



Relationships Between Student Engagement and Mental Health as Conceptualized from a Dual-Factor Model

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Abstract

This chapter reviews empirical links between youth mental health and behavioral, emotional/affective, cognitive engagement among school-aged youths. Youth mental health is defined in a dual-factor model, as comprised of positive indicators of well-being (e.g., subjective well-being) and negative indicators of ill-being (e.g., internalizing and externalizing symptoms of mental health problems). After establishing the associations between student engagement and mental health as indicated from observational studies, we describe how interventions that target engagement have impacted youth mental health, and vice versa how addressing mental health problems that pose barriers to student engagement actually impact aspects of engagement. The chapter concludes with a discussion of considerations for marginalized or underrepresented groups of students, implications for practice, and directions for future research.

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Defining Student Engagement and Mental Health

Within a larger text that examines how student engagement drives positive development for youths, in this chapter we focus on positive *emotional* development (i.e., emotional well-being) with the view that optimal mental *health* reflects a complete state of being. This view is aligned with a dual-factor model of mental health, in which a complete state of mental health is defined as (a) minimal symptoms of internalizing and externalizing forms of psychopathology (the ill-being factor), coupled with (b) the presence of positive factors such as high subjective well-being (the well-being factor; Suldo & Doll, 2021; Suldo & Shaffer, 2008). Subjective well-being is the construct scholars have used most commonly to operationalize happiness, and includes both cognitive and affective dimensions. A youth with high subjective well-being judges their life to be going well on the whole (i.e., high global life satisfaction) and on a daily basis experiences positive feelings more frequently than negative feelings. In contrast to traditional psychological research and practice that focuses on emotional and behavioral problems (i.e., the ill-being factor), a modern positive psychology lens attends to facilitating well-being beyond the mere absence of psychopathology, as reflected in high levels of indicators of eudemonic and hedonic well-being (e.g., subjective well-being).

Leaders within positive psychology purport that *flourishing* is predicted by Positive emotions, Engagement, Relationships, Meaning, and Accomplishment (PERMA; Morrish et al., 2018; Seligman, 2011). The first element—positive emotions—includes pleasant feelings such as pride, cheer, joy, enthusiasm—the positive affective dimension of subjective well-being. Kern et al. (2016) advanced the EPOCH Measure of Adolescent Well-Being to measure characteristics in youth that are believed to influence the PERMA domains later in life, specifically: Engagement, Perseverance, Optimism, Connectedness, and Happiness. In this chapter, we examine associations between student engagement and a flourishing emotional state, as conceptualized within a PERMA framework and its variants such as EPOCH. Of note, the term “engagement” within PERMA refers to complete absorption in one’s activity/task—sometimes called a “flow” state (i.e., Csikszentmihalyi, 2014) where time passes differently due to focus and immersion in the task at hand. There is some overlap between engagement as conceptualized in PERMA and cognitive student engagement (as defined in the next paragraph). For instance, a youth who is totally focused on an academic task that is challenging yet doable may demonstrate both the engagement element of psychological flourishing and cognitive engagement at school. Regardless, within the positive psychology literature, use of the term engagement is generally context-free; a youth can be engaged in leisure pursuits, in community activities, in sports, at school, or in other settings.

The construct of *student engagement* pertains to “how students think, act, and feel in school” and is often conceptualized as having affective, behavioral, and cognitive dimensions (Fredricks et al., 2019, p. 1). These dimensions are interrelated but cover distinct aspects of student engagement. Affective engagement includes students’ emotional reactions toward school and class, as well as their feelings of belonging to school and connectedness to adults and peers within. Behavioral engagement includes students’ school attendance, conduct in class, and participation in school-based activities outside of class time such

as involvement in extracurricular activities. Cognitive engagement refers to students’ deliberate investment in learning, including beliefs about the value of education, as well as use of self-regulated learning and metacognitive strategies to facilitate learning (Fredricks et al., 2019). Of note, researchers sometimes use terms such as *school engagement* and, less commonly, *study engagement* (i.e., Kwok & Fang, 2021; Ouweneel et al., 2011), but a review of items used to assess those constructs reveals conceptual alignment with one or more dimensions of student engagement as defined earlier in this paragraph. For instance, publications that reference *study engagement* provide an operational definition analogous to cognitive engagement (i.e., student experiences of vigor, dedication, and absorption in relation to academic tasks). In this chapter, we conceptualize student engagement as comprised of the three aforementioned subtypes— affective, behavioral, and cognitive engagement—and review studies that examined one or more of these subtypes of student engagement even if it was not termed such in the publication.

With these definitions of mental health and student engagement in mind, in the next sections we examine links between the two constructs as given by theory and then examined in empirical research. After summarizing the associations between student engagement and mental health as indicated from observational studies, we describe how interventions that target engagement have impacted youth mental health, and vice versa how addressing mental health problems that pose barriers to student engagement actually impact aspects of engagement. We then conclude with a summary of implications for future research.

Theoretical Associations Between Mental Health and Student Engagement

A convincing part of the argument for locating, expanding, and integrating mental health services in schools rests on the salience of youth mental health to academic success. Adelman and Taylor

(2010) delineated numerous social, economic, and health problems, including forms of psychopathology that if left unaddressed pose barriers to learning thereby making prevention and treatment of emotional and behavioral problems integral considerations in school reform efforts. By definition, youths who meet criteria for various mental health problems experience cognitive and behavioral symptoms that reduce opportunities for student engagement. Primary features of anxiety and depression such as frequent worries, lethargy, social avoidance, and somatic symptoms logically translate to increased likelihood of absences from school, challenges concentrating on academic material, and withdrawal from potential social supports. With respect to common symptoms of externalizing disorders, non-compliance, impulsivity, and affiliation with deviant peers translate to teacher and peer rejection, deficits in organizational and study skills, and truancy. Central features of thought disorders such as paranoia, hallucinations and delusions, and sleep disruptions logically pose barriers to full cognitive, behavioral, and affective engagement in and out of the classroom during episodes of psychosis. Taken together, children and adolescents without clinically impairing levels of emotional or behavioral symptoms are simply more likely to enter the classroom able to take advantage of opportunity for full student engagement, whereas students with and without diagnosed forms of psychopathology must mitigate an additional set of barriers to learning.

