

EXAMINING THE RELATIONSHIP BETWEEN SELF-ESTEEM, MATTERING, SCHOOL CONNECTEDNESS, AND WELLNESS AMONG MIDDLE SCHOOL STUDENTS

With data collected from 254 middle grade (5-8) students enrolled in a rural, southern school district, this study sought to determine the influence of self-esteem, mattering, and school connectedness on students' overall wellness. Using a two-step hierarchical multiple regression analysis, the author found that school connectedness significantly improved the amount of variance in student wellness accounted for by self-esteem and mattering alone. This article provides implications for future research and suggestions for school counseling practice in light of these results.

Early adolescence (defined as ages 11-13) is a pivotal stage in the development of young people. As youth transition out of childhood, they begin facing several challenges related to the psychological, behavioral, emotional, and cognitive changes associated with adolescence (Rowley, Roesch, Jurica, & Vaughn, 2005). Furthermore, during this time of transition, adolescents begin to learn new behaviors that may either promote health and social adaptation or seriously undermine adjustment in later adolescence and adulthood (Stormshak et al., 2011; Wynne, Ausikaitis, & Satchwell, 2013).

Although most individuals experience adolescence as a relatively healthy period, a growing number of children are facing significant challenges during their adolescent years. When these challenges go unaddressed, they can leave some adolescents vulnerable to making unhealthy decisions, potentially resulting in the emergence of myriad behavioral health issues such as depression, anxiety, eating disorders, substance abuse, and suicidal ideation (Guo, Nguyen, Weiss, Ngo, & Lau, 2015; Watson & Lemon, 2011). Recent statistics released by the World Health Organization (WHO; 2017), show an estimated 10-20% of adolescents worldwide experiencing mental disorders, and nearly half of all diagnosed mental illnesses beginning by age 14.

Although the number of adolescents developing symptoms placing them at risk for mental health problems is increasing, few of these individuals seek out professional help. Approximately 18-35% of diagnosed adolescents are actively receiving services to address their various mental health issues

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(Gulliver, Griffiths, & Christensen, 2010; Jörg et al., 2016). The rest either forgo needed care or lack access to available services (Coles et al., 2016). Based on this underutilization of community mental health services, several scholars have identified schools as the primary setting for addressing adolescent mental health issues (Brown, Dahlbeck, & Sparkman-Barnes, 2006; Collins, 2014; Walley & Grothaus, 2013; Wynne et al., 2013). School counselors' immediate access to students with mental health issues makes them a well-positioned resource capable of providing the mental and behavioral health services that otherwise might not be accessible or available to these children (Collins, 2014). Furthermore, preventive services provided by school counselors as part of a comprehensive school counseling program may buffer the development of future mental health issues among at-risk youth.

Per the American School Counselor Association (2015), "school counselors recognize and respond to the need for mental health and behavioral prevention, early intervention and crisis services that promote psychosocial wellness and development for all students" (p. 57). One approach school counselors can take to meet this charge and deliver much needed responsive and preventive services is to incorporate a strength-based wellness model into their existing school counseling curricula (Briggs, Gilligan, Staton, & Barron, 2010; Holcomb-McCoy, 2005; Villalba & Myers, 2008). As described by Myers, Sweeney, and Witmer (2000), wellness is best viewed as a multidimensional construct in which mind, body, and spirit are integrated in a purposeful manner with a goal of living life more fully. Wellness and illness are not opposite ends on the same continuum; individuals can perceive themselves as being well and still exhibit symptoms of mental illness. However, a connection between wellness and illness exists; researchers have demonstrated that a positive outlook on life relates to a reduction in the intensity and

duration of illnesses, both physical and mental (Manderscheid et al., 2010). Although multiple theories and models of wellness have been created, most fail to capture the true holistic nature of individual wellness. One model that has shown promise, and is grounded in the counseling literature, is the evidence-based Indivisible Self Model of Wellness (IS-Wel; Myers & Sweeney, 2005).

PREVENTIVE SERVICES PROVIDED BY SCHOOL COUNSELORS AS PART OF A COMPREHENSIVE SCHOOL COUNSELING PROGRAM MAY BUFFER THE DEVELOPMENT OF FUTURE MENTAL HEALTH ISSUES AMONG AT-RISK YOUTH.

