastery. It is also helpful to ensure that at least some of the activities chosen by the student do not require substantial financial resources or are not contingent on external circumstances. For example, a student might list going for a walk outside as a potential positive activity, but as this activity might not be safe or possible during nighttime or adverse weather, it is important that other activities are available for the student as well. Additionally, while many students find listening to music on a smartphone or MP3 player an effective pleasant activity, practitioners should keep in mind that these devices may be taken away by parents as punishment for misbehavior. After brainstorming positive activities, the practitioner and student decide on which activities the student would like to engage during the week and problem-solve around possible barriers to activity completion. A specific time is chosen during the day for the student to engage in the activity; practitioners can encourage students to set a reminder alarm if he/she is concerned about forgetting the activity. Students might benefit from creating a list of pleasant activities, and younger students may enjoy creating a decorative display, a "grab bag" of activities, or some other creative, tangible product.

On occasion, depressed adolescents have difficulty brainstorming pleasant activities, or may be pessimistic about the possibility of engaging in the activities. In these cases, it may be helpful for a practitioner to have a ready-made list of a large number of pleasant activities for the student to read over, although this should only be used after it is evident that the student is unable to generate activities him/herself. This might also be true of students in rural settings in which there are few available activities and resources, or students living far from more populated areas of the town. In these cases, the practitioner might

have to assess for resources around the home, or activities in which the student used to enjoy before feeling depressed. Out-of-the-box activities may also be helpful for use with rural populations. For example, one student suggested riding his four-wheeler on his family's property as a possible pleasant activity. Another student reported that she enjoys helping her family take care of their goats.

Automatic Thought/Belief Identification and Cognitive Restructuring

Automatic thoughts are the immediate, frequently unnoticed thoughts that intervene between an event or a situation and the individual's emotional response to the event. These thoughts can be inaccurate and may fall into one of several common cognitive distortions or thinking errors. For example, one specific cognitive distortion is "minimizing the positive," wherein a student will neglect the positive or neutral aspects of a situation and only focus on the negative aspects. Students struggling with depression may exhibit a number of cognitive distortions, as well as pattern of negative thinking about themselves, others, and the world around them. The practitioner can help the student begin to notice these as a good first step towards identifying and challenging these distorted thoughts and beliefs. Generally, this is accomplished by having the student complete a thought record. Thought records can contain many different categories, but generally the most important categories for the student to record are the situation, the emotion elicited, and the automatic thoughts. Subsequent behaviors can be included in thought records as well. Sometimes it is easy for students just starting in therapy to pay attention to times in which they felt a strong negative emotion (e.g., sad, angry) and write down the situation and automatic thoughts after identifying this emotion. For students who might need more concrete direction, the practitioner can specify what emotions to which the student might pay attention (e.g., the student can be asked to write down one situation in which the he/she felt sad or lonely).

When maladaptive thoughts are identified, the practitioner and student can work together to evaluate, challenge, and restructure these thoughts, with the goal of replacing maladaptive thoughts with rational and realistic thoughts. A common misconception students may have is that overly negative thoughts are to be replaced with positive thoughts; the practitioner can instruct the student that overly positive thoughts can also be unhelpful and unrealistic (providing examples), and explain to the student that the goal is to think more realistically. When evaluating a thought for accuracy, the practitioner can ask the student to gather evidence for or against the thought, describe worst/best-case and most realistic scenarios, generate alternative explanations, and/or consider what he/she would tell a friend in the same situation. After a thought is evaluated, the student is asked about their new perceptions of the realistic nature of the thought; if it is concluded that the thought is not realistic, the student is asked to generate a more accurate thought that will replace the maladaptive thought. With younger students, this process should be simplified into concrete examples, and visualizations of the process are helpful. Younger students may also benefit from having the process reframed as being a "thought detective" who seeks out clues to see if a thought is real or not. Using examples from crime-solvers or detectives from children's television programs—such as Scooby-Doo may be helpful here.

It should be noted that while students struggling with depression do exhibit a pattern of negative thinking, it is also possible that their mood can be impacted in a valid way by adverse circumstances in their life. For example, a student affected by familial poverty, job loss, or mental illness may have automatic thoughts related to these issues that are not maladaptive. This may be especially true of students living in rural areas with limited resources. If a practitioner suspects that the student's cognitive response to adverse circumstances is adaptive or valid, the practitioner can help the student utilize his or her coping skills to help with the situation.

Remembering to complete and return thought records and other written homework can be a challenge for students. Therapy in the context of the school setting can help with this problem, as the student and the practitioner are in the same location for longer periods of time than in a traditional treatment setting. If the practitioner has time, check-ins can be done the day before the scheduled session, during which homework reminders are given ("We'll be meeting tomorrow during lunch-don't forget to bring your thought record!"). Additionally, the student can be provided with a "therapy folder" to keep with his/her usual academic notebooks and folders. Technology can be utilized as well, with reminder alerts scheduled into smartphones or tablets, or homework completed entirely on technological devices (this can be particularly helpful for students who have difficulty keeping up with paper documents).

Optional Components of Cognitive-Behavioral Therapy

Relaxation Training

Relaxation training is helpful for working with adolescents struggling with anxiety or anger control/emotion regulation difficulties, but can be used with depressed adolescents as well. Deep breathing, mindfulness skills, guided imagery, and progressive muscle relaxation are examples of relaxation exercises that can be used. If feasible, instructions for these techniques can be recorded and a copy of the recording can be provided for the adolescent to use during at-home practice, or students can record in-session relaxation training on a phone or other device.

Sleep Hygiene

Hypersomina and insomnia are symptoms of depression, and youth experiencing depression are more likely to experience sleep disturbances than those without depression. There is also some evidence that sleep disturbances may predict future depression (for meta-analysis, see Lovato & Gradisar, 2014). Students may present with erratic sleeping patterns, such as frequent or lengthy napping, staying up excessively late, and no consistent bed- or wake times. Sleep

disruptions can negatively impact a student's ability to concentrate and perform in school, and are linked with negative behavior outcomes and emotionality (Blunden, Hoban, & Chervin, 2006). If a student is experiencing sleep disturbances that might be impacting his/her daily life or contributing to his/her symptoms of depression, a practitioner may consider helping the student improve his/her sleep hygiene. Sleep hygiene techniques include avoiding daytime napping, avoiding caffeine and other stimulants too close to bedtime, keeping regular sleep and wake times throughout the week, using the bed only for sleep and not for other activities (e.g., homework completion, watching television), and establishing a regular bedtime routine (National Sleep Foundation, 2016). Identification and problem solving of barriers to improving sleep hygiene may be needed to ensure success. Psychoeducation about the importance of sleep and its relationship with concentration and mood difficulties may also need to be provided, as some students may not be aware of the detriments of an erratic sleep cycle.

Problem Solving

Although not a specific component of traditional CBT, problem-solving skills can be helpful to teach when working with depressed students. Problem solving consists of five steps: (1) identifying the problem in specific terms; (2) brainstorming many different solutions; (3) evaluating the solutions generated during brainstorming, including short- and long-term consequences of each option; (4) choosing the best solution; (5) rewarding himself/herself. Anagrams or other mnemonics can be used to help students remember the steps. Students can practice problem solving both through vignettes presented by the practitioner and by applying these skills to problems in his/her own life that are brought up organically in session.

Interpersonal Skills

Although more traditionally included in interpersonal psychotherapy (discussed below), interpersonal skills can be included in a structured CBT treatment of depression (e.g., Lewinsohn et al., 1990). Interpersonal skills taught can include social skills, communication skills, and conflict resolution skills. This may be a helpful addition to CBT if the student reports or appears to exhibit difficulties with his/her interpersonal relationships.