Is reducing and managing the aforementioned forms of *negative* emotionality sufficient to enable student engagement, or are students' positive emotions important in and of themselves? Fredrickson's (2001) Broaden-and-Build theory would suggest that positive emotions are highly salient to student learning and engagement, and essential to optimal functioning across contexts as well (see Pekrun & Linnenbrink-Garcia, chapter "Academic Emotions and Student Engagement", this volume). In particular, positive emotions create an upward spiral, marked *broadening* of one's cognitive capacity and behavioral flexibility (i.e., momentary thought-action repertoires) that, over time, allows one to

build lasting personal social, psychological, and physical resources (Fredrickson, 2001). Extensive empirical support for this "broaden-and-build" theory shows that positive emotions open up our minds to creative and flexible thinking, broaden the scope of our attentional field, and create new opportunities for positive experiences. Positive emotions foster personal knowledge and social connections, whereas negative emotions lead to impulsive, rigid, and narrow thoughts and behavioral responses. In a test of this theory to the educational context, Stiglbauer et al. (2013) found strong support for reciprocal relationships between high school students' positive affect and schooling experiences when both constructs were assessed five times during one school year. In particular, students who experienced frequent positive affect also reported the highest levels of relatedness, competency, and autonomy at school concurrently and later in the year, and such positive school experiences also predicted increases in affective well-being, illustrating the upward spiral at the core of the broaden-and-build theory.

The personal, social, and cognitive resources built by positive emotions can lead to student engagement and achievement. Case in point, Reschly et al. (2008) examined 7th–10th grade students' self-reports of frequency of emotional experiences at school, coping responses, and cognitive and affective engagement. They found that higher positive affect predicted greater use of adaptive coping strategies (a psychological and social resource), specifically responding to stress by using problem-solving strategies and/or seeking support. In contrast, frequency of negative affect at school was unrelated to coping. Such ties between positive emotional experiences and broadened psychological and social resources (i.e., problem-solving and turning to others, respectively) are in line with the broaden-and-build theory with respect to the adaptive functions served by positive emotions which, in turn, lead to better outcomes such as cognitive and affective engagement (Reschly et al., 2008).

The heightened academic success engendered by engagement likely strengthens opportunities for elements of PERMA such as accomplishment

and relationships, which co-occur with and beget additional positive affect. Such pathways are illustrated in studies in which more frequent positive emotions in the academic context predicted higher levels of *psychological capital* (i.e., academic self-efficacy, optimism, hope, and resilience) among students in high school (Carmona–Halty et al., 2019) and college (Ouweneel et al., 2011), with psychological capital in turn predicting greater cognitive engagement (i.e., vigor, dedication, and absorption during academic tasks; Ouweneel et al., 2011) and better grades in math and language (Carmona–Halty et al., 2019). Further, longitudinal studies with adolescents support the existence of positive reciprocal relations between subjective well-being and student engagement (Datu & King, 2018) and achievement (e.g., 9-week grade point average; Ng et al., 2015). Recent longitudinal research with elementary school age children (grades 4–6; *M* age 10 years) examined *strengths use* as a personal resource that may mediate associations between positive emotions and cognitive engagement (i.e., perseverance and motivation in academic tasks; Kwok & Fang, 2021). Strengths use includes the identification and deployment of one’s strengths, which are the “characteristics that allow a person to perform well or at their personal best” (p. 1036). Children who experienced more frequent positive emotions at the start of the study were more likely to use their strengths concurrently and later; use of strengths, in turn, predicted higher levels of cognitive engagement across time. Kwok and Fang (2021) concluded that “positive emotions may trigger the use of strengths both in school and in daily life, a kind of ‘personal resource’ in general” which makes students more likely to experience greater initiative, confidence, positive feedback, and mastery, which engender student engagement (p. 1047). Taken together, findings from a growing number of studies with children and adolescents indicate that attending to negative emotionality is important but insufficient, as the presence of positive emotions is critical to building resources that produce optimal outcomes.

Empirical Relationships Between Student Engagement and Youth Mental Health

Indicators of mental health (both psychopathology and subjective well-being) have been found to be associated with the various dimensions of student engagement, particularly among adolescent students. Adolescents are an appropriate focal population given the decline in student engagement that often characterizes transitions to middle and high school (Marks, 2000), and the increase in mental health problems (rising rates of mental illness; declines in average levels of subjective well-being; Casas & Gonzalez-Carrasco, 2019; Merikangas et al., 2010) seen during the adolescent years. In this section we highlight evidence of empirical relationships between mental health and engagement from observational studies assessing positive and negative indicators of youth mental health.

Subjective Well-Being

Findings from correlational studies have provided support for connections between each affective and cognitive component of subjective well-being and co-occurring student engagement. Even in regression analyses that control for the shared variance between affect and life satisfaction, Heffner and Antaramian (2016) found that higher levels of positive affect and life satisfaction in middle school students significantly predicted higher levels of cognitive engagement (academic aspirations), behavioral engagement (on-task behavior in class), and affective engagement (closeness to teachers), whereas higher levels of negative affect uniquely predicted lower affective and behavioral engagement.

Positive affect is one of multiple elements in the expanded PERMA/EPOCH framework reflecting flourishing mental health. Kern et al.’s (2016) examination of EPOCH elements in relation to youth outcomes found significant, positive correlations between participant scores on each EPOCH dimension and indicators of student

engagement. The magnitude of the bivariate correlations was small for teacher-rated behavioral engagement and moderate-to-large for student-reported affective engagement. Specifically, higher levels of engagement (i.e., flow—absorption in activity, losing track of time), perseverance (i.e., task completion, determination), optimism (i.e., positive beliefs about the future), connectedness (i.e., perceived social support, caring relationships), and happiness (i.e., feeling cheerful, loving life, having fun), co-occurred with greater affective engagement (i.e., feeling excited and interest in class, and eager to go to school; $r = 0.40, 0.58, 0.50, 0.37,$ and $0.44,$ respectively) and more teacher-reported effort in class ($r = 0.09, 0.36, 0.16, 0.16,$ and $0.15,$ respectively). Further, Datu (2018) found that high school students who scored higher on a measure of global flourishing that taps purpose and meaning, rich social relationships, engagement, and optimism had higher levels of emotional and behavioral engagement, even after accounting for variance in student engagement explained by positive affect and other dimensions of subjective well-being.

Regarding the affective component of subjective well-being, King et al.'s (2015) observational research with postsecondary students (predominantly college freshmen) indicated that more frequent experiences of positive emotions at the start of the year co-occurred with and predicted higher levels of behavioral engagement (on-task behavior in class) and emotional engagement (e.g., perceiving class as fun, feeling interested in class), whereas higher levels of negative affect co-occurred with and predicted "disaffection" (i.e., less behavioral and emotional engagement). In an experimental follow-up study, these researchers found that students randomized to a condition designed to evoke positive emotions (specifically, through writing about a personal life event that made them feel happy) indeed then reported greater behavioral and emotional engagement (evidenced by the same indicators used in the first study) than students randomized to recall sad memories. Since the measurement of engagement occurred soon

after the induction of positive or negative emotions, it is difficult to verify from this study if positive affect translates to actual, observable heightened student engagement or simply student perception of such. In reflecting on this limitation of self-report indicators of engagement, King et al. noted that "it is possible that those in a positive affective state were more likely to sample memories wherein they were in an engaged state (vs. disengaged state) in school compared to those in a negative affective state" (pp. 70). Experimental studies reviewed in a subsequent section of this chapter on school-based interventions shed more light on this matter, and provide evidence that interventions developed to foster PERMA in children and adolescents have positive effects on *teacher-rated* indicators of engagement, in addition to *student reports of engagement* and their own subjective well-being (Shoshani & Slone, 2017; Shoshani et al., 2016).

