REVIEW OF RESEARCH

Middle School Program

Introduction

Early adolescence is a time when students are developmentally primed to be especially sensitive to their peers (Steinberg, 2007). During this developmental period, students also experience increased intensity of emotions (Steinberg, 2007). This sometimes volatile combination can result in peer conflicts that disrupt the educational environment, interfere with learning, and cause emotional harm. A main goal of the Second Step Middle School Program is to equip students with the skills, knowledge, and mindsets they need to handle strong emotions, better understand and connect with their peers, and avoid or resolve serious conflicts. In addition, the program supports academic achievement by increasing social connectedness and growth mindset (the belief that intelligence can be developed) and contributes to a positive classroom and school climate overall.

Social Connectedness

Feeling a sense of social connectedness is a fundamental human need (Walton, Cohen, Cwir, & Spencer, 2012) and an important contributor to students' school success. Research shows that having a greater feeling of social connectedness increases academic achievement (Walton & Cohen, 2011), and when social connectedness is threatened, IQ performance drops (Baumeister, Twenge, & Nuss, 2002). The Second Step Middle School Program aims to strengthen social connectedness through social belonging lessons at the beginning of sixth grade and then again in eighth grade to help prepare students for the transition to high school. These lessons are designed to improve students' subjective sense of social connection by helping them form positive, helpful interpretations of common middle and high school social challenges (Walton, 2014). Research shows that it's important to prevent students from feeling like they don't belong or fit in when they encounter everyday social difficulties in a new school environment (Walton & Cohen, 2011). The social belonging lessons normalize common social difficulties by helping students understand that social challenges when entering a new school are temporary and usually get better, in part through help and support from other students and staff (Walton et al., 2012).

Values

Values can have a powerful influence on adolescents. In the Second Step Middle School Program, students are guided to think about their values and apply them in a variety of situations to improve decision making and cope with peer challenges and difficult thoughts and emotions. Reflecting on their values helps students feel more socially connected and prosocial, and this effect is actually stronger for youth who struggle with behavior problems (Thomaes, Bushman, de Castro, Cohen, & Denissen, 2009). Spending time focusing on their values can help students lower stress and reduce their tendency to stereotype peers (Sherman & Cohen, 2006). Values can also help students regulate their emotions (Tamir & Mauss, 2011). Interventions based on values can even improve students' grades (Bowen, Wegmann, & Webber, 2013; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009). Focusing on values can strengthen students' ability to maintain self-control—an important skill that helps students face many of the challenges of middle school. Certain challenges that require self-control can temporarily deplete the reserve of self-control that students need to address subsequent challenges; however, focusing on values can help students maintain higher levels of self-control (Schmeichel & Vohs, 2009).
Growth Mindset

Research on mindsets, or implicit theories, has focused on the effects of having a fixed (or entity) versus a growth (or incremental) mindset (Yeager, Paunesku, Walton, & Dweck, 2013). A mindset is a person’s beliefs about whether his or her abilities or characteristics are fixed, set, and unchangeable (fixed mindset), or malleable and capable of changing over time depending on circumstances and effort (growth mindset). A growth mindset has been shown to create an internal “psychological world” that promotes resilience (Yeager & Dweck, 2012). Second Step targets growth mindset in two arenas: intelligence (or the ability to do well in school) and personality.

Interventions to promote a growth mindset about intelligence and academic achievement have been shown to increase grades overall and increase the rate at which at-risk students pass their classes (Dweck, Walton, Cohen, Paunesku, & Yeager, 2011). Second Step content targeting growth mindset about intelligence is based closely on an intervention developed at Stanford University that’s been shown to be effective (Miu & Yeager, 2015). When students believe their intelligence and ability to do well in school are malleable and can grow and change based on experience and effort, it has a positive effect on many aspects of school-related behavior. Research shows that having a growth mindset about intelligence can affect students’ academic goals (they believe they can learn versus thinking they’re unintelligent), attitudes toward effort in school (they believe trying hard creates success rather than indicating a lack of ability), and how they respond to setbacks and difficulties (they try new strategies and work harder versus giving up) (Yeager & Dweck, 2012).