Since its creation over 10 years ago, support for the IS-Wel model has grown exponentially. Developed through structural equation modeling of a large database (Hattie, Myers, & Sweeney, 2004), the IS-Wel model reflects a strength-based, choice-oriented, multidimensional approach emphasizing the interconnectedness of various dimensions of an individual's life. Conceptually, the factor structure of the IS-Wel incorporates three levels of dimensions. At the center of the model is the higher order factor labeled as Total Wellness. According to Myers (1992), total wellness is best conceptualized as each individual's drive and ambition to achieve maximum functioning that encompasses the mind, body, and spirit. Comprising this higher order total wellness factor are five second order factors labeled Creative Self, Coping Self, Essential Self, Social Self, and Physical Self. Each of these second order factors was conceptualized and labeled through a series of confirmatory and factor analyses performed on the 17 discrete wellness dimensions identified in previous wellness research (Hattie et al., 2004; Sweeney & Witmer, 1991). With these three dimension levels, various local, institutional, global, and chronological contextual variables also play an important role in the model.

Although wellness dimensions appear hierarchically in the IS-Wel model, researchers agree that wellness is best understood as residing on a continuum with synergy existing between the identified wellness domains (Roscoe, 2009). Consequently, when counselors emphasize individuals' strengths and improve wellness in one area, they are potentially contributing to enhancements or reductions in wellness in

other areas (Myers & Sweeney, 2008; Myers, Wilse, & Villalba, 2011).

Although wellness develops across the lifespan, its promotion during adolescence is especially important if individuals are to be healthy and well throughout their lives (Makinson & Myers, 2003). As such, educators have applied successful interventions based on the IS-Wel model with both children (Villalba & Myers, 2008) and adolescents (Makinson & Myers, 2003; Smith-Adcock, Webster, Leonard, & Walker, 2008) at the elementary, middle, and secondary school levels. However, despite the noted importance of wellness promotion among adolescents and a growing interest in infusing wellness-based interventions into comprehensive school counseling programs (Hartwig Moorhead, Green, McQuiston, & Ozimek, 2008; Villalba & Borders, 2005), researchers remain challenged in their efforts to uniformly define the concept of adolescent wellness and positively identify the individual factors instrumental in promoting adolescent well-being (Spurr, Bally, Ogenchuk, & Walker, 2012). In the handful of studies conducted among this population, self-esteem and mattering consistently have been identified as two of the more salient constructs thought to influence and affect psychological and psycho-

social wellness in adolescence (Dixon Rayle, 2005; Dixon Rayle & Myers, 2004; Lemon & Watson, 2011; Myers et al., 2011; Perepiczka, 2009; Smith-Adcock et al., 2011).

SELF-ESTEEM

Self-esteem refers to the evaluative feelings individuals have about themselves (Bosson, Brown, Zeigler-Hill, & Swann, 2003). Individuals with high self-esteem generally view themselves in positive terms, believing they have worth and are valued and respected by others. These individuals feel empowered to take charge of their lives and grow in healthy and productive ways. Individuals with low self-esteem often view themselves in negative terms, are dissatisfied with their life, and are self-deprecating in their thoughts, actions, and communication with others. The feelings of incompetence these individuals have often prevent them from making changes in their lives that help them grow. According to Erol and Orth (2011), self-esteem is more variable and less stable during early adolescence (the middle school years) than late adolescence or young adulthood.

as a significant correlate of wellness (McLoughlin & Kubrick, 2004; Myers et al., 2011; Smith-Adcock et al., 2008).

MATTERING

Mattering can be defined as “the feeling that others depend upon us, are interested in us, are concerned with our fate, or experience us as an ego-extension” (Rosenberg & McCullough, 1981, p. 165). Within this context, two forms of mattering exist: interpersonal mattering and societal or general mattering. Interpersonal mattering reflects an individual’s perceptions of how they matter to specific persons in their life. Although societal or general mattering also relates to perceptions of mattering to others, the concept includes an individual’s perceptions that they are making a difference in the world they live in. To better conceptualize mattering, Marshall (2001) developed a framework that illustrates how mattering perceptions impact an individual. In her framework, individuals derive their sense of mattering from the quality and quantity of attention they receive from others. The more attention individuals

adolescents, for whom recognition and validation from others play a critical role in identity formation (Dixon, Scheidegger, & McWhirter, 2009; Dixon Rayle & Myers, 2004; Marshall, 2001; Rosenberg, 1985; Rosenberg & McCullough, 1981). Using this theoretical relationship as a framework, both Dixon Rayle (2005) and Marcus (1991) found evidence supporting the existence of significant positive relationships between general mattering and holistic wellness among adolescents. Similarly, Marshall (2001) found that adolescents’ perceptions of mattering to their parents, friends, and family was positively correlated with relatedness and purpose in life, and ultimately with making decisions promoting holistic wellness. Following from the work of previous researchers, mattering was added to this study and examined as a potential predictor variable.