Internalizing Problems

Internalizing forms of psychopathology may manifest when students withdraw from social interactions, avoid various tasks, and express feelings of excessive worry (anxiety), sadness, hopelessness, and depression. In relation to student engagement, researchers have found significant inverse relationships between the affective, behavioral, and cognitive aspects of student engagement and adolescent students reports of feeling sad, hopeless, depressed, or excessive worry (Conner & Pope, 2013; Wang & Peck, 2013). In fact, Wang and Peck (2013) showed that 9th and 11th grade students who reported low levels of affective (e.g., feeling happy, safe, and interested at school), behavioral (e.g., schoolwork completion), and cognitive engagement (e.g., using self-regulating learning strategies such as connecting learning material to other known information) reported higher rates of depression compared to their peers who reported higher levels of affective, behavioral, and cognitive engagement.

Externalizing Problems

Students' engagement in school can also be impacted by their experience of externalizing difficulties, including substance use, risky/early sexual activity, and conduct problems/delinquent behaviors (see Griffiths et al., chapter "Using Positive Student Engagement to Create Opportunities for Students with Troubling and High-Risk Behaviors", this volume). Case in point, studies conducted with adolescent students showed that youths who reported higher levels of one or more indicators of student engagement were significantly less likely to report high rates of substance use and sexual activity (Carter et al., 2007; Li & Lerner, 2011; Simons-Morton & Chen, 2009). Likewise, secondary students who reported being more engaged in school indicated that they were less likely partake in problematic behaviors such as fighting, bullying, stealing, cheating on assignments, and carrying a weapon (Carter et al., 2007; Conner & Pope, 2013; Li & Lerner, 2011; Simons-Morton & Chen, 2009).

Subjective Well-Being and Psychopathology Considered in Tandem

The literature summarized in the preceding paragraphs establishes that higher levels of student engagement are typically seen in students with better mental health, defined by *either* higher levels of indicators or PERMA/subjective well-being or fewer symptoms of internalizing or externalizing behavior problems. A handful of studies have examined student engagement from a dual-factor model of mental health lens, and thus used measures of both well-being and ill-being to assess mental health. Findings from studies of students in elementary school (Smith et al., 2020), middle school (Suldo & Shaffer, 2008), and high school (Rose et al., 2017; Suldo et al., 2016) indicate that the highest levels of student engagement co-occur with the experience of *complete mental health* as reflected in few symptoms of internalizing and externalizing forms of

psychopathology, coupled with high subjective well-being.

Case in point, Rose et al. (2017) examined the mental health of Black teenagers using latent class analysis and identified four mental health groups characterized by high or low levels of subjective well-being (i.e., life satisfaction, self-esteem, and social integration) and psychopathology (e.g., depressive symptoms). The group with *complete mental health* (high subjective well-being, low psychopathology) reported higher affective engagement (i.e., school bonding) than the *vulnerable* group (low psychopathology but low subjective well-being) or the *symptomatic but content* group (high subjective well-being but high psychopathology), supporting advantages of high well-being coupled with low ill-being with respect to student engagement. In recent research with students in grades 4 and 5, Smith et al. (2020) found that children with complete mental health had higher levels of behavioral engagement (on-task classroom behavior) and emotional engagement (positive affect such as interest, enjoyment, and enthusiasm in class; per teacher and student report) than their peers in the *troubled* group (low subjective well-being and high psychopathology). The groups of students characterized by high subjective well-being (complete mental health, symptomatic but content) reported more emotional engagement than students with low subjective well-being (vulnerable, troubled), whereas students with low psychopathology (complete mental health, vulnerable) had higher levels of teacher-rated behavioral and emotional engagement than students with more symptoms of psychopathology (symptomatic but content, troubled). In follow-up regression analyses that controlled for internalizing and externalizing behavior problems, subjective well-being predicted greater behavioral and emotional engagement across rater, illustrating benefits associated with high subjective well-being above and beyond low psychopathology.

With respect to cognitive engagement, secondary students with complete mental health reported more positive beliefs about the value of school, and use greater use of self-regulated learning behaviors in pursuit of academic goals,

in relation to their vulnerable peers (Suldo & Shaffer, 2008; Suldo et al., 2016). There were no differences in these indicators of cognitive engagement between symptomatic but content and troubled students. In sum, these studies uncovered a critical association between high subjective well-being and cognitive engagement among students without elevated psychopathology, supporting the need to foster students' positive mental health.

Mental Health Interventions and Student Engagement

Theory backed by research demonstrates undeniable links between youth mental health and student engagement, but directionality is less clear and in need of further research. Accordingly, promising school-based interventions might cultivate student engagement either directly through practices intended to increase a dimension of engagement, or indirectly by using psychological or behavioral strategies intended to improve a mental health indicator associated with student engagement. Next, we provide examples of how mental health interventions can result in improvements in student engagement and increases in engagement can lead to improvement in mental health. The following illustrations delineate exemplars of school-based mental health services within a multi-tiered preventative framework, consistent with a public health approach (Macklem, 2011; World Health Organization, 2004). We acknowledge that variables outside of the school setting (e.g., family and community) are also influential in promoting student engagement and youth mental health; however, school-based interventions have been deemed as a viable means for providing relatively low cost, accessible support for youths who are disenfranchised (Suldo et al., 2014). Therefore, our intent is to highlight how school-based practitioners could position themselves to employ interventions that are useful for promoting youth mental health and student engagement among all youths. We end this section with considerations for addressing the needs of students who have been

historically oppressed, marginalized, or forgotten, a discussion that is critical for approaching this work from a culturally responsive, social justice orientation.

Tier 1: Universal Prevention Strategies that Target Mental Health and Engagement

In a multi-tier framework, Tier 1 includes programs offered to all students regardless of current risk level. As discussed by Suldo et al. (Suldo et al., 2019a), these interventions may occur through schoolwide initiatives or through selected classrooms. Furthermore, classroom-based social and emotional learning (SEL) curricula are likely to be facilitated by teachers or interventionists with specialized training, such as school mental health providers. Relevant to this chapter, universal programs that have been found to positively impact at least one aspect of student engagement during efficacy studies may prevent or reduce psychopathology or aim to increase subjective well-being. Furthermore, we highlight examples of universal programs that are intended to target student engagement directly, as a means of fostering students' mental health.