Interpersonal Psychotherapy for Adolescent Depression

Although CBT has the largest amount of empirical support for the treatment of child and adolescent depression, it is not the only evidence-based treatment for depression. Interpersonal psychotherapy for adolescent depression (IPT-A)-an adaptation of traditional interpersonal psychotherapy—also has empirical support for reduction of depression symptoms and improvement of social functioning (Mufson, Weissman, Moreau, & Garfinkel, 1999). IPT-A has been implemented in school-based mental health clinics with similarly positive outcomes (Mufson et al., 2004) and can be administered in group as well as individual sessions (O'Shea, Spence, & Donovan, 2015; Young, Kranzler, Gallop, & Mufson, 2012).

IPT shares some components of CBT, such as the importance of early psychoeducation, regular mood monitoring, and assignment of homework for in-between session practice. However, IPT emphasizes the ways in which interpersonal processes and relationships impact an individual's mood, and treatment focuses around identified interpersonal problem areas (i.e., grief, role transitions, role disputes, and interpersonal deficits). Individuals participating in IPT learn and practice interpersonal skills and communication strategies to help improve their relationships with others. Social skills and parent-child conflict resolution are specifically stressed in the adolescent adaptation of IPT-A (Mufson & Sills, 2006). IPT-A may be a helpful therapeutic choice for adolescents experiencing depression due to interpersonal stressors, such as familial

separation or divorce, frequent parent-child conflicts, or difficulties with peers.

Modularized or Manualized Treatments?

Although these evidence-based treatments for depression are available in manuals for interested practitioners, it may not always be feasible for practitioners—especially school-based practitioners to implement a manualized treatment. Manualized treatments limit the flexibility with which a practitioner can individualize treatment to each student's unique needs. Additionally, rigidly adhering to a manual can hinder the development of a strong therapeutic alliance, an important component of working with youth (discussed later). An alternative to manualized treatment formats is modular treatments, which allow the practitioner to choose from a variety of empirically supported practice strategies in an effort to tailor treatment to each individual while maintaining adherence to evidence-based strategies. Chorpita and Daleiden (2009) make note of several evidence-based "common elements" supported for use with youth with mood disorders, including psychoeducation, activity scheduling, cognitive therapy, problem solving, communication/social skill training, and relapse prevention. After initial assessment with a student, a practitioner can choose the most relevant common elements for the student's symptom presentation. An example of a school-based modular treatment for depression and anxiety in middle and high school students is the Student Emotional and Educational Development (SEED) project. Conducted in both rural and urban schools, students received approximately 4-12 sessions of individual therapy, with modules based on the individual students' needs. Students participating in the SEED project experienced significant reductions in symptoms, with approximately two-thirds of students no longer reporting clinically significant symptoms of depression at posttreatment (Michael et al., 2016).

Necessary Treatment Components Regardless of Therapeutic Orientation

Certain aspects of therapy should be incorporated into any treatment of depression, regardless of the specific intervention chosen by the practitioner. One of the most important aspects of any treatment—especially when working with youth—is the development of a strong therapeutic alliance. A therapeutic alliance is considered one of the core competencies in which a practitioner should engage, regardless of therapeutic orientation (Sburlati, Schniering, Lyneham, & Rapee, 2011), and the alliance alone has demonstrated an association with improved treatment outcomes for children and adolescents treated for depression via CBT (Shirk, Gudmundsen, Kaplinski, & McMakin, 2008). Therapeutic alliance is particularly relevant for rural youth who may be distrustful of or who perceive stigma related to seeking help from a mental health professional. Initial sessions of any treatment should consist of the practitioner and student getting to know one another, with the goal of fostering a good relationship and trust. Practitioners can form a therapeutic alliance with younger students by engaging them in fun games and activities, and can form an alliance with older students by conversing about their hobbies, friends, and interests.

Practitioners should exhibit traits of genuineness and unconditional positive regard, and should position themselves as advocates for the student and his/her needs (as opposed to the needs of the parent or the school). This may be particularly difficult if the student has been referred for services by an outside source expecting a particular outcome, such as a school administrator hoping for a decrease in behavior referrals. In cases where the student did not independently seek out services, a practitioner may need to put in extra effort to build rapport and help the student see the benefits of this helping relationship. Practicing patience with keeping the

initial pace of therapy slow and not pushing students to talk are also necessary skills to building a strong alliance (Sburlati et al., 2011).

Practitioners working in rural environments should also take care to reduce stigma around treatment. Asking students about their perceptions of mental health services is a good way to identify any maladaptive thoughts about treatment (e.g., "only crazy people need therapy"). Concerns about undergoing psychotherapy can be alleviated by labeling it as "skill building" or framing the treatment as a type of class instead of therapy; this is easy to do for CBT, which involves learning and practicing a number of skills. Unless needed (e.g., for billing purposes), diagnostic labels should be avoided; however, a thorough assessment of the student's symptoms should still occur at the onset of treatment. Additionally, it is appropriate to name the student's collection of symptoms as "depression" or even encourage the student to come up with his/her own name for depressive symptoms this may help the student conceptualize depression as something external that can be combated through skills learned in treatment (an adaption of externalizing conversations, as described in White, 2007). In order to reduce stigma and increase confidentiality surrounding seeking out school mental health services, mental health staff should pay attention to the names of treatment programs and centers. For example, naming a treatment program "Depression Program" may lead to a disinclination for students to be associated with the program. However, nonspecific names with no references to mental health conditions are likely more palatable to students. An example of this is the previously described Student Emotional and Educational Development program, which uses the acronym SEED (Michael et al., 2016); here, a referral to mental health services can be called "participating in the SEED program," which contains no obvious reference to mental health treatment.

Consideration should also be given to the location of therapy sessions, as well as the room design, as these serve as protectors for student's confidentiality. Therapy rooms should be private

and inaccessible to outside parties when being used by practitioners; a room with large windows or a publically accessible room such as a teacher's lounge is not appropriate for therapy. The way in which a student is called from class to therapy sessions should also protect the student's confidentiality. Although not relevant for sessions held before or after school, or for students who are able to remember weekly session dates/ times and come independently, students who are called from class run the risk of confidentiality breaches. For example, a call for a student over a classroom phone or intercom specifying that the student is expected at the mental health center or a well-known practitioner coming to meet the student at his/her class may result in an unintentional disclosure that the student is receiving mental health services. Thus, students should be asked to report to generic or typical school locations (e.g., "the front office," "guidance") when teachers or other students are within earshot. Practitioners and students can jointly brainstorm other ways to protect the student's confidentiality, if other concerns arise.

Regardless of the intervention selected for the treatment of depression, regular monitoring for risk of harm to self should be included throughout treatment. Thoughts of death, suicidal ideation, and suicide attempts are strongly linked with depression (American Psychiatric Association, 2013), and suicide is the second leading cause of death for youth aged 10-24 (Centers for Disease Control and Prevention, 2014). This is of particular concern in rural areas, where the suicide rate for youth is more than double the suicide rate in urban areas (Fontanella et al., 2015; Singh et al., 2013). As suicide and other crisis events are covered in another chapter in this handbook, authors will not discuss this phenomenon beyond a simple recommendation that practitioners working with youth with depression should be well educated on risk and warning signs, thorough risk assessment, and crisis intervention/safety planning for suicidality.