SCHOOL CONNECTEDNESS

Another potential predictor of adolescent wellness is *school connectedness*. The concept of school connectedness has existed for over two decades, but only recently has it started receiving increased attention in the professional literature. First conceptualized by Goodenow (1993) in the early 1990s, the term school connectedness was operationally defined by the Center for Disease Control and Prevention (CDC; 2009) as the “belief by students that adults and peers in the school care about their learning as well as about them as individuals” (p. 3). Expanding on this conceptualization, Monahan, Oesterle, and Hawkins (2010) viewed school connectedness as consisting of two primary and interdependent components: attachment and commitment. Attachment refers to the strength of the relationships students have with those at school and commitment refers to their investment in school and academic success. Rather

A CONNECTION BETWEEN WELLNESS AND ILLNESS EXISTS; RESEARCHERS HAVE DEMONSTRATED THAT A POSITIVE OUTLOOK ON LIFE RELATES TO A REDUCTION IN THE INTENSITY AND DURATION OF ILLNESSES, BOTH PHYSICAL AND MENTAL.

Despite its instability, self-esteem plays a critical role in the identity development of adolescents and serves as an important marker of general well-being. Adolescents with lower levels of self-esteem often have an increased risk for experiencing a variety of negative outcomes such as emotional difficulties, health problems, increased psychopathology, and interpersonal problems (Adams, Kuhn, & Rhodes, 2006). Thus, researchers have identified the self-esteem construct

receive, the more they believe they matter. As Elliott, Kao, and Grant (2004) noted, mattering reflects our feelings and beliefs that we make a difference in the lives of other people and that we are significant to the world around us. In other words, our presence makes an impact and is noticed by others.

In previous studies, a sense of mattering to specific other people has been described by researchers as an important component of one’s psychosocial well-being, especially among

than viewing school connectedness as a dichotomous construct, Monahan et al. (2010) favored viewing it as existing on a continuum, with higher degrees of school connectedness being associated with positive student outcomes and lower degrees being associated with negative student outcomes. Students who felt strongly connected to their school were less likely to engage in delinquent or violent behavior, had better academic outcomes, and experienced lower levels of emotional distress (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; McNeely, Nonnemaker, & Blum; 2002). Those who felt little to no connection were more likely to experiment with drugs and alcohol, be at an increased risk of teen pregnancy, and experience suicidal thoughts or attempt suicide (Brookmeyer, Fanti, & Henrich, 2006; Resnick et al., 1997).

Although connecting students to school is important at all grade levels, it becomes especially crucial during the adolescent years when students begin relying less on their parents and family members and more on their school peers to establish their sense of self (Blum, 2005). Because adolescents spend more time in school than in any other context, school connectedness has been associated with several behavioral, emotional, and academic outcomes in adolescence. Specifically, researchers have begun identifying school connectedness as a salient factor in reducing the likelihood that adolescents will engage in health-compromising behaviors (Blum, 2005; Millings, Buck, Montgomery, Spears, & Stallard, 2012) and in improving students' perceptions of personal adolescent well-being (Ashley, Ennis, & Owusu-Ansah, 2012). Furthermore, multilevel mediation analyses have revealed positive relationships between school connectedness and both student self-esteem (Zhang et al., 2016) and mattering (Thompson, Iachan, Overpeck, Ross, & Gross, 2006). Given that positive relationships have been noted between self-esteem, mattering, and school connectedness, and each of these constructs individually has been

shown to be predictive of wellness, an investigation of their collective contributions to adolescent wellness is worth examining and is the focus of this current study.