Promoting Subjective Well-Being Through Positive Psychology Interventions

Universal interventions under this category of support—promoting subjective well-being—are typically designed to target empirically identified correlates of high subjective well-being, including ways of thinking (e.g., gratitude and optimism), behaving (e.g., using one's signature strengths in daily activities, pursuing goals), striving (e.g., hope), and relating to other people at home and school.¹ The ultimate goal, then, is to

¹The positive psychology interventions discussed in this section focus on up-regulating positive emotions. In contrast, most traditional social-emotional learning (SEL) interventions focus on developing children and adolescents' skills in down-regulating negative emotions such as anger, sadness, and worry (Morrish et al., 2018). There are a few exceptions, as some commercially available SEL

equip students with opportunities to develop thoughts and behaviors that one would typically expect to see among happy people. For example, *Awesome Us* is a classwide program that focuses on students' understanding and use of character strengths in their daily lives (Quinlan et al., 2015). In this particular program, students participate in six weekly sessions (lasting for about 1.5 hours each) that are led by a content expert with support from the classroom teacher. Quinlan et al. (2015) found that students in grades 5 and 6 who participated in the program experienced gains in the intervention target (strengths use) and proximal outcome (positive affect), alongside increases in behavioral (on-task behavior in class) and emotional engagement (e.g., viewing class as fun and learning as enjoyable). In contrast, students in the control group experienced significant drops in engagement throughout the duration of the intervention.

Two additional examples of programs targeting correlates of subjective well-being include a 4-week classwide positive psychology intervention intended to promote gratitude among elementary students (Diebel et al., 2016) and the *Maytiv School Program* (implemented school-wide and classwide) designed to foster multiple aspects of PERMA including positive emotions, gratitude, goal fulfillment, hope, optimism, perseverance, flow experiences, character strengths, and positive relationships (Shoshani et al., 2016). Studies of program outcomes revealed that elementary and middle school student participants reported increased aspects of emotional well-being (e.g., higher gratitude and positive affect,

and reductions in negative affect) and multiple aspects of student engagement (Diebel et al., 2016; Shoshani et al., 2016). Students in the Diebel et al. (2016) study, for example, reported increased school belongingness, an indicator of affective engagement.

Recent experimental studies examining the effects of the Maytiv program when implemented with classes of preschool and middle school students detected positive effects on *teacher*-rated indicators of engagement, in addition to student reports of engagement and their own subjective well-being (Shoshani & Slone, 2017; Shoshani et al., 2016). The Maytiv program developed by Shoshani and colleagues is a universal curriculum with lessons intended to foster youth positive emotions, flow, positive relationships, character strengths, and goal-directed behavior, in alignment with the PERMA framework. Teachers are trained in the curriculum through a series of 15 bimonthly workshops, and deliver the curricular content in their classroom during the week between workshops. In a randomized control trial with 70 teachers/classrooms with over 2500 students in grades 7, 8, and 9, over a 2-year examination period students in the intervention condition experienced significant growth in positive affect as intended, and also significant growth in teacher-rated as well as self-reported emotional engagement and cognitive engagement, in relation to the no-treatment control group (Shoshani et al., 2016). Such findings support a causal impact of positive activities intended to evoke positive emotions on multiple dimensions of student engagement, as assessed by multiple methods. Similar findings were yielded from a study of a preschool version of the Maytiv program, examined with 315 children ages 3–6 served in 12 preschools randomly assigned to intervention or control (Shoshani & Slone, 2017). Compared to children in control preschools, children in the intervention condition increased significantly more in proximal mental health outcomes, namely self-reported life satisfaction and child and parent ratings of positive affect. Moreover, children in the intervention group experienced significantly larger increases in cog-

programs such as MindUP (The Hawm Foundation, 2011) contain comprehensive emotion regulation strategies in deliberate attempts to do both—up-regulate positive emotions and down-regulate negative emotions. However, since the emphasis or exclusive focus of most SEL programs is on prevention of mental health problems through managing negative emotions, we tend to distinguish between SEL and positive psychology interventions and recommend educational leaders integrate positive psychology interventions with their existing SEL program in accordance with a dual factor model of mental health that provides a framework for addressing both ill-being and well-being.

nitve and behavioral engagement as indicated by teacher ratings of learning behaviors displayed at the beginning and end of the school year. This study provides further support for the notion that mental health and student engagement are linked, and that deliberate efforts to evoke children's positive emotions—in addition to fostering the other PERMA elements—increase youth subjective well-being as expected and also cause concomitant improvements in student engagement that are not limited to personal perceptions of engagement.

Preventing Psychopathology at the Universal Level

A core objective of programs targeting psychopathology at the universal level is to mitigate psychological problems that will likely lead to emotional distress. To this end, programs may help students develop skills for identifying and managing emotions, coping with stress, utilizing problem-solving, and restructuring negative thoughts, while simultaneously improving student engagement and reducing mental health symptoms that pose barriers to student learning. As cited in Suldo et al. (2019a), two examples of such include the *Transformative Life Skills* program (Frank et al., 2017) and the *FRIENDS for Life* program (Ruttledge et al., 2016). Program components entail but are not limited to teaching students mindfulness strategies and relaxation techniques for managing emotions and cognitive restructuring to address worry and anxiety (*FRIENDS for Life* program).

Regarding the *Transformative Life Skills* program, Frank et al. (2017) found that middle school student participants experienced improvement in their use of adaptive coping styles to manage stressors, alongside increased behavioral and affective engagement compared to peers who were randomly assigned to a business-as-usual control group. Indicators of increased behavioral engagement included fewer unexcused absences and problem behaviors resulting in detention. Indicators of affective engagement included a greater sense of belongingness and attachment to school. Similarly, Ruttledge et al. (2016) demon-

strated that elementary school children who participated in the *FRIENDS for Life* program experienced a reduction in anxiety symptoms and sustained increases in affective engagement (school connectedness) compared to students in a delayed-intervention control condition. Taken together, educators who adopt promising or evidence-based Tier 1 school mental health programs developed to either increase well-being or prevent/reduce ill-being might expect to see positive effects on student engagement in addition to enhanced mental health outcomes.

Targeting Engagement to Improve Mental Health

In this section, we draw attention to universal interventions that are intended to directly foster student engagement in conjunction with youth mental health or that improve mental health outcomes as a byproduct of program implementation. Case in point, the *Bridges to High School* program aims to prevent mental health difficulties and academic problems that Mexican American youths may encounter (Gonzalez et al., 2014). Because it is a family-focused intervention, the program targets four core areas: (1) effective parenting, (2) youth coping efficacy, (3) youth engagement with learning and at school, and (4) family cohesion. At the parent level, practices to increase student engagement include helping parents understand school expectations, cultivating parents' capacity to engage in home-school communication, and sharing strategies for strengthening parents' use of parenting practices associated with academic success. Direct work with youth included visualization of positive futures, skills training in self-regulated learning and coping strategies, and encouragement to turn to family and school resources that support personal goals. Gonzalez et al. (2014) found that seventh grade students whose families participated in the program experienced greater affective and cognitive engagement, evidenced by their reports of increased bonding to and valuing of school, compared to peers assigned to a minimal dose control condition (i.e., a single-family

workshop). Follow-up research further revealed that student participation in the full program predicted better grades and lower levels of internalizing psychopathology a year later, with a sustained effect on reduced internalizing symptoms 5 years later due to the positive impact of intervention on student engagement (Gonzalez et al., 2014).