Thinking Outside the Box: Considerations and Adaptations for School-Based Treatment for Depression in Rural Environments

Service Delivery Providers

An important consideration for the treatment of depression in the school setting is who will be available to administer the intervention. While trained mental health professionals (e.g., licensed psychologists, counselors, and social workers) are the ideal choice for administration, students in need of services may outnumber the availability of trained professionals, especially in rural environments where there may be a lack of qualified treatment providers (Merwin et al., 2003; Wang et al., 2005). Thus, in order to meet the mental health needs of students, interventions may be implemented by nontypical treatment providers.

Graduate Students

Schools within reasonable traveling distance of a university with a mental health graduate training program can consider partnering with the university to gain student assistance with service delivery. Graduate-level students receiving training in a mental health field can provide supervised services in the school setting and serve as a low-cost option for meeting the mental health needs of students. An example of this is the Assessment, Support, and Counseling (ASC) Center-discussed in more detail later-at which graduatelevel clinicians provide mental health services to high school students, resulting in significant improvements in reported mental health symptoms (Albright et al., 2013). While graduate students are excellent providers of school-based mental health services, they may not be available during the entirety of a school week due to competing demands, such as graduate coursework. Additionally, graduate students affiliated with a university far away from rural schools may not be able to be "on call" if a student is in crisis. Thus, it is important that schools designate an on-site mental health individual to handle mental health emergencies if they arise.

Nurse Practitioners

Pediatric nurse practitioners that have received specific training in efficacious mental health treatments may be able to deliver effective treatments to depressed adolescents. The Creating Opportunities for Personal Empowerment (COPE) program is an example of a CBT group treatment for adolescent depression implemented by a pediatric nurse practitioner that resulted in significant decreases in symptoms of depression at both post-intervention and 4-week follow-up (Melnyk, Kelly, & Lusk, 2014). Nurse practitioners as mental health service providers may be a helpful alternative for schools that do not have access to typical mental health providers but have a nurse practitioner on staff. Additionally, this may reduce the barrier of stigma surrounding mental health care, as visiting a school nurse may be viewed as a less stigmatizing behavior in a rural area than visiting a mental health professional.

Teachers

Teachers can be utilized to provide some information regarding depression to students, especially in the context of a structured depression prevention program. An example of this is the Adolescent Depression Awareness Program, which was administered in 9th-grade health classes and was shown to increase literacy about depression as well as help-seeking behaviors for those struggling with depression (Ruble, Leon, Gilley-Hensley, Hess, & Swartz, 2013). Such a program can be helpful to reduce stigma surrounding mental illness in rural environments. It is important that teachers administering such a program receive training about program implementation. Additionally, it is vital that schools adopting such a prevention program have a system in place for meeting the needs of students identified as having symptoms of depression or other mental health issues via this program.

Peers?

Considering the fact that social networks in rural communities may have a stronger influence on member behavior than in urban communities, Noel, Rost, and Gromer (2013a, 2013b) developed

a CBT-based depression prevention program for middle school females implemented by high school juniors and seniors. The authors noted that these older students are "natural leaders in the community" and suggested that middle schoolers, beginning to seek out more autonomy from adults, might be more influenced by older peers than adult figures. This unconventional form of service delivery yielded some promising results: participants in the treatment groups exhibited a significant decrease in depression symptoms from pre- to posttest as compared to participants in a wait-list control group. However, it is important to note that participants were prescreened for inclusion in the study, and participants who met full criteria for major depressive disorder or endorsed suicidal ideation were excluded from the study. Thus, these results are not representative of a more severe population. Furthermore, the authors modified treatment considerably to ensure student safety. For example, adolescents in charge of service delivery underwent intensive training, and the implementation manual was more detailed than traditional manuals. The authors monitored each session via telecam to ensure implementation adherence and to identify any students appearing to be a risk to themselves or others, and a school district employee was present in the room during all groups (Noel et al., 2013a, 2013b).

Naturally, there are some modifications to this treatment program that should be made if the program was to be implemented without the support of university researchers. For safety reasons, students considered for the group should be thoroughly screened or interviewed before the group begins to ensure that their symptoms are not too severe for such a group; in fact, this group might function more safely as a depression prevention program or mentorship program for at-risk students not yet exhibiting symptoms of depression rather than a treatment group for those currently experiencing depression. A school staff member with mental health background and training (e.g., a licensed clinical social worker) should be responsible for the training of facilitators and monitoring of implementation adherence, present in the room during all groups, and prepared to intervene if a group member exhibits mental health symptoms at a severity that is beyond the competency of the facilitator, such as the expression of suicidal ideation.

Training for School-Based Mental Health Providers

Regardless of the individual providing schoolbased services, it is important that providers are well trained in evidence-based treatments for depression and regularly update their knowledge on treatments for depression. Ideally, practitioners unfamiliar with a certain treatment for depression should engage in in-person trainings that contain both didactic and role-playing or practice components. Practitioners should also receive supervision and/or consultation when first trying out a new treatment for depression. That being said, attending in-person trainings may be difficult for a mental health provider living in a very remote area, and supervision and consultation from other providers in rural areas may be nearly impossible to obtain. Fortunately, there is evidence that school mental health providers can effectively be trained to implement evidence-based treatments for depression-specifically CBT-through a variety of methods. In a study in which therapists received either daylong workshops detailing skills used in specific modules or the principles of CBT and active learning, or a computer-based training via a DVD, no differences were found between each method. This indicates that computer-assisted training may be an effective method of training in CBT, which may be helpful for rural school mental health providers for whom in-person trainings are not feasible (Beidas et al., 2012).

Group Therapy for Depression

Treatment for depression—especially CBT—can be effectively implemented to treat depression in a group format as well. For example, the adolescent adaptation of the Coping With Depression (CWD) program is a moderate-length (16 sessions) CBT-based depression treatment

significantly reduced symptoms of depression, with results still evident at 2-year follow-up (Lewinsohn et al., 1990) and across multiple studies, although the overall effect size remains small (Cuijpers, Munoz, Clarke, & Lewinsohn, 2009). Groups can also expand beyond the core components of CBT to include other positive health behaviors or life skills. An example of this is the COPE program, a school-based group aimed at reducing symptoms of depression and anxiety that consists of seven sessions of traditional CBT and eight sessions of content related to physical health, activity, and nutrition. Students participating in COPE exhibited a significant decrease in symptoms of depression both at posttreatment and 4-week follow-up, with moderateto-large effect sizes (Melnyk et al., 2014).

Generally speaking, CBT groups are fairly structured and do not allow for the same tailoring of treatment to specific students as does individual therapy, but contain the same core concepts of CBT. Group therapy may be a helpful, potentially cost-effective alternative to traditional individual therapy, as one practitioner is able to see multiple students at the same time; this may be a viable option for practitioners working in schools in which a large number of students experience depression. Group therapy can also allow students to feel socially supported by peers experiencing similar struggles. However, implementing group therapy has logistical challenges in school settings, as bus schedules and extracurricular commitments may prohibit students from attending a group before or after school, and finding a time during the school day that does not keep multiple students away from valuable instructional time can be difficult. Additionally, students may have concerns about confidentiality. The importance of confidentiality must be regularly stressed within the group, as believing one's personal disclosures could be discussed with outside individuals might make students reluctant to participate. Practitioners should also find a spot for the group to meet that is private, is not accessible to students, and would remain undisturbed while the group is in session.