PURPOSE OF THE CURRENT STUDY

Despite the fact that school connectedness has been found to negatively predict delinquency and health-risk behaviors, a review of the literature did not identify any studies in which researchers examined the relationship between school connectedness and holistic wellness. Therefore, the purpose of this study was to explore the influence of school connectedness on the holistic wellness of middle school

Most the students who participated in the study identified as White ($n = 152$, 59.8%), with the remainder identifying as either African American ($n = 68$, 26.8%), Asian American ($n = 9$, 3.5%), Hispanic ($n = 9$, 3.5%), or Native American ($n = 16$, 6.3%). Looking at family structure, 55.5% of the students ($n = 141$) reported living with both biological parents, 29.9% ($n = 76$) reported living in a blended family with a biological parent and stepparent, and 14.6% ($n = 37$) reported living with only one parent. In terms of ethnicity, percentages within the sample were comparable to district-wide numbers reported by the school district. However, with respect to gender, the percentage of females in this sample was higher than the percentage of female students across all four middle schools in the district (62.2% to 51.8%).

WHEN COUNSELORS EMPHASIZE INDIVIDUALS' STRENGTHS AND IMPROVE WELLNESS IN ONE AREA, THEY ARE POTENTIALLY CONTRIBUTING TO ENHANCEMENTS OR REDUCTIONS IN WELLNESS IN OTHER AREAS.

students above and beyond what is already known about the predictive abilities of self-esteem and mattering from previous research. Specifically, the author examined the following research question: to what extent can the variance in holistic wellness be accounted for by middle school students' sense of school connectedness after controlling for the constructs of self-esteem and mattering?

METHOD

Participants

The author recruited participants for this study from four middle schools (grades 5-8) located in a rural school district in the southern United States. The sample included 96 (37.8%) boys and 158 (62.2%) girls. Students' ages ranged from 10 to 14, with an average age of 11.47 years ($SD = 1.03$).

Using the G*Power 3.1 statistical power analysis program (Faul, Erdfelder, Lang, & Buchner, 2007), the author conducted an a priori power analysis to determine the minimum number of participants needed to establish statistical power for this research design at the .80 level given $\alpha = .05$. The results of this power analysis indicated that a minimum sample size of 77 participants was necessary to detect a moderate effect ($f^2 = .15$) of predictor variables for estimating change among the criterion variable. Based on this finding, the sample of 254 participants used in the current study is sufficient to explain relationships between predictor and criterion variables.

Instruments

Participants completed a collection of four survey questionnaires and a demographic data sheet. The demo-

graphic data sheet asked students to indicate their age, gender, ethnicity, family structure, number of siblings, and general performance in school (typical grades received). Survey questionnaires used included the following:

Five Factor Wellness Inventory-Teenage Version (5F-Wel-T; Myers & Sweeney, 2005). The 5F-Wel-T was included to assess participants' current state of holistic wellness. Developed through structural equation modeling, the 5F-Wel-T was designed to assess the factors comprising the Indivisible Self model of wellness among adolescents. The instrument contains two demographic items and 97 items that ask participants to respond to a series of behavioral or attitudinal statements (e.g., "I make time for leisure activities that I like" and "I can find creative solutions to hard problems") using a 4-point Likert-type scale with values ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Researchers obtain a raw score for each factor scale

SCHOOL CONNECTEDNESS IS DEFINED BY THE CDC AS THE "BELIEF BY STUDENTS THAT ADULTS AND PEERS IN THE SCHOOL CARE ABOUT THEIR LEARNING AS WELL AS ABOUT THEM AS INDIVIDUALS."

by summing the scores of all items comprising that scale. For comparative purposes, raw scale scores are then converted to a common metric using a simple linear transformation process that results in each being placed on a common metric ranging from 25 to 100, where higher scores are indicative of higher levels of wellness. Overall, the 5F-Wel-T provides scores for a single higher order factor of Total Wellness, five second order factors of the Self (Creative, Coping, Essential, Social, and Physical), and 17 third order factors. Because of the high correlations among the second and third order 5F-Wel factors, only the higher order Total Wellness factor was used as the index of student wellness in this study. Using the 5F-Wel-T, Myers and

Sweeney (2005) reported a Cronbach's alpha coefficient of .91 for the higher order Total Wellness scale.

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES was included to assess participants' global self-esteem. The 10-item self-report instrument asks participants to rate their level of agreement with several statements related to their feelings about themselves (e.g., "On the whole, I am satisfied with myself"). Ratings are made using a 4-point Likert-type scale with values ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). Because of negative wording, half of the items are reverse scored. Item scores are then totaled to produce a composite measure of self-esteem ranging between 0 and 30, with higher scores indicating higher self-esteem. During initial validation studies, Rosenberg (1979) noted strong internal reliability for the instrument as evidenced by a computed Cronbach's alpha coefficient of .92.