In another example of an intervention tailored to a specific population—in this case, high school freshmen entering accelerated curricula, the authors of this chapter and colleagues at the first author’s institution developed the *Advancing Coping and Engagement (ACE)* program. ACE is a universal program designed to equip students taking Advanced Placement (AP) and International Baccalaureate (IB) classes with competencies in responding to academic stressors, in particular by utilizing effective coping strategies and deliberately increasing behavioral and affective engagement at school (Shaunessy-Dedrick et al., 2022). The classwide curriculum, delivered to 9th grade students in Pre-IB and AP classes consists of 12 modules with companion sessions for caregivers and AP/IB teachers. Three of the student modules focus on student engagement in response to earlier research with AP/IB students ($N = 2379$) indicating that affective and behavioral engagement are critical for promoting desired academic and mental health outcomes among this population (Suldo et al., 2018). The three engagement modules are centered on students’ affective connections with the school, their AP or IB program, and class; students’ relationships with teachers and classmates; and students’ involvement with extracurricular activities. As reported in Suldo et al. (2019a) and Shaunessy-Dedrick et al. (2022), an initial examination of intervention acceptability as viewed by the intended users of the ACE program indicated that students, teachers, and parents who took part in a pilot of ACE at two high schools perceive skill development in these areas as salient to student success in AP/IB, and in general had a positive response to the modules that target engagement. An evaluation of the outcomes associated with student participation in ACE is underway.

Tier 2: Selective Interventions that Target Mental Health and Engagement

Tier 2 interventions focus on youths who are at-risk for academic, emotional, or behavioral difficulties and range from pairing at-risk students with adult mentors to offering time-limited small group or individual counseling to a limited number of students. The latter is typically implemented by school counselors or psychologists. Nevertheless, Doll et al. (2014) asserted that “school-based support staff are not the only resources for supporting students’ healthy development” (p. 156). In this sense, mentors, or individuals without a background in professional mental health service delivery “are as essential to child mental health as the services of the school mental health professionals...[and] a comprehensive mental health plan for school mental health services will incorporate scores of adult caretakers who are not traditionally considered to be mental health providers” (Doll et al., 2014; p. 157).

There are several well-researched selective interventions that address student engagement through supplementary support offered by adult mentors. Most of these interventions focus on students who are at-risk for dropping out of school (see research on *Check & Connect*; Christenson et al., 2012; Christenson & Pohl, 2020), students who have displayed problematic externalizing behaviors (see research on *Check-in/Check-out*; e.g., Miller et al., 2015), or youths who are targets of peer victimization or bullying (Espelage & Swearer, 2004). There is less guidance available on evidence-based interventions with a dual focus of promotion of student engagement and improved mental health outcomes, especially for students who are experiencing internalizing difficulties. Next, we describe a promising selective intervention our team created for use by school mental health professionals to help students develop healthy coping skills and promote student engagement practices that are linked to emotional and academic success.

Grounded in motivational interviewing (Miller & Rollnick, 2012), *Motivation, Assessment, and Planning (MAP) meetings* serve as a supplemental component to the aforementioned ACE program. The MAP meetings are intended to help students reflect on and further develop healthy coping skills and student engagement practices that are linked to emotional and academic success in AP/IB courses. School mental health providers deliver the MAP intervention through three core steps. First, after delivery of the ACE program in the fall semester, a multimethod, multisource approach is used to identify students with signs of academic and/or emotional challenges (see Suldo et al., 2019b for a description of the screening process). Second, the interventionist administers a standard battery of surveys to assess the identified student's current coping strategies, levels of student engagement, and perceived parenting practices. Engagement indicators include (a) behavioral engagement (extent of involvement in extracurricular activities), (b) affective engagement/school connectedness (perceived relationships with AP/IB teachers, satisfaction with AP/IB classes, and pride in school); and (c) cognitive engagement (interest in AP/IB classes, persistence, and performance standards). The questionnaire also assesses the students' motivation to engage in their coursework, with specific attention to self-efficacy and flow experiences in the classroom. Third, the interventionist meets with the student individually for approximately 50 minutes to discuss their level of coping and engagement based on the assessment results, and support the student in creating a self-directed change plan. In line with motivational interviewing standards (Miller & Rollnick, 2012), the four stages in the counseling meeting include Engage, Focus, Evoke, and Plan. Following review of the student's current coping and engagement in relation to a normative database of other AP/IB students, students select a target to address (e.g., behavioral engagement: join one after-school club) and the MAP coach and student work in a collaborative manner to develop an action plan for improving the selected target.

We developed the MAP meetings during the 2016–17 year and field tested the MAP interven-

tion in the spring semester with 49 students who completed the ACE program during the fall semester (O'Brennan et al., 2020) and further evaluated the usability and acceptability with a different sample of 121 students during the 2017–18 year (Suldo et al., 2021). Findings from survey and interview data from participating students and coaches as well as intended end users (school mental health staff) indicate that MAP is perceived by all stakeholder groups as useful to support student progress toward goals relevant to student success. For instance, school mental health staff who listened to de-identified MAP meetings conveyed that MAP would be an appropriate brief support for students taking AP/IB courses at their school. Suldo et al. (2021) found that only 15% of the at-risk freshmen warranted a referral for more intense supports after a second MAP meeting, suggesting the intervention is an effective early support for students who might otherwise fly under the radar and develop more severe academic or emotional challenges.

Tier 3: Addressing Mental Health Problems that Pose Barriers to Student Engagement

In theory, universal and targeted supports should meet the needs of most students in the school context. Still, a smaller number of students (approximately 5% of the student body) are likely to need support that is more comprehensive and therapeutic in nature, including the provision of outpatient, community-based treatment (Doll et al., 2017). Intensive interventions provided in a school setting affords mental health specialists an opportunity to address and track the impact of students' psychological and behavioral functioning on key academic outcomes, including their engagement in school. The following section summarizes structured mechanisms for attending to students' mental health and engagement needs at this level of intense support. Of note, in contrast to the scores of professional guidance available regarding evidence-based interventions for youths with internalizing or externalizing forms of mental illness, including programs and prac-

tices evaluated in schools rather than community settings, promising practices for improving subjective well-being have been advanced only in the last 15 years and are therefore discussed after presentation of cognitive-behavioral therapy.