Online Treatment Programs for Depression

Online programs are one potential option for rural mental health care that circumvents several of the major barriers to treatment in rural areas. Evaluations of online programs for depression have revealed promising outcomes. A meta-analysis of a small number of international computerized/online CBT programs for child and adolescent depression found that these programs were superior to control conditions, with an overall moderate effect size (Ebert et al., 2015). MoodGYM (Calear, Christensen, Mackinnon, & Griffiths, 2013) and Project Competent Adulthood Transition with Cognitive-Behavioral and Interpersonal Training (CATCH-IT; Van Voorhees et al., 2009) are two examples of free online programs aimed at preventing and reducing depression in school-aged youth, implemented in the classroom and primary care setting, respectively. Both programs are linked with significant reductions in depressive symptoms in youth (Calear et al., 2013; Van Voorhees et al., 2009) and there is evidence that program adherence (i.e., completing at least 20 out of 29 MoodGYM exercises) is related to symptom reduction, especially in males. Notably, students from rural areas completed more exercises than did students from urban areas (Calear et al., 2013).

These results suggest that online or computerized treatments for depression in youth may be a viable alternative to face-to-face services in rural areas that lack mental health service providers. Online treatments for depression may also be a more preferable means of mental health service for rural youth who are concerned about a lack of confidentiality or stigma related to seeing a mental health professional in person. Additionally, online programs that are self-guided may be more acceptable to rural individuals who report a desire to cope with mental health issues on their own. That being said, youth completing these programs should still be monitored by a mental

health professional in some capacity to ensure that they are completing the online exercises and their symptoms are not escalating in severity. Online programs are more appropriate for youth at risk for or experiencing mild symptoms of depression; youth experiencing severe symptoms of depression or suicidality should receive inperson treatment. In fact, participants were excluded from Project CATCH-IT if they met full criteria for major depressive disorder or were experiencing suicidal ideation or intent (Van Voorhees et al., 2009).

Exemplar School Mental Health Program: The Assessment, Support, and Counseling (ASC) Center

The ASC Center is an interdisciplinary, integrative school-based mental health center that provides outpatient mental health services to students in need. Affiliated with a local university, the ASC Center works as a partnership between the university and the schools it serves. The ASC Center was first implemented into a rural high school in western North Carolina during the 2006-2007 school year; at the time of this chapter, ASC Centers have expanded into schools in three counties in rural western North Carolina. Daily operations and client referrals are overseen by an on-site licensed mental health professional, such as a licensed clinical social worker or a licensed master's-level psychologist. Mental health services are provided by graduate-level student trainees receiving their master's degrees in psychology, social work, or marriage and family therapy. Each student practitioner receives individual supervision from a Ph.D.-level professional in their respective disciplines, as well as on-site supervision from the licensed mental health professional at the school. Although some group therapy services are provided, the majority of students are seen via individual therapy. Students referred for services experience a range of symptoms, including depression, anxiety, trauma, and anger control difficulties. Mental health services provided are evidence based; CBT is the most frequently utilized treatment. ASC Center practitioners also collaborate with school faculty and administration, as well as community support organizations such as general practitioners and community mental health agencies to best support student mental health needs. The ASC Center utilizes treatment rooms housed within the school main office, and each practitioner protects students' confidentiality by calling them to "the office" for sessions.

The services provided through the ASC Center are very effective in reducing mental health symptoms in students; 63% of students who received services experienced symptom improvement or recovery and 78% experienced a decrease in overall psychological distress from pre- to posttreatment (Albright et al., 2013). Additionally, over half of the students who received services from the ASC Center experienced improvement in GPA between pre- and posttreatment/followup, and attendance rates of three-quarters of students receiving services remained stable or improved (Michael et al., 2013). These outcomes indicate that school mental health programs like the ASC Center are able to notably reduce mental health symptoms in youth by providing highquality evidence-based services within the school.

Vignette: A Prototypical Treatment of Depression in a Rural School-Based Context

Erica is a 14-year-old high school freshman living in a rural area who was referred for mental health services after her English teacher reported concerns about content that suggested some suicidal ideation in one of Erica's writing assignments. A school counselor met with Erica and found that she was experiencing notable symptoms of depression with some mild suicidal ideation. Erica was referred for individual therapy through the school's mental health program, established through a partnership with a nearby university. Erica was paired with Bill, a graduate student clinician working at the school 2 days a week who had received training and some

experience in the evidence-based treatment of depression.

Bill's first meeting with Erica was relatively brief and focused on building rapport. Bill asked about Erica's history with mental health services; Erica reported receiving family therapy following a Social Services report related to domestic violence within the home. Erica did not find this therapy particularly helpful, as the information she disclosed was not kept confidential from her mother. Bill and Erica discussed the parameters of confidentiality within their work together and agreed that Bill would notify Erica if he disclosed information to her mother. Bill briefly discussed logistical elements related to therapy (e.g., session length and day of the week), and the two decided on a time of day during which sessions could be held. Erica was not able to attend sessions before or after school as she relied on the school bus for transportation, so she and Bill selected a part of the school day during which her grades would not suffer if she missed a bit of instructional time once a week. As Erica had expressed suicidal ideation previously, Bill assessed for risk of harm. Erica reported some suicidal ideation but no specific plan or access to means. She had no history of previous suicide attempts. The two made a safety plan, and Erica agreed to talk to her mother, Bill, or her school counselor if she had thoughts of suicide.

During the second session, Bill learned more about Erica's presenting problems. described a low mood with mild suicidal ideation that had lasted for the past few months. Bill described additional symptoms of depression, and Erica reported that she also experienced a loss of interest in activities (noting that everything seemed boring), low energy, difficulty concentrating, a lack of appetite, and feelings of worthlessness. Erica also reported a sleeping pattern wherein she went to bed as soon as she returned home from school, often waking up well after dinner, and then stayed up very late watching television. This sleeping pattern impacted her ability to complete homework, and her grades were starting to suffer as a result. Erica had not considered these symptoms and behaviors to be linked with depression and was interested to learn that they were connected. Additionally, Bill learned a bit about Erica's family. Erica's parents separated several years ago. There was a history of domestic violence in the home, and Erica witnessed her biological father physically abuse her mother and older sister. Social Services had previously worked with the family but had no current involvement. Erica does not have any contact with her biological father, and expressed some anger surrounding his treatment of her mother. Erica lived with her mother, her mother's boyfriend, an older sister, and her sister's newborn child. The family home is small, and Erica shared a room with her sister and her new niece; this arrangement contributes to Erica's sleeping difficulties. Erica expressed resentment towards her niece and her mother's boyfriend for taking so much of her mother's time and attention. Historically, Erica's relationship with her mother was positive and Erica was able to confide in her; however, this relationship had deteriorated recently. Although her relationship with her mother was not as close as she wished, Erica reported being close to a couple of peers at school; however, she does not have many opportunities to spend time with these friends outside of school, as she lives far away from them and her transportation options are limited.

After consulting with his supervisor, Bill decided to use a cognitive-behavioral approach when working with Erica. He described this treatment to her and she appeared interested in this approach. Bill introduced the concept of mood monitoring and instructed Erica to rate her mood on a scale of 1–10 in the mornings, afternoons, and evenings. Bill asked Erica to describe several anchor points for her mood at different ratings, and wrote these down for her to reference if needed. Bill provided Erica with a monitoring chart, but Erica reported a preference of completing her mood monitoring on her phone, as she was concerned about losing the chart.