Students can also have a growth or fixed mindset about their own and other students’ personalities (Dweck et al., 2011; Miu & Yeager, 2015). When students have a fixed mindset about personality, they believe who people are and how they act is set and doesn’t change; this belief can strongly affect how they respond to peer conflicts and difficulties (Miu & Yeager, 2015). Students with a fixed mindset about personality are more likely to see their peers’ behaviors as resulting from how they “really are”—qualities that won’t change over time. They’re also more likely to believe that when others hurt or offend them, they do it on purpose. This is known as having a hostile attribution bias. Believing others’ personalities are fixed can increase students’ desire for revenge in conflict situations (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). Finally, having a fixed mindset about their own personality means students feel slights and insults more deeply, increasing the negative effects of bullying and peer rejection and exclusion. Having a growth mindset about their own and others’ personalities has been shown to improve how students respond to social exclusion and peer hostility and reduce depression (Miu & Yeager, 2015).

Emotion Management

Youth who have difficulties managing their emotions are more likely to be involved in aggression and substance abuse (Brady, Myrick, & McElroy, 1998; Wills, Walker, Mendoza, & Ainette, 2006; Vitaro, Ferland, Jacques, & Ladouceur, 1998; Hessler & Katz, 2010) and have a harder time behaving in socially skilled ways (Spinrad et al., 2006). Students with poor emotion-management skills are also prone to acting impulsively on their emotions rather than using problem-solving skills, such as analyzing situations, anticipating consequences, and planning (Donohew et al., 2000; Simons, Carey, & Gaher, 2004). Better emotion management helps students cope with problems in more effective ways (Zalewski, Lengua, Wilson, Trancik, & Bazinet, 2011).

Emotional awareness and knowledge are important contributors to positive development. The Second Step Middle School Program helps increase students’ emotion knowledge by teaching them to notice their emotions and reflect on what actions the emotions are making them feel like taking. Greater emotion knowledge improves social competence and decreases both internalizing and externalizing problems (Trentacosta & Fine, 2010).

Research shows that children and adolescents can learn a variety of strategies to manage their emotions (Metz et al., 2013; Wyman et al., 2010) and cope with stressful situations. For example, they may learn techniques to distract themselves, relax, or deliberately alter their thoughts and self-talk in an emotional situation. Teaching students to recognize strong feelings and use positive
strategies to stay in control are effective ways to increase coping and reduce aggression and other problem behaviors in both the short and long term.

Second Step emotion management lessons emphasize coping effectively with situations that provoke strong feelings. Students are taught proactive strategies, such as deep, centered breathing and positive self-talk to prevent negative feelings from escalating into negative behavior. The ability to keep from responding emotionally enables students to employ many of the other skills taught in the program, such as perspective taking and problem solving.

In addition to more traditional emotion-management and calming-down strategies, the Second Step Middle School Program helps students learn to be more aware of their emotions without having to act on them. Research increasingly shows that efforts to avoid experiencing unpleasant emotions actually increase emotional difficulties (Hayes & Wilson, 1994; Plumb, Orsillo, & Luterek, 2004; Shahar & Herr, 2011; Shalcross, Troy, Boland, & Mauss, 2010). Practicing noticing emotions without immediately acting on them helps students gain impulse control and step back from emotional experiences in ways that can increase their ability to choose how to respond, rather than simply reacting to situations (Hayes, Pistorello, & Levin, 2012; Teasdale et al., 2002).

Consciously practicing emotion-management techniques can result in more automatic use of strategies and techniques (Bargh & Chartrand, 1999). Research also supports using implementation intentions—plans to take an action toward a goal when prompted by a specific cue—as a way to make positive responses to strong emotions more automatic (Eder, 2011; Gallo, Keil, McCulloch, Rockstroh, & Gollwitzer, 2009). Emotionally challenging situations for middle school students often involve peers and require students to respond quickly to both emotions and provocations. The kind of stress common to middle school peer conflicts can hinder cognitive processing, making more automatic responses potentially more effective (Williams, Bargh, Nocera, & Gray, 2009). Planning ahead and forming implementation intentions for how to respond to powerful emotions and emotionally charged interactions can help students react to emotional situations quickly yet effectively (Hopp, Troy, & Mauss, 2011; Webb, Schweiger Gallo, Miles, Gollwitzer, & Sheeran, 2012).

Perspective Taking

Being able to identify, understand, and respond in a caring way to how someone is feeling provides the foundation for helpful and socially responsible behavior, friendships, cooperation, coping, and conflict resolution (Batanova & Loukas, 2014). As children mature into adolescence, they develop an expanded self-awareness and social awareness that includes a greater ability to understand and respond to what other people are feeling and an improved ability to see things from others’ perspectives.