Counseling and Therapeutic Approaches

A natural question for the school mental health provider is: What is the best therapeutic approach for supporting youth mental health? The answer to this question may be influenced by a number of factors such as (a) one's clinical competence in relation to various approaches to psychotherapy (e.g., psychoanalysis and psychodynamic therapies, behavior therapy, cognitive therapy, and humanistic therapy); (b) the availability of time to provide school-based counseling; and (c) a review of empirical evidence relative to school-based counseling outcomes. We do not intend to be prescriptive in our discussion of cognitive-behavioral therapy (CBT) by suggesting that it is the only treatment approach for serving youths in school settings. Notwithstanding, it is important to acknowledge that the provision of school-based mental health support for individual students is often limited by time constraints due to the structure and duration of the school day. As such, therapeutic approaches that are less likely to be time-limited may be less feasible in school settings. Furthermore, a great deal of research has been published demonstrating improvement in students' mental health outcomes upon the completion of counseling interventions guided by CBT techniques (Cullen, 2013; Hilt-Panahon et al., 2008). In recent years, an alternative time-limited therapeutic approach—positive psychotherapy (PPT)—has been advanced as an alternative treatment for depression, with preliminary research finding reductions in depressive symptoms as strong as those seen in adults randomized to CBT (Furchtlehner et al., 2020).

Next, we review key components and features of CBT and PPT and provide evidence of treatment efficacy based on empirical studies. We end this section with a brief review of progress moni-

toring techniques that interventionists can utilize, including those that may directly assess student engagement in response to individualized, long-term counseling.

Cognitive-Behavioral Therapy Components

CBT is an evidence-based intervention for treating internalizing and externalizing problems experienced by youths and adults (Hofmann et al., 2012). CBT includes a combination of cognitive and behavioral strategies that are integrated to improve client functioning (see Joyce-Beaulieu & Sulkowski, 2020 or Kendall, 2012 for a comprehensive review). The two main cognitive components of CBT are psychoeducation and cognitive restructuring. Psychoeducation is intended to enhance one's understanding of the nature of their challenges, whereas cognitive restructuring is intended to help the client identify, challenge, and reframe negative and distorted thought patterns that are contributing to the identified concern.

Behavioral strategies typically include relaxation training, problem-solving and social skills training, exposure and response prevention, and behavioral activation. Relaxation training involves teaching clients multiple ways to reduce high levels of internal arousal associated with intense feelings of anxiety or anger (e.g., deep breathing, visual imaginary). Problem-solving and social skills training involve teaching youths to learn and apply skills for responding to challenging situations by engaging in adaptive actions (hence the behavioral nature of these two strategies) guided by a systematic process. Exposure coupled with response prevention aims to help individuals overcome intense fears by exposing them to anxiety-provoking experiences and encouraging them to employ coping strategies during such encounters—as opposed to avoiding or escaping the experience. Finally, behavioral activation is typically utilized to help clients cope with depressed feelings by encouraging them to engage in fun, distracting or productive activities to lift their mood. In addition to the aforementioned techniques, parent training can be employed as well to help caregivers learn how to

support their child, especially those who display aggressive behaviors. In this regard, counselors may teach parents how to appropriately reinforce desired behaviors, deliver effective consequences for problematic behaviors, communicate effectively, set boundaries and rules, and use stress management strategies.

Evidence of CBT Effectiveness

Hilt-Panahon et al.'s (2008) review of school-based interventions for children and adolescents with and at-risk of depression concluded that CBT demonstrated moderate-to-large effect sizes, particularly when intervention activities included cognitive restructuring, pleasant activity scheduling (behavioral activation), and problem-solving training. Likewise, Cullen's (2013) meta-analysis indicated that school-based CBT is effective for treating anxiety disorders and related symptoms. Overall, Cullen found that several of the studies demonstrated moderate-to-strong evidence of treatment efficacy; and CBT interventions were especially effective when they included multiple techniques such as psychoeducation, cognitive restructuring, exposure, and social skills training.

School-based CBT can be an effective intervention for treating externalizing problems as well, such as aggression among children and adolescents. For example, Feindler and Engel's (2011) review of intervention approaches for supporting school age-youths who display physical and verbal aggression toward other people highlights the benefits of using CBT for anger management support. Feindler and Engel found that CBT-based interventions yielded significant reductions in aggressive behaviors and improvement in student coping, social skills, and self-esteem, with interventions demonstrating moderate effect sizes. Furthermore, Feindler and Engel identified psychoeducation (e.g., teaching students to identify their triggers and emotional response), arousal management (e.g., deep breathing), social skills and problem-solving training, and cognitive restructuring as critical elements of CBT for addressing aggression, all of which can be implemented in individual or group settings. By way of example of impact on an indi-

vidual student, Parker et al. (2016) reported the results of a non-controlled case study illustrating the effects of a school-based selective intervention for a middle school student with aggressive behaviors. Using a treatment approach that included cognitive restructuring, psychoeducation, relaxation training, and a parent component in the form of a home-school daily report card plan, Parker and colleagues reported a reduction in the student's aggressive behaviors upon the end of the 6-month intervention period and at a 1-year follow-up.

Positive Psychotherapy Components

Positive Psychotherapy (PPT) is a clinical treatment approach that is grounded in the principles of positive psychology (in particular, the PERMA conceptualization of well-being and emphasis on character strengths) along with recognition of the critical role of a positive therapeutic alliance in improving clients' mental health (Rashid & Seligman, 2018). Regarding alliance, Rashid and Seligman contend that "effective therapeutic relationships can be built on exploration and analysis of positive personal characteristics and experiences (e.g., positive emotions, strengths, and virtues), and not just talking about troubles" (p. 21). PPT was created to balance empathic attention to the negative experiences that led to and maintain an individual's psychological distress with deliberate focus on one's resources and strengths that facilitate resilience and well-being.

The intervention manual presents a 15-session protocol (Rashid & Seligman, 2018), which has been evaluated in individual counseling and small group counseling modalities. The exercises within the sessions came from intervention research conducted to identify discrete positive activities that have empirical support for causing increases in indicators of happiness or subjective well-being. In a recent meta-analysis of the effectiveness of positive psychology interventions, Carr et al. (2020) analyzed findings from 347 studies with over 72,000 participants from 41 countries and identified ten types of positive activities that had significant effects on improving well-being or reducing ill-being (depression,

anxiety), specifically: gratitude, savoring, optimism and hope, using signature strengths, humor, kindness, positive writing, meaning making, forgiveness, and goal-setting.

Positive activities included in PPT involve (a) behavioral exercises intended to increase gratitude, kindness, and forgiveness, (b) cognitive/visualization exercises intended to direct one's attention to positive aspects of one's past, present, and future, and (c) communication exercises intended to improve relationships. Communication exercises, for example, include: strengths spotting (identifying and appreciating character strengths demonstrated in family members) and using an active-constructive response style to extend positive emotions when loved ones share good news (Rashid, 2015). The counselor provides psychoeducation about the role of negative, bitter thoughts and memories in perpetuating psychological distress, alongside information about how positive cognitions lead to positive emotions, build resources, and propel psychological growth. The counselor presents one or two positive activities in a session, and assigns practice assignments for the client to complete between sessions to either rehearse or complete the specific positive psychology tool.