Erica brought her mood log back during the next session. She filled in her mood during most days, although she forgot to do so over the weekend. Bill praised her for her success, and validated that it can be difficult to remember assignments on the weekend, and the two

brainstormed how she might remember to report on her mood next weekend. Erica reported an overall low mood (approximately 3 out of 10) during the previous week, and Bill pointed out a pattern in which Erica's mood was the lowest in the mornings and the evenings, and comparably higher in the afternoons. Erica hypothesized that her mood tended to be particularly low in the mornings because she was tired and unhappy about getting up so early for school. She noted that her mood tended to be higher while at school because she was able to see her friends and participate in art class. As Erica's sleep schedule was erratic and likely affecting her mood, Bill decided to deviate from the typical progression of CBT to discuss sleep hygiene. Bill explained circadian rhythms (calling them "sleep rhythms") and the link between lack of sleep, difficulties concentrating, and negative mood. Bill explained the tenants of good sleep hygiene and Erica admitted that she did not practice many of these. However, when discussing barriers to sleep hygiene Erica noted that she enjoyed staying up late, as this was typically the only quiet time she had to herself in the family's small, hectic home. Additionally, Erica noted that it was difficult for her to only use her bed for sleeping, as this was the only place to sit in her room when doing homework. Bill utilized some motivational interviewing techniques to increase Erica's readiness to change some of her sleeping habits, and the two brainstormed possible solutions for some of the barriers Erica mentioned. The two also decided on a more appropriate bedtime to which Erica could adhere. Erica was instructed to continue monitoring her mood on her phone, and Bill pointed Erica towards a free smartphone application she could use to log her sleep.

During the next session, Erica reported some success with improving her sleep schedule. Although she did not go to bed at her decided bedtime every night and only refrained from napping 2 days out of the week, she noted an improvement in her mood after getting a full night's sleep the night before. Bill praised her for her success and the two brainstormed solutions for some of the barriers Erica experienced. Bill decided to begin working with Erica on behavioral

activation. Bill discussed how depression can be linked with anhedonia and the link between engaging in pleasant activities and positive mood. When asked about the pleasant activities in which she currently engaged, Erica could not report many and agreed that she felt bored much of the time. Erica also reported many barriers to pleasant activities; her family lived far from the town and did not have many resources, and it was hard for Erica to get into town to see her friends or engage in an activity because the family shared one car. Bill gave Erica the assignment of tracking her daily activities, as well as brainstorming possible activities she might want to incorporate into her life.

In between sessions, Erica stopped by her school counselor's office, distressed over a fight she had with her mother. This fight exacerbated her symptoms of depression and brought about some mild suicidal ideation. Her school counselor discussed Erica's feelings and made a safety plan with her. The school counselor updated Bill once he returned to the school. When Bill checked in on Erica, she had calmed down considerably and denied current suicidal ideation. However, Erica's mother took away Erica's phone as a punishment for "talking back," so she did not have a copy of her therapy homework. She was able to recall her overall mood and sleep schedule, noting that her mood was particularly low after her fight with her mother. Erica described a sparse activity schedule, especially after her phone was taken away. She had not been able to brainstorm any additional activities in which she would like to engage. Bill provided Erica with a large list of potential pleasant activities, explaining that these activities did not require money or resources. Bill stressed the need to generate activities that could be accomplished if Erica did not have her phone. Erica chose several activities from the list in which she could easily engage in the upcoming week. Additionally, she chose one activitylearning how to crochet—that could serve as a longer term activity goal. Erica and Bill broke this goal down into several steps that Erica could accomplish over the next few weeks. Erica and Bill agreed on a time during which Erica could schedule pleasant activities; many were scheduled

after school as a deterrent from afternoon naps. Bill provided Erica with paper copies of monitoring sheets and gave her a folder in which she could keep future therapy homework.

During the course of treatment, Erica expressed a concern over peers asking her why she left class on a weekly basis. Bill learned that although Erica was called from class via a class phone the teacher answered privately, the teacher usually announced aloud that Erica was called to the main office, resulting in a conspicuous exit on Erica's part. Erica was not comfortable disclosing to other students that she was receiving therapy services, and Bill helped Erica brainstorm ways to respond to the students when they asked. To help protect Erica's confidentiality, Bill decided to hold their sessions during another class as much as possible.

Erica continued practicing behavioral activation over the next several sessions and experienced some success incorporating pleasant activities into her daily routine. She discovered that the most effective activities were listening to music, writing poetry, and sketching the landscape around the family home. She was able to notice an improvement in her mood while engaged in activities, but continued to experience dips in her mood related to fights with her mother and her mother's boyfriend. During this time, Bill began to focus on cognitive skills, discussing automatic thoughts and cognitive distortions. Erica noted that she tended to focus on the negatives in situations, and also engaged in cognitive distortions of mind reading and jumping to conclusions. Erica initially had some difficulty paying attention to the thoughts she had when experiencing an extreme emotion, and she and Bill worked on being more mindful of these thoughts over a few sessions. Bill provided Erica with thought records, and Erica was successful in completing these records. Over the course of the next few sessions, Bill and Erica worked on evaluating the evidence for thoughts in an effort to help Erica generate more realistic thoughts. Bill noticed a theme in Erica's thinking style that reflected an underlying belief that she was a worthless, stupid person, and that nobody liked her—many of Erica's cognitions tended to fall back on this automatic belief. Feeding this belief was the arrival of her niece, who took much of her sister's and her mother's attention. Both her mother and her sister worked, limiting their opportunities to spend quality time with Erica, which she interpreted as them not caring for her anymore. Bill worked with Erica to help build awareness of this belief and to help generate evidence against it. Erica was able to recognize that the belief was ultimately unrealistic and—with Bill's assistance—began to pay more attention to times in which her mother and sister demonstrated that they cared for her.

Although Erica was able to recognize that her belief that nobody cared for her was unrealistic, she tended to revert back to this belief after she and her mother had a fight or if she was not able to spend quality time with her mother for several days at a time. Erica also had a difficult relationship with her mother's boyfriend—she was reluctant to accept him as an authority figure and resented that he took up her mother's time, especially when he was present during activities that would otherwise be quality time between Erica and her mother. As these issues were more reflective of family dynamics than depressive thinking, Bill and his supervisor concluded that Erica might benefit from a few family therapy sessions. Bill presented this idea to Erica, and she consented to bringing her mother in for a meeting, although she did not want her mother's boyfriend present. Bill had some difficulty contacting Erica's mother to schedule this meeting; her work schedule was erratic, and she often was unavailable during school hours. When Bill finally made contact with Erica's mother, she stated that she would likely not be able to come to the school for a family meeting; she was not able to take any time off from work and—as the family shared one vehicle—would be unable to gain transportation to the school. Bill consulted with his supervisor and they decided on an acceptable alternative wherein Bill would teach Erica interpersonal and conflict resolution skills with the goal of improving communication with her mother while checking in with Erica's mother periodically by phone.

Over a few sessions, Bill taught Erica skills related to conflict resolution and effective communication, role-playing each skill in session. Erica also practiced calmly communicating with her mother about her wish to spend more one-on-one time with her and how this lack of quality time made her feel. Erica initially exhibited some negative thinking surrounding the effectiveness of the skills, expressing doubt that her mother would listen to her. Bill and Erica utilized cognitive restructuring skills to increase Erica's confidence in the conversation with her mother, and planned for some pleasant activities in which Erica could engage if the conversation did not result in the outcomes Erica desired. Bill asked Erica to schedule a time in which she and her mother could sit down to talk and be as uninterrupted as possible. Erica was able to have this conversation with her mother and reported that it went well; she felt like her mother listened to her and the two were able to schedule some quality time they could spend together. Additionally, Erica began using some communication and conflict resolution skills when interacting with her mother's boyfriend, which helped diffuse some fights that otherwise might have occurred.