General Mattering Scale (GMS; Marcus, 1991). The GMS is a five-item scale that the author used to assess participants' beliefs that they matter to others. Participants respond to a series of questions (e.g., "How much do you feel other people pay attention to you?") using a 4-point Likert-type scale with values ranging from 1 (*not at all*) to 4 (*very much*). Scores on the GMS can range from 5 to 20, with higher scores reflecting higher perceptions of mattering. In a study using a sample of 462 adolescents, Dixon Rayle and Myers (2004) reported a Cronbach's alpha coefficient of .74 for the GMS.

School Connectedness. The author assessed perceptions of connectedness with school using a subset of questions

found in the National Longitudinal Study of Adolescent Health. This study explored the determinants of health and health-related behaviors among adolescents across the United States (Resnick et al., 1997). This subset of questions was collectively referred to as school connectedness. Participants responded to each of the six questions in this subset using a 5-point Likert-type scale with values ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores on each item were then summed to produce a total score related to school connectedness ranging between 6 and 30. A Cronbach's alpha coefficient of .76 was found for the school connectedness subset of questions (Resnick et al., 1997).

Procedure

After receiving permission from the district superintendent to conduct this research project, the author sought and received IRB approval from his host university. Parental consent forms were distributed to all students in grades 5-8 at three of the district's middle schools. The forms detailed the scope of the project, what students were being asked to do as participants, and how information would be used and participant anonymity would be ensured. Parents were given a week to review the consent document and decide if they were willing to let their child participate. At the end of the week, signed consent forms were collected and a list of study-eligible students was created. These students were then approached and asked if they would be willing to participate in a research study that their parents had already been informed of and approved. Those students who expressed a willingness to participate were given a copy of the survey questionnaire and asked to respond to each item honestly and to the best of their ability. When finished, students were asked to return their completed surveys to the research assistant assigned to processor survey administration. Although a total of 287 parental consent forms were returned (representing 32.8%

of the available student population at these schools), 33 students either chose not to participate or discontinued their participation prior to completion, resulting in the final 254-student sample used in this study.

RESULTS

Preliminary analyses

First, the author computed descriptive statistics and alpha coefficients for each scale used in the study (see Table 1). Next, he tested the assumptions of multiple linear regression models. To assess the assumptions of linearity and homoscedasticity, he inspected standardized residual plots. To assess the assumption of normality, he inspected Q-Q plots and computed a Kolmogorov-Smirnov goodness-of-fit test. To assess for multicollinearity, the author examined bivariate correlations and variance inflation factors (VIF; see Table 2). The results of these preliminary analyses indicated no evidence suggesting that these assumptions had been violated. Thus, the data were appropriate to analyze using a multiple linear regression.

Primary analysis

To test the hypothesis that student wellness is a function of mattering, self-esteem, and school connectedness, the author performed a two-step hierarchical multiple linear regression (HMLR) analysis, the results of which appear in Table 3. HMLR is a way to demonstrate whether variables of interest explain a statistically significant amount of variance in an outcome variable after accounting for the variance contributed by other known variables. In the first step, the author added self-esteem and mattering to the model simultaneously as known predictor variables with wellness as the criterion based on research findings establishing the relationship between these variables. The linear combination of these two predictor variables explained a significant portion of the variance in adolescent wellness, $F(2, 245) = 66.16, p < .001; R^2 = .35$

TABLE 1 DESCRIPTIVE STATISTICS AND ALPHA COEFFICIENTS FOR ALL STUDY VARIABLES

Variable	M	SD	Range	α
General Mattering Scale (GMS) score	15.49	3.06	6-20	.75
Rosenberg Self-Esteem Scale (RSES) score	20.34	4.68	2-30	.92
School Connectedness score	22.26	5.32	8-36	.81
Total Wellness (5F-Wel-T) score	80.18	9.14	54.55-96.10	.93

TABLE 2 INTERCORRELATIONS AND VARIANCE INFLATION FACTORS (VIF) FOR PREDICTOR AND CRITERION VARIABLES

Variable	1	2	3	4	VIF
1. Mattering	–	.52	.46	.48	1.61
2. Self-Esteem		–	.29	.54	1.38
3. School Connectedness			–	.51	1.28
4. Wellness				–	