Evidence of PPT Effectiveness

Initial studies of PPT with diverse samples using individual and group delivery formats with varying numbers of sessions reported reductions in depressive symptoms and increases in subjective well-being (Rashid, 2015). To date, positive psychotherapy has been evaluated in at least a dozen studies with adults, and a few with youths. Walsh et al. (2017) identified nine studies published in peer-reviewed journals that used PPT in clinical treatment of adults with depression, psychosis, or suicidal ideation. This synthesis of the available research drew attention to the fact that there was considerable variability in clinical use of PPT, with some but not all activities in the PPT protocol used and treatment often supplemented with additional exercises from CBT or positive psychology. Seshadri et al.'s (2021) meta-analysis of effects of novel treatments for adult depression concluded that PPT ($N = 4$ studies) has not yet

been examined in enough well-designed studies to afford definitive conclusions, but so far appears to be comparable to CBT in terms of effectiveness in reducing depression, with the most promising outcomes among adults with moderate depression (vs. mild or severe depression).

Rashid et al. (2013) reported mixed effects of PPT in initial use with a non-clinical sample of 22 middle school students randomly assigned to intervention (8 90-min group sessions of PPT) or no-treatment control. PPT was associated with increases in self-reported well-being and parent-rated social skills, but no effects on life satisfaction or depressive symptoms. Further modification and evaluation is needed to understand optimal levels of teacher and parent involvement in the youth-focused work in order to achieve positive results of PPT across academic, social, and mental health outcomes (Rashid et al., 2013). Mahmoudi and Khoshakhlagh (2017) evaluated positive psychotherapy relative to a delayed-intervention control with 30 high school students in Iran who were referred by school counselors and diagnosed with depression. The PPT condition involved 10 large group sessions with activities that addressed identification of personal strengths, forgiveness, gratitude, hope and optimism, relationship enhancement, and evocation of positive emotions. Analysis of self-report measures from pre- to post-intervention to 2-month follow-up indicated significant, lasting improvements in self-esteem and eudemonic well-being among the intervention group in relation to the control group. Examination of indicators of psychopathology was not reported. Taken together, initial evaluation of PPT when used with youths in school settings provides preliminary support for increases in hedonic and eudemonic well-being (Mahmoudi & Khoshakhlagh, 2017; Rashid et al., 2013), with evidence of a beneficial impact on ill-being restricted to studies with adults in clinical treatment (Furchtlehner et al., 2020; Seshadri et al., 2021).

Progress Monitoring in School Settings

Examining the outcomes of efficacy studies that feature experiments and comparison conditions (as described in the preceding sections) is useful

for identifying engagement and mental health interventions that are generally effective for K-12 students. However, evaluative data collected within the context of field-based support can help practitioners determine whether a given intervention is appropriate for their targeted population. When examining students' outcomes in everyday practice, educators and clinicians can utilize a variety of progress monitoring tools to assess a student's response to therapeutic interventions (see Renshaw et al., this volume). School mental health interventions should be evaluated using indicators of both well-being and ill-being, in accordance with a dual-factor model of mental health (Doll et al., 2021). Given the focus of this chapter, we highlight how the identified approaches can afford examination of indicators of student engagement as a critical aspect of treatment goals.

First, school mental health providers can examine naturally occurring school data such as office discipline referrals, incidents of in- and out-of-school suspensions, work completion status/rate, and student participation in social activities. Observational data may include (a) recording the extent to which students display on-task behaviors in the classroom and (b) noting how and to what extent students interact with peers and adults in the classroom or larger school setting. Finally, interventionists may utilize daily behavioral report cards and behavior rating scales as a mechanism to assess other adults' perceptions of the degree in which the student is displaying problematic or desired behaviors (Joyce-Beaulieu & Sulkowski, 2020).

These methods of data collection are consistent with assessing indicators of student engagement, as evidenced by students' display of problematic or adaptive behaviors, attendance patterns, and work completion rate (behavioral engagement) and social connections with peers and adults (affective engagement) (see Reschly et al., 2020). Joyce-Beaulieu and Sulkowski (2020) further explained that anecdotal accounts of students' growth are useful for determining their response to CBT interventions. Thus, inquiring about students' perceptions of the classroom and school environment may be another approach

to examining their affective and cognitive engagement. An example of such may include a student who views school and studying (an indicator of cognitive engagement) as meaningless at the beginning of treatment and later grows to appreciate school due to the implementation of cognitive restructuring, visualizing of one's best possible self in the future, or other CBT or PPT techniques.

Considerations for Supporting Marginalized and Overlooked Pupils

When supporting marginalized populations, it is important that educators take a culturally responsive approach. To this end, school mental health providers may use culturally relevant material, build upon students' cultural strengths, or help students cope with cultural-related challenges (Parker et al., 2021). For example, *Jóvenes Fuertes* is a validated version of the *Strong Teens* program that was designed for use with Latin* (Latinx) adolescents. The content includes lessons on ethnic pride (a cultural strength), in addition to using traditional CBT skills, such as cognitive reframing and problem-solving skills, to cope with acculturative stress. When delivered in a school setting, Castro-Olivo (2014) found that the intervention yielded significant effects on the students' social-emotional learning knowledge and social-emotional resiliency.

Still, this example and others we have provided thus far reflect mental health and student engagement interventions that support students directly. In recent years, more discussion has been accentuated in the professional literature about the limitations of addressing mental needs among marginalized populations at the client level alone. Scholars contend that restricting treatment to individual (and perhaps group-based) intervention does not fully address social determinants of mental health, such as systemic policies, practices, and social norms of discrimination that perpetuate ongoing disparate outcomes among people who are disenfranchised (Compton & Shim, 2015; Singh et al., 2017). Instead, individual approaches imply that clients

(or students) who are marginalized are solely responsible for the outcomes of their hegemonized treatment (see Galindo et al., chapter “Expanding an Equity Understanding of Student Engagement: The Macro (Social) and Micro (School) Contexts”, this volume, for a discussion of structural barriers to student engagement).

Case in point, LGBTQ+ youths are at a high risk of experiencing negative emotions and diminished mental health compared to their non-LGBTQ+ peers due to experiences of discrimination, victimization, isolation, and rejection (Russell & Fish, 2016; White et al., 2018). Consequently, LGBTQ+ youths reported higher levels of student engagement when they were surrounded by supportive, safe adults in their school setting (Seelman et al., 2012). Seelman et al. (2012) also found that indicators of affective (belonging and valuing of class content) and behavioral (being productive in school) engagement were significant predictors of decreased fear-based truancy for sexual minority youth with higher levels of subjective fear at school, providing additional evidence for the importance of fostering a positive school climate for this population.

Racial/ethnic minoritized youths represent another vulnerable population due to their encounter with racial discrimination in and out of school, and for some youths of color, exposure to neighborhood violence and inequitable access to mental health support (Alegria et al., 2010; Quirk, 2020; Rosenbloom & Way, 2004; Thomas et al., 2011; Tobler et al., 2013). It is then unsurprising that researchers have found significant, negative links between student engagement (e.g., school bonding, commitment in the school process) and discrimination, and positive associations between student engagement and social support in school settings among racial/ethnic minoritized students (Dotterer et al., 2009; Garcia-Reid et al., 2005). Taken together, it is incumbent upon school mental health providers to respond to their professional charge to advocate for antiracist and anti-discriminatory policies and practices in school settings.