Bill continued to work with Erica on skill building and cognitive restructuring over the next few sessions. Erica's mood continued to improve, especially after learning she could calmly communicate her feelings to her mother. This was reflected in Erica's mood monitoring charts as well as her verbal report. As such, Bill discussed the possibility of terminating treatment with Erica; Erica agreed that she no longer needed to meet with Bill on a weekly basis. Bill spent a session discussing relapse prevention and had Erica make note of the symptoms of depression that serve as "red flags" that her depression was starting to return. Erica stated that feeling bored all the time and sleeping more than usual were prominent "red flags" for her, and listed skills to use if these symptoms returned. As a way of celebrating the end of treatment, Bill had Erica recount the things she had learned during their work together and asked her to create some sort of tangible product that detailed these skills. Erica decided to create an illustrated book of these symptoms and skills. After treatment officially ended, Bill checked in with Erica briefly about once a month over the next few months to ensure that her mood continued to be relatively stable.

Discussion of Vignette

This vignette represents an exemplar of evidence-based treatment of depression within the context of school-based mental health, and incorporates some of the benefits and challenges of this model. Treatment within a school-based context is particularly appropriate for students like Erica whose parents have work schedules and transportation difficulties that would make it challenging for them to take a child to an outside mental health provider on a weekly basis. Here, Erica was able to receive excellent mental health treatment on a regular basis that was free of cost for her family.

Although Bill progressed through the core components of CBT, he did not shy away from modifying this treatment for Erica's specific needs. For example, upon learning of Erica's erratic sleep schedule that was likely contributing to her low mood, Bill elected to postpone behavioral activation to work on sleep hygiene. Additionally, Bill helped Erica learn communication and conflict resolution skills; while not a part of traditional CBT, these skills helped Erica manage the stressful relationships with her family. These modifications likely provided Erica with the most effective treatment for her individual difficulties.

One of the challenges that Bill faced as a mental health provider in a school setting is that he was not able to be at the school during the entirety of the week. Fortunately, he and Erica worked out a system wherein she could come to her school counselor in between sessions if needed. Maintaining good relationships with school staff and administration is imperative for school mental health practitioners, and these staff members can serve as supports for the student when a practitioner is not available. Another challenge to school-based mental health work is that of

protecting the student's confidentiality. While steps can be taken to protect confidentiality when calling a student from class for mental health treatment (e.g., calling them to "the office" instead of "the mental health center"), Bill may not have anticipated that other students would begin to ask Erica questions about routinely leaving class. Bill was able to be flexible (a beneficial quality for school-based practitioners) and alter the time in which they met to protect Erica's confidentiality.

Another challenge Bill faced that may be more unique to rural school-based mental health care was the difficulties related to scheduling a family session. It can be difficult to communicate and schedule a time to meet with parents as a schoolbased practitioner, as many parents work during the school day. Erica's mother also had limited resources and transportation difficulties that compounded these typical difficulties. When it became apparent that scheduling a session with Erica's mother would be nearly impossible, Bill again practiced flexibility and altered his treatment plan to address Erica's relationship with her mother in another effective manner. While the solution Bill chose was appropriate in this situation, it should be noted that in more severe situations, such as acute suicidal crisis, Bill should have pushed harder for Erica's mother to attend a meeting and helped her brainstorm ways to get transportation to the school.

Chapter Summary

This chapter described the school-based treatment of child and adolescent depression. Depression rates in rural areas may equal or exceed those of urban areas, and youth living in rural areas experience several barriers to receiving quality mental health care. Mental health services provided within the school are an excellent way of circumventing these barriers and providing youth with the mental health care they need. CBT has the most empirical support for reducing the symptoms of depression and improving functioning and can be easily implemented into a school mental health

context by a number of providers. Practitioners should take care to modify the treatment as needed for each students' individual presenting problem, as well as concerns unique to working with youth in rural areas, such as the need to develop a strong therapeutic alliance and being mindful of the students' confidentiality. By following the guidelines set forth in this chapter, practitioners from a variety of backgrounds can successfully treat depression in children and adolescents in their school systems.

References

Albright, A., Michael, K., Massey, C., Sale, R., Kirk, A., & Egan, T. (2013). An evaluation of an interdisciplinary rural school mental health programme in Appalachia. Advances in School Mental Health Promotion, 6, 189–202. doi:10.1080/1754730X.2013.808890

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

Anxiety and Depression Association of America (2016). *Mental health apps*. Retrieved from https://www.adaa.org/finding-help/mobile-apps.

Beidas, R. S., Mychailyszyn, M. P., Edmunds, J. M., Khanna, M. S., Downey, M. M., & Kendall, P. C. (2012). Training school mental health providers to deliver cognitive-behavioral therapy. *School Mental Health*, 4, 197–206. doi:10.1007/s12310-012-9074-0

Blunden, S., Hoban, T. F., & Chervin, R. D. (2006). Sleepiness in children. *Sleep Medicine Clinics*, 1, 105–118. doi:10.1016/j.jsmc.2005.11.006

Bureau of Health Workforce Health Resources and Services Administration (HRSA) U.S. Department of Health & Human Services. (2016). *Designated health professional shortage areas statistics as of July 24, 2016.* Retrieved from https://datawarehouse.hrsa.gov/tools/hdwreports/Reports.aspx.

Calear, A. L., Christensen, H., Mackinnon, A., & Griffiths, K. (2013). Adherence to the MoodGYM program: Outcomes and predictors for an adolescent school-based population. *Journal of Affective Disorders*, 147(1–3), 338–344. doi:10.1016/j.jad.2012.11.036

Carnevale, T. (2011). An integrative review of adolescent depression screening instruments: applicability for use by school nurses. *Journal of Child and Adolescent Psychiatric Nursing*, 24(1), 51–57. doi:10.1111/j.1744-6171.2010.00256.x

Centers for Disease Control and Prevention. (2014). 10 leading causes of death by age group, United States—2014. Retrieved from http://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_age_group_2014_1050w760h.gif.

- Chorpita, B. F., Daleiden, E. L., & Weisz, J. R., (2005). Identifying and selecting the common elements of evidence based interventions: a distillation and matching model. *Mental Health Services Research*, 7, 5-20. doi: 10.1007/s11020-005-1962-6
- Compton, S. N., March, J. S., Brent, D., Albano, A. M., Weersing, V. R., & Curry, J. (2004). Cognitivebehavioral psychotherapy for anxiety and depressive disorders in children and adolescents: An evidencebased medicine review. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43(8), 930–959. doi:10.1097/01.chi.0000127589.57468.bf
- Costello, E. J., Keeler, G. P., & Angold, A. (2001). Poverty, race/ethnicity, and psychiatric disorder: A study of rural children. *American Journal of Public Health*, 91, 1494–1498.
- Creed, T. A., Reisweber, J., & Beck, A. T. (2011). Cognitive therapy for adolescents in school settings. New York: Guilford Press.
- Cuijpers, P., Munoz, R. F., Clarke, G. N., & Lewinsohn, P. M. (2009). Psychoeducational treatment and prevention of depression: The "coping with depression" course thirty years later. *Clinical Psychology Review*, 29(5), 449–458. doi:10.1016/j.cpr.2009.04.005
- Dubow, E. F., Lovko, K. R., & Kausch, D. F. (1990).
 Demographic differences in adolescents' health concerns and perceptions of helping agents. *Journal of Clinical Child Psychology*, 19, 44–54. doi:10.1207/s15374424jccp1901_6
- Eberhardt, M., & Pamuk, E. (2004). The importance of place of residence: Examining health in rural and nonrural areas. American Journal of Public Health, 94, 1682–1686.
- Ebert, D. D., Zarski, A. C., Christensen, H., Stikkelbroek, Y., Cuijpers, P., Berking, M., & Riper, H. (2015). Internet and computer-based cognitive behavioral therapy for anxiety and depression in youth: A meta-analysis of randomized controlled outcome trials. *Plos One*, 10(3), 1–15. doi:10.1371/journal. pone.0119895
- Elliott, B. A., & Larson, J. T. (2004). Adolescents in midsized and rural communities: Foregone care, perceived barriers, and risk factors. *Journal of Adolescent Health*, 35, 303–309. doi:10.1016/j.jadohealth.2003.09.015
- Fontanella, C. A., Hiance-Steelesmith, D. L., Phillips, G. S., Bridge, J. A., Lester, N., Sweeney, H. A., & Campo, J. V. (2015). Widening rural-urban disparities in youth suicides, United States, 1996–2010. *JAMA Pediatrics*, 169, 466–473. doi:10.1001/jamapediatrics.2014.3561
- Fortney, J. C., Harman, J. S., Xu, S., & Dong, F. (2010). The association between rural residence and the use, type, and quality of depression care. *The Journal of Rural Health*, 26, 205–213. doi:10.1111/j.1748-0361.2010.00290.x
- Frank, R. G., Hiskamp, H. A., & Pincus, H. A. (2003). Aligning incentives in the treatment of depression in primary care with evidence-based practice. *Psychiatric Services*, 54, 682–687. doi:10.1176/appi.ps.54.5.682
- Hauenstein, E. J., Petterson, S., Rovnyak, V., Merwin, E., Heise, B., & Wagner, D. (2007). Rurality and men-