TABLE 3 SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR VARIABLES PREDICTING TOTAL WELLNESS

Variable	β	T	sr^2	R	R^2	ΔR^2
Step 1				.59	.35	.35
Mattering	.28	4.45*	.05			
Self-Esteem	.40	6.63*	.12			
Step 2				.44	.43	.08
Mattering	.13	2.16*	.01			
Self-Esteem	.38	6.70*	.10			
School Connectedness	.34	6.17*	.09			

Note. $N = 254; *p < .05$

(adjusted $R^2 = .35$). Specifically, both self-esteem and mattering were positively correlated with student wellness. In the second step, the author added school connectedness to the model as a predictor variable to explore whether this variable of interest significantly

improved the amount of explained variance in adolescent wellness attributed to the linear model. The inclusion of school connectedness resulted in a significant portion of the variance in adolescent wellness being explained by the linear combination of the three

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predictor variables, $F(3, 244) = 63.45$, $p < .001$; $R^2 = .44$ (adjusted $R^2 = .43$). Like self-esteem and mattering, school connectedness was also positively correlated with adolescent wellness. Following Cohen's (1992) recommendation that unique contributions to the overall variance of a model are indicated by ΔR^2 values $\geq .02$, the computed ΔR^2 value of .08 in this study indicates that school connectedness is a significant predictor of adolescent wellness after controlling for both self-esteem and mattering.

DISCUSSION

The purpose of this study was to explore the influence of school connectedness on the holistic wellness of middle school students above and beyond what was already known from previous research examining self-esteem and mattering. Among adolescents, poor wellness has been associated with delinquent behaviors and psychosocial issues, and adolescent wellness serves as a reliable precursor for adult levels of wellness (Hartwig Moorhead et al., 2008). Consequently, school counselors are tasked with finding creative ways to enhance the wellness of the students with whom they work. The findings from this study highlight the value of school counselors fostering school connectedness as another way of enhancing adolescent wellness. In the computed hierarchical regression model, the variable of school connectedness explained an additional 8% of the variance in adolescent wellness after controlling for self-esteem and mattering. In this study, students reporting a greater degree of connectedness to their school generally had higher reported wellness

scores. Coupling school connectedness with the strong predictive ability of self-esteem and mattering, school counselors should consider developing lessons and establishing student learning outcomes addressing these constructs as part of a comprehensive guidance curriculum focused on improving students' holistic wellness.

In addition to promoting school connectedness as a means of improving adolescent wellness, the results of this study also support the continued focus on self-esteem and mattering with adolescents. Entered into the hierarchical regression analysis as controlled variables, self-esteem and mattering collectively predicted 35% of the variance in adolescent wellness. The significance of these predictors highlights the need for school counselors to continue using evidence-based comprehensive programs like Student Success Skills (SSS; Brigman, Campbell, & Webb, 2010), which have demonstrated ability in helping students develop the cognitive, social, and self-management skills to feel more secure in who they are and improve their sense of school connectedness (Lemberger & Clemens, 2012; Lemberger, Selig, Bowers, & Rogers, 2015).

Study Limitations

This study was not without its limitations. Therefore, readers are encouraged to consider the results reported in this article within the context of the limitations inherent in the design and implementation of the study. First, the use of a convenience sample might limit the generalizability of the results. Although the sample was diverse in terms of race/ethnicity, data were from a single rural southern school district. Second, participation was restricted to those students whose parents provided

consent for their participation and who themselves agreed to participate. Students who willingly agree to participate in a study of this nature may inherently feel a stronger connectedness to their school. Third, all data were collected using self-report questionnaires. Responses may be influenced by students lacking introspective ability or outright trying to portray themselves in a more favorable manner. Finally, because self-esteem reflects a subjective account of how much a person likes himself or herself, the heightened scrutiny and emotional lability associated with adolescence may result in unstable personal assessments. One day adolescents may feel good about themselves and the next feel completely inadequate. In light of these limitations, the results provide valuable insight to school counselors conducting wellness-based programs.