As a final example of a subgroup potentially in need of additional attention, students who are enrolled in rigorous, accelerated courses will

likely be overlooked for mental health interventions due to the assumption that they require little support, particularly when they excel in academic courses (Suldo et al., 2014). On the contrary, high achieving students can very well experience mental health-related challenges, which may be exacerbated by high levels of academic-related stress associated with rigorous coursework or striving toward perfectionism due to their high academic ability (e.g., Mofield et al., 2016; Shaunessy et al., 2011; Stornelli et al., 2009). These students can be impacted by self-prescribed perfectionism, wherein students may set high personal standards for themselves, as well as socially prescribed perfectionism stemming from the perception that others (e.g., parents) demand perfectionism among the students (Fletcher & Speirs Neumeister, 2012; Hewitt & Flett, 1991). Like other groups of students, school mental health providers can use systematic screening to identify students enrolled in advanced coursework who may need additional support (Suldo et al., 2019b) mental health support, including by facilitating student engagement, may be especially critical for underrepresented students who may experience increased stress due to the workload in accelerated courses *and* due to the previous mentioned factors linked to racial discrimination.

Implications for Intervention Implementation

Overall, the aforementioned examples of Tier 1 approaches underscore the benefits of universal programs for addressing student engagement directly and indirectly through structured, mental health preventative efforts. Because lower levels of student engagement and diminished youth mental health are particularly pronounced during middle and high school, programs demonstrating positive outcomes across several age groups, especially at the elementary level, support the rationale for investing in youth mental health initiatives in the early stages of their education. Mental health approaches at the Tier 2 level are generally intended to be preventative as well, with the goal of minimizing the severity of initial

signs of psychopathology and academic challenges. Nevertheless, students receiving Tier 2 interventions may experience early indicators of significant mental health concerns, which warrants the use of more human capital, that is, adults from various occupational backgrounds providing short-term individual or small group support. As illustrated in the description of the *MAP* intervention, supplemental/targeted support can target student engagement and mental health indicators simultaneously to promote optimal student functioning. Some Tier 2 approaches can be provided by mentors/caregivers without a professional mental health background depending on the student's need.

This, then, reserves resources for the use of trained school mental health providers to address the needs of students who are particularly vulnerable to experiencing significant mental health challenges. As such, school-based mental health support at the Tier 3 level is more intensive due to the duration and highly individualized approach to treatment (Doll et al., 2014; Macklem, 2011; NASP, 2015). For example, positive psychotherapy requires 8–15 weekly sessions. Parker and colleagues (2016) provided a 6-month CBT intervention coupled with a 9-week behavioral intervention plan; and the intervention they executed was intended to meet the individual student's needs, as opposed to utilizing a standard treatment protocol that may have failed to address the specific challenges the student experienced.

Across all levels of interventions, student engagement can be targeted directly or indirectly through the use of empirically supported psychological strategies such as motivational interviewing, CBT, and positive psychology interventions that broaden-and-build resources that lead to student engagement and achievement. Finally, mental health support must reflect culturally sensitive practices that are responsive to marginalized youths' lived experiences. As impressed upon the readers in this chapter, responding to the needs of disenfranchised students must include the combination of student-based interventions and efforts to advocate for systemic changes to promote socially-just, equitable practices for all.

Directions for Future Research

We opened this chapter by describing and distinguishing modern conceptualizations of student engagement (i.e., behavioral, cognitive, and affective subtypes) and flourishing mental health (i.e., PERMA), and proceeded to summarize studies linking mental health to engagement and academic achievement. However, the separability of these multidimensional constructs is unclear, as is the directionality of the associations between them. Measurement studies are needed to determine if the general engagement aspect of PERMA is distinct from cognitive engagement for students, a developmental group for whom schooling is a primary focus of daily activity. Longitudinal research that tracks children and adolescents' levels of student engagement, mental well-being and ill-being, and academic achievement over time is needed to illustrate if associations are primarily reciprocal (e.g., Datu & King, 2018; Ng et al., 2015) or if instead deteriorations or improvements in one area (e.g., mental health) drive changes in another area such as student engagement, a pathway inferred by this chapter's emphasis on mental health interventions.

Experimental studies that evaluate the impact of school mental health interventions on student outcomes should include indicators of multiple student engagement subtypes, in part to permit determination of how the different foci of mental health interventions (e.g., treatment of psychopathology through CBT, fostering subjective well-being through positive psychology interventions) may impact different aspects of engagement. In addition to comprehensive assessment of student engagement and mental health (well-being and ill-being), data on distal academic outcomes via indicators of achievement (e.g., test scores, course grades, on-time graduation) should be collected to permit examination of intervention impact on those outcomes particularly relevant to administrative stakeholders who are responsible for decisions about resource allocation. Such efficacy studies should include sizeable representation of students from different gender, race/ethnicity, and socioeconomic groups to permit

crucial examinations of how subgroups of students based on their intersectional identities respond to interventions targeting mental health and engagement, including systemic and culturally adapted interventions. In addition to such large-scale efficacy studies, we need more case and field-based research examining links between mental health interventions and student engagement in real-world applications of evidence-based interventions to local contexts.

Summary

Student engagement is a multidimensional construct reflected in behavioral engagement (active participation in the learning environment), affective engagement (feelings during class and learning, perceptions of belongingness and connectedness at school), and cognitive engagement (valuing of education, use of self-regulated learning strategies; Fredricks et al., 2019). In this chapter, we present literature that documents associations between student engagement and optimal mental health defined in part by subjective well-being in line with a dual-factor model (Suldo & Doll, 2021). In accordance with Fredrickson's (2001) Broaden-and-Build theory, we establish the salience of positive emotions to student learning and engagement; positive emotions create an upward spiral marked by *broadening* of cognitive capacity and behavioral flexibility that in turn *builds* lasting personal social, psychological, and physical resources (Fredrickson, 2001). In short, positive emotions serve adaptive functions that lead to better outcomes including student engagement (Reschly et al., 2008). We maintain that the superior academic outcomes that stem from student engagement foster opportunities for students' positive experiences reflective of numerous elements of PERMA (e.g., accomplishment and relationships) that foster flourishing mental health (Carmona-Halty et al., 2019; Kwok & Fang, 2021; Ouweneel et al., 2011). In sum, positive emotions and student engagement foster competencies related to coping, strengths use, and social connections that are critical to healthy emotional development as well

as academic achievement. For such reasons, universal and targeted applications of the promising or evidence-based school-based interventions that are described in this chapter as created to improve student well-being or ameliorate ill-being might conceptualize student engagement as among the proximal outcomes, and expect positive effects on student engagement in addition to enhanced mental health outcomes.

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