- tal health treatment. Administrative Policy in Mental Health and Mental Health Services Research, 34, 255–267.
- Hedden, S. L., Kennet, J., Lipari, R., Medley, G., Tice, P., Copello, E. A. P., ... Hunter, D. (2014). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health. Retrieved from http://www.samhsa.gov/data/ sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.htm.
- Hernan, A., Philpot, B., Edmonds, A., & Reddy, P. (2010). Healthy minds for country youth: Helpseeking for depression among rural adolescents. *The Australian Journal of Rural Health*, 18, 118–124. doi:10.1111/j.1440-1584.2010.01136.x
- Hoyt, D. R., Conger, R. D., Valde, J. G., & Weihs, K. (1997). Psychological distress and help seeking in rural America. American Journal of Community Psychology, 25, 449–470.
- Jameson, J. P., & Blank, M. B. (2010). Diagnosis and treatment of depression and anxiety in rural and nonrural primary care: National survey results. *Psychiatric Services*, 61, 624–627. doi:10.1176/appi. ps.61.6.624
- Jones, A. R., Cook, T. M., & Wang, J. (2011). Ruralurban differences in stigma against depression and agreement with health professionals about treatment. *Journal of Affective Disorders*, 134(1–3), 145–150. doi:10.1016/j.jad.2011.05.013
- Jureidini, J. N., Doecke, C. J., Mansfield, P. R., Haby, M. M., Menkes, D. B., & Tonkin, A. L. (2004). Efficacy and safety of antidepressants for children and adolescents. *British Medical Journal*, 328, 879–883. doi:10.1136/bmj.328.7444.879
- Kuo, E. S., Vander Stoep, A., Herting, J. R., Grupp, J., & McCauley, E. (2013). How to identify students for school-based depression intervention: can school record review be substituted for universal depression screening? *Journal of Child and Adolescent Psychiatric Nursing*, 26, 42–52. doi:10.1111/ jcap.12010
- Lejuez, C. W., Hopko, D. R., & Hopko, S. D. (2001). A brief behavioral activation treatment for depression. *Behavior Modification*, 25, 225–286.
- Lewinsohn, P. M., Clarke, G. N., Hops, H., & Andrews, J. (1990). Cognitive-behavioral treatment for depressed adolescents. *Behavior Therapy*, 21, 385– 401. doi:10.1016/S0005-7894(05)80353-3
- Lovato, N., & Gradisar, M. (2014). A meta-analysis and model of the relationship between sleep and depression in adolescents: Recommendations for future research and clinical practice. Sleep Medicine Reviews, 18, 521–529. doi:10.1016/j.smrv.2014.03.006
- Melnyk, B. M., Kelly, S., & Lusk, P. (2014). Outcomes and feasibility of a manualized cognitive-behavioral skills building intervention: group COPE for depressed and anxious adolescents in school settings. *Journal of Child and Adolescent Psychiatric Nursing*, 27, 3–13. doi:10.1111/jcap.12058
- Merwin, E., Hinton, I., Dembling, B., & Stern, S. (2003). Shortages of rural mental health profession-

- als. Archives of Psychiatric Nursing, 17, 42–51. doi:10.1053/apnu.2003.1
- Michael, K. D., Albright, A., Jameson, J. P., Sale, R., Massey, C., Kirk, A., & Egan, T. (2013). Does cognitive behavioral therapy in the context of a rural school mental health programme have an impact on academic outcomes? Advances in School Mental Health Promotion, 6, 247–262. doi:10.1080/17547 30X.2013.832006
- Michael, K. D., George, M. W., Splett, J. W., Jameson, J. P., Sale, R., Bode, A. A., ... Weist, M. D. (2016). Preliminary outcomes of a multi-site, school-based modular intervention for adolescents experiencing mood difficulties. *Journal of Child and Family Studies*, 25, 1903–1915. doi:10.1007/s10826-016-0373-1
- Michael, K. D., & Merrell, K. W. (1998). Reliability of children's self-reported internalizing symptoms over short to medium-length time intervals. *Journal of American Academy of Child and Adolescent Psychiatry*, 37, 194–201. doi:10.1097/00004583-199802000-00012
- Mufson, L., Dorta, K. P., Wickramarante, P., Nomura, Y., Olfson, M., & Weissman, M. M. (2004). A randomized effectiveness trial of interpersonal psychotherapy for depressed adolescents. Archives of General Psychiatry, 61, 577–584. doi:10.1001/archpsyc.61.6.577
- Mufson, L., & Sills, R. (2006). Interpersonal Psychotherapy for depressed adolescents (IPT-A): An overview. Nordic Journal of Psychiatry, 60, 431–437. doi:10.1080/08039480601022397
- Mufson, L., Weissman, M. M., Moreau, D., & Garfinkel, R. (1999). Efficacy of interpersonal psychotherapy for depressed adolescents. Archives of General Psychiatry, 56, 573–579.
- National Sleep Foundation. (2016). Sleep hygiene. Retrieved from https://sleepfoundation.org/ask-the-expert/sleep-hygiene.
- Ng, M. Y., Eckshtain, D., & Weisz, J. R. (2015). Assessing fit between evidence-based psychotherapies for youth depression and real-life coping in early adolescence. *Journal of Clinical Child & Adolescent Psychology*, 0, 1–17. doi:10.1080/15374416. 2015.1041591.
- Noel, L. T., Rost, K., & Gromer, J. (2013a). A depression prevention program for rural adolescents: modification and design. *Children & Schools*, 35, 199–211. doi:10.1093/cs/cdt018
- Noel, L. T., Rost, K., & Gromer, J. (2013b). Depression prevention among rural preadolescent girls: A randomized controlled trial. *School Social Work Journal*, 38, 1–18. doi:10.1007/s10802-005-9014-7
- O'Shea, G., Spence, S. H., & Donovan, C. L. (2015). Group versus individual interpersonal psychotherapy for depressed adolescents. *Behavioural and Cognitive Psychotherapy*, 43, 1–19. doi:10.1017/S1352465814000216
- Owens, J. S., Watabe, Y., & Michael, K. D. (2011). Culturally responsive school mental health in rural communities. In C. S. Clauss-Ehlers, Z. Serpell, & M. D. Weist (Eds.), *Handbook of culturally responsive school mental health: Advancing research, training, practice, and policy* (pp. 31–42). New York, NY: Springer.