Implications for School Counselors

The results of this study suggest that addressing school connectedness might be a worthwhile activity for school counselors, and further research is needed to identify best practices for doing so. According to the CDC (2009), students are more likely to engage in healthy behaviors and succeed academically when they feel connected to their school. In addition to the positive relationship to holistic wellness found in this study, school connectedness also has been found to be one of the strongest protective factors for boys and girls in decreasing substance use, curbing school absenteeism, reducing acts of violence, and minimizing the risk of unintentional injury, and it is the second most important protective factor against emotional distress, disordered eating, and suicidal ideation and attempts (Resnick et al., 1997). Recognizing the relationship between school connectedness and adolescent wellness, school counselors might consider including several of the effective strategies for promoting school connectedness identified by the CDC (2009) in their wellness-based guidance curricula. The following recommendations are

offered to assist school counselors in integrating a discussion of school connectedness in their current work and assessing its impact on student wellness.

Implementing joint decision-making processes that facilitate student engagement and academic achievement has proven to be one of the more effective strategies for increasing students' sense of school connectedness (CDC, 2009; Sulkowski, Demary, & Lazarus, 2012). For students to feel connected to their school, it is important for them to feel some sense of control over how the school operates and what the experience attending school is like. The school counselor could conduct a needs assessment to determine what changes or modifications students would like to see either to the school's physical environment or institutional culture that would make it more pleasant. School counselors could also plan campus-wide activities to encourage students to develop friendships with others at the school and begin feeling like part of a larger community.

Another strategy involves providing opportunities for families to become more active in their children's academic and school life. Regular communication with parents and guardians helps inform them of what is going on at the school and how they can help create a continuous learning environment for their children (e.g., emailing parents ideas and tips for following up on classroom guidance activities initiated at school). As part of efforts to build school-family-community partnerships (Bryan & Henry, 2012), school counselors could conduct parent workshops teaching behavior management skills or sharing ideas for creating a more supportive learning environment that promotes child academic development. Increasing parental involvement often increases student engagement by extension (Mo & Singh, 2008).

Providing students with the academic, emotional, and social skills necessary to be actively engaged in school is another valuable strategy. By working with students in small groups

on such topics as improving their interpersonal skills, solving problems, managing stress, making wise decisions, and communicating effectively, school counselors equip students with the life skills needed to succeed not only at school, but in life. School counselors also can promote prosocial behavior among students by providing opportunities to engage in service learning projects, community outreach events, and other school-sponsored extracurricular activities. While school counselors already perform many of these interventions as part of their comprehensive school counseling program, the author encourages adding a more focused assessment plan addressing the impact these activities have on students' perceptions of self-esteem, mattering, and school connectedness.

THIS STUDY INDICATES THAT SCHOOL CONNECTEDNESS IS A SIGNIFICANT PREDICTOR OF ADOLESCENT WELLNESS AFTER CONTROLLING FOR BOTH SELF-ESTEEM AND MATTERING.

School counselors also can work with teachers and administrators to create multidisciplinary teams focused on creating an environment that fosters student connectedness (CDC, 2009). Professional development opportunities that equip school personnel with the knowledge and skills to meet the diverse cognitive, emotional, and social needs of adolescents can be a valuable addition to the comprehensive school counseling program. With student-to-school-counselor ratios increasing at most schools, the school counselor cannot effectively work alone to promote school connectedness in all students. Other school personnel must also be involved. Workshops targeting effective strategies for promoting a positive classroom environment, effectively communicating with students and their parents, and utilizing a responsive classroom approach would all be useful activities to consider implementing.

School counselors might find it helpful to invest their energies in creating trusting and caring relationships that serve to promote open communication among administrators, teachers, staff, students, their families, and communities. Given the myriad tasks school counselors are asked to perform on a daily basis, little time may be left for them to establish and maintain strong working relationships with these various stakeholders. The results of this study point to the importance of continual, and in some cases renewed, emphasis on nurturing these relationships to strengthen efforts to improve student wellness. Campus-wide initiatives on communicating and promoting expectations, values, and group norms supportive of positive health and academic behaviors easily can

be started on most school campuses. Even getting to know students by name helps build rapport and allows for stronger relationships to develop. These relationships become important when the school counselor needs to reach out to those students who may be experiencing academic, social/emotional, or family problems challenging their personal wellness but remain hesitant to seek the help and support they need.

CONCLUSION

Despite the current study's limitations, the findings suggest school connectedness to be a significant predictor of adolescent wellness. Thus, school counselors should consider delivering responsive counseling services aimed at increasing students' sense of connectedness to their school as a means of promoting positive lifestyle changes

that will help meet the wide range of developmental needs common in early adolescence. The potential improvement in well-being resulting from a stronger sense of school connectedness also will serve as a protective factor against future physical and mental health concerns. ■

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