Youth with better perspective-taking skills are more likely to offer emotional support to others (Litvack-Miller, McDougall, & Romney, 1997), and adolescents with more empathy report behaving more helpfully than peers with less empathy do (McMahon, Wernsman, & Parnes, 2006). Youth who develop these empathy and perspective-taking skills are also less likely to be physically, verbally, and indirectly aggressive to peers (Kaukiainen et al., 1999). In general, research shows that empathy reduces aggressive behavior in children and adolescents (Salmivalli, 2010; McDonald & Messinger, 2011; Roberts, Strayer, & Denham, 2014). Whereas adolescents with lower levels of empathy are more likely to join in bullying, those with higher levels of empathy are more likely to help victims of bullying. Perspective taking has been shown to reduce bullying among middle school students (Espelage, 2010).

Decades of research have established that aggression is fueled in part when adolescents have a hostile attribution bias (Yeager, Miu, Powers, & Dweck, 2013; Dodge, Coie, & Lynam, 2006). This is the tendency to assume peers have hostile intent, particularly in ambiguous situations (Arsenio, Adams, & Gold, 2009). When students develop and use perspective-taking skills, it can help them see others’ intentions more accurately, potentially reducing hostile attributions (Van Cleemput, Vandebosch, & Pabian, 2014).

Experiencing others’ suffering can sometimes result in empathic distress, the inability to cope with the perceived pain of another (FeldmanHall, Dalglish, Evans, & Mobbs,
2015). This can motivate adolescents to focus more on escaping the feelings than helping the person in need. Some Second Step lessons are intended to help students be more aware of and able to tolerate difficult emotions, which should strengthen the likelihood that empathy and perspective taking will result in compassionate action.

Values also serve an important role in strengthening the link between perspective taking and positive actions toward peers. When students have a commitment to showing care and concern for others and treating them with respect, it increases positive behavior toward others, especially when students have more empathy (Wilhelm & Bekkers, 2010; Yeager, Paunesku, Walton, & Dweck, 2013).

**Implementation Intentions**

Goal setting is important in itself, but setting a goal doesn't always include specifying what action or actions to take toward the goal, or when, where, and how to take the action. Extensive research has shown that implementation intentions help people accomplish goals (Gallo & Gollwitzer, 2007). In the Second Step Middle School Program, students are taught to form implementation intentions by creating If–Then Plans, in which the “If” is a specific cue they expect to encounter and the “Then” is the action they want to carry out. Setting an implementation intention helps students be specific about what they want to do. It also helps them carry out that action by linking it to a specific cue—something concrete that can trigger them to act. Research has established that implementation intentions facilitate the achievement of goals well above and beyond simple goal setting by itself (Gollwitzer & Sheeran, 2006).

Implementation intentions make it easier for students to follow through on a plan (Bargh, Gollwitzer, & Oettingen, 2010). They are powerful in part because they help make positive actions more automatic, reducing the need for willpower and self-control, which have been shown to be temporarily depletable resources (Gollwitzer & Sheeran, 2006). By using this strategy, students can think about challenging situations they’re likely to encounter and make a thoughtful plan ahead of time about how to respond. Implementation intentions create a mental association between the cue and the action, which results in the cue serving as a trigger for the student to carry out the action. This process makes doing the action more like a habit than a conscious effort.

Although implementation intentions are fairly simple, they have been shown to be just as effective with difficult goals as with easy goals (Gollwitzer & Sheeran, 2006). In addition, implementation intentions are especially effective for students with self-regulation challenges (Bargh, Gollwitzer, & Oettingen, 2010). Across multiple Second Step lessons, students are prompted to form implementation intentions to help them carry out plans and accomplish goals they develop for themselves. Self-generated plans are important because implementation intentions are more effective for intrinsically motivated goals than extrinsically motivated goals (Gawrilow & Gollwitzer, 2008).

**Conclusions**

The Second Step Middle School Program helps early adolescent students cope with challenges, create and maintain positive relationships, and succeed both socially and academically. The engaging lessons equip students with the mindsets, knowledge, and skills they need to handle strong emotions, make and follow through on good decisions, and create strong friendships while avoiding or de-escalating peer conflicts.
References