- Puskar, K. P., Tusaie-Mumford, K., Sereika, S. M., & Lamb, J. (1999). Screening and predicting adolescent depressive symptoms in rural settings. Archives of Psychiatric Nursing, 13, 3–11.
- Robinson, W. D., Springer, P. R., Bischoff, R., Geske, J., Backer, E., Olson, M., ... Swinton, J. (2012). Rural experiences with mental illness: Through the eyes of patients and their families. *Families, Systems, and Health*, 30, 308–321. doi:10.1037/a0030171
- Rost, K., Fortney, J., Fischer, E., & Smith, J. (2002). Use, quality, and outcomes of care for mental health: The rural perspective. *Medical Care Research and Review*, 59, 231–265.
- Ruble, A. E., Leon, P. J., Gilley-Hensley, L., Hess, S. G., & Swartz, K. L. (2013). Depression knowledge in high school students: effectiveness of the adolescent depression awareness program. *Journal of Affective Disorders*, 150, 1025–1030. doi:10.1016/j. jad.2013.05.033
- Sburlati, E. S., Schniering, C. A., Lyneham, H. J., & Rapee, R. M. (2011). A model of therapist competencies for the empirically supported cognitive behavioral treatment of child and adolescent anxiety and depressive disorders. Clinical Child and Family Psychology Review, 14, 89–109. doi:10.1007/s10567-011-0083-6
- Seeley, J. R., Stice, E., & Rhode, P. (2009). Screening for depression prevention: identifying adolescent girls at high risk for future depression. *Journal of Abnormal Psychology*, 118, 161–170. doi:10.1037/a0014741
- Shirk, S. R., Gudmundsen, G., Kaplinski, H. C., & McMakin, D. L. (2008). Alliance and outcome in cognitive-behavioral therapy for adolescent depression. *Journal of Clinical Child & Adolescent Psychology*, 37, 631–639. doi:10.1080/15374410802148061
- Shirk, S. R., Kaplinski, H., & Gudmundsen, G. (2009). School-based cognitive-behavioral therapy for adolescent depression: A benchmarking study. *Journal of Emotional and Behavioral Disorders*, 17, 106–117. doi:10.1177/1063426608326202
- Singh, G. K., Azuine, R. E., Siahpush, M., & Kogan, M. D. (2013). All-cause and cause-specific mortality among US youth: Socioeconomic and ruralurban disparities and international patterns. *Journal* of *Urban Health*, 90, 388–405. doi:10.1007/ s11524-012-9744-0
- Singh, G. K., & Siahpush, M. (2002). Increasing rural-urban gradients in US suicide mortality, 1970–1997. American Journal of Public Health, 92, 1161–1167.
- The TADS Team. (2007). The treatment for adolescents with depression study (TADS): Long-term effectiveness and safety outcomes. *Archives of General Psychiatry*, 64, 1132–1144. doi:10.1001/archpsyc.64.10.1132
- Tudiver, F., Edwards, J. B., & Pfortmiller, D. T. (2010). Depression screening patterns for women in rural health clinics. *The Journal of Rural Health*, 26, 44–50. doi:10.1111/j.1748-0361.2009.00264.x
- U.S. Food and Drug Administration. (2013). FDA proposes new warnings about suicidal thinking, behavior

- in young adults who take antidepressant medications.

 Retrieved from http://www.fda.gov/NewsEvents/
 Newsroom/PressAnnouncements/2007/ucm108905.
 htm
- United States Department of Agriculture. (2015). *Rural America at a glance: 2015 edition*. http://www.ers.usda.gov/media/1952235/eib145.pdf.
- Van Voorhees, B. W., Fogel, J., Reinecke, M. A., Gladstone, T., Stuart, S., Gollan, J., ... Bell, C. (2009). Randomized clinical trial of an internet-based depression prevention program for adolescents (Project CATCH-IT) in primary care: 12-week outcomes. *Journal of Developmental & Behavioral Pediatrics*, 30, 23–37. doi:10.1097/DBP.0b013e3181966c2a
- Wallis, A., Roeger, L., Milan, S., Walmsley, C., & Allison, S. (2012). Behavioural activation for the treatment of rural adolescents with depression. *Australian Rural Health*, 20, 95–96. doi:10.1111/j.1440-1584.2012.01261.x
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 629–640.
- Warner, C. M., & Fox, J. K. (2012). Advances and challenges in school-based intervention for anxious and depressed youth: Identifying and addressing issues of sustainability. *School Mental Health*, 4, 193–196. doi:10.1007/s12310-012-9087-8
- Weist, M. D., & Murray, M. (2007). Advancing school mental health promotion globally. Advances in School Mental Health Promotion, Inaugural Issue, 1, 2–12. doi:10.1080/1754730X.2008.9715740
- White, M. (2007). *Maps of narrative practice*. New York: W.W. Norton & Company, Inc..
- Young, J. F., Kranzler, A., Gallop, R., & Mufson, L. (2012). Interpersonal psychotherapy-adolescent skills training: Effects on school and social functioning. School Mental Health, 4, 254–264. doi:10.1007/ s12310-012-9078-9
- Ziller, E., Anderson, N., & Coburn, A. (2010). Access to rural mental health services: Service use and out-ofpocket costs. *The Journal of Rural Health*, 26, 214–224. doi:10.1111/j.1748-0361.2010.00291.x
- Carissa M. Orlando received her Master of Arts degree in Clinical-Health Psychology from Appalachian State University in 2012. She practiced psychology in North Carolina for three years in both school and community contexts before returning to academia in 2015 to pursue her Ph.D. in Clinical-Community Psychology from the University of South Carolina. She is passionate

about working with young people—particularly adolescents—struggling with internalizing disorders, self-injurious behaviors, and suicidality, and finds that school-based mental health services are an excellent way of reaching at-risk students. Her research interests include improving quality of care delivered in a school-based context, particularly the identification, assessment, and intervention of suicidal and self-injurious thoughts and behaviors.

Abby Albright Bode is a doctoral student in Clinical-Community Psychology at the University of South Carolina, and is expected to complete her doctoral training in the summer of 2018. Prior to doctoral studies, she earned her master's degree in Clinical Health Psychology at Appalachian State University in Boone, North Carolina. Abby's practice and research are focused on evidence-based practices in rural school mental health service provision and on youth empowerment within the school context.

Kurt D. Michael is a Professor of Psychology at Appalachian State University (ASU). He was trained at the University of Colorado-Boulder, Utah State University, and Duke University Medical Center. He teaches at the undergraduate and graduate levels and supervises several clinical training sites in rural schools. His primary empirical interests are the development of effective school mental health (SMH) and suicide prevention programs in rural settings. He is an Associate Editor of the Journal of Child and Family Studies. He was also appointed to the editorial board of the Journal of Rural Mental Health. In addition to Dr. Michael's teaching and research interests, he is a practicing Licensed Psychologist and, in 2006, developed and implemented interdisciplinary SMH partnerships entitled the Assessment, Support, and Counseling (ASC) Centers in rural western North Carolina. The ASC Center was designed to serve children and families in North Carolina while, at the same time, foster workforce development, which aligns well with ASU's strategic mission to improve the health of North Carolinians and to have a sustained impact on the region, both economically and culturally. Dr. Michael was recently honored for his long-term commitment to North Carolina citizens as the 2014 Board of Governors recipient of the James E. Holshouser Jr. Award for Excellence in Public Service http://video.unctv.org/ video/2365355746/. Dr. Michael consults with agencies on a national level regarding the development of crisis intervention and suicide prevention protocols for public school systems.