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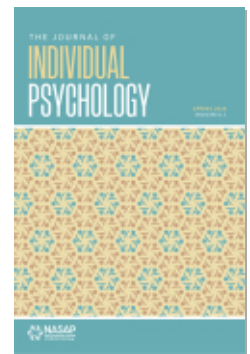
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Melisa Sevi Koç, Bilge Uzun

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The Role of Mindfulness in the Relationship Between Social Interest and Psychological Health

Melisa Sevi Koç and Bilge Uzun

ABSTRACT: Social interest is the cornerstone of psychological health. Recently, the psychological construct of mindfulness, which is closely linked to psychological health, has received a great deal of attention in counseling research and practice. Mindfulness plays a prominent role in traditional and modern Buddhist approaches that emphasize social justice and equality, as does Adlerian theory. In this regard, this study explores the mediating role of mindfulness in the relationship between social interest and psychological health. The sample consisted of 261 Turkish university students. The participants were administered the Demographic Information Form as well as three other instruments. Overall, results indicate that mindfulness positively mediates the relationship between social interest and psychological health.

KEYWORDS: mindfulness, social interest, psychological birth order, psychological health

SOCIAL INTEREST IS ONE OF THE MOST DIFFICULT-TO-UNDERSTAND CONCEPTS of Adler's Individual Psychology. According to Adler (1938/1964), every individual is part of a social community. It is the basic need for belonging that binds people together. In Adlerian theory, the sense of belonging to the community is explained by the German word *Gemeinschaftsgefühl* (Ansbacher, 1991). This term encompasses not only a sense of shared human experience but also a commitment to take action for social welfare. In other words, social interest above and beyond emotion includes cognition and attitude, concern for society, and interest in society's well-being (Ansbacher, 1991). That is to say, the feeling of social inclination toward all humankind is embedded in social interest, and the essence of social interest is the esteeming of something outside the self without hidden or secondary motives (Leak, 2011). As such, individuals with social interest have a shortfall of egotism and preoccupation with themselves.

Further, one of the most influential ideas of Adler's Individual Psychology is that individuals perceive the world from a particular, individualized phenomenological perspective. Adler (1928) argued that all people integrate their subjective perceptions of significant experiences into their lifestyle development, a process influenced significantly by family dynamics, including, but not limited to, birth order. Thus, he described

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typical characteristics of four birth-order positions: firstborn (e.g., responsible, stringent with rules), middle born (e.g., sociable, peacemaker), youngest (e.g., charming, outgoing), and only child (e.g., mature for their age, diligent) (Adler, 1928; White et al., 1997). Although such descriptions can aid mental health professionals in their case conceptualizations, in line with the phenomenological approach Adler adopted, Adler placed much more emphasis on psychological birth order, that is, on the individual's self-perceived position in the family, which may or may not be the same as the individual's actual birth order (Campbell et al., 1991; Stewart, 2012). Indeed, research has shown a stronger relationship between psychological birth order and style of life in comparison to actual birth order and style of life (White et al., 1995). Numerous studies have linked psychological birth order to various psychological constructs, such as coping styles, resilience, irrational relationship beliefs, marital adjustment, and personality traits such as optimism, self-confidence, and introversion (Cotterill, 2022; Ergüner-Tekinalp & Terzi, 2014; İlmen & Sürücü, 2022; Kalkan, 2008; Kalkan & Koç, 2008).

PSYCHOLOGICAL HEALTH: THE INTERPLAY OF SOCIAL INTEREST AND MINDFULNESS

Social Interest

Adler (1938/1964) regarded social interest as a basic personality trait that every individual has the potential to develop from birth, but it also must be taught, learned, and practiced. Analogous to language development, although individuals are born with this innate potential, neither language nor social interest can fully develop without appropriate social experiences (Ferguson-Dreikurs, 1999). Therefore, childhood is the ideal period for the development of social interest. The more children see themselves as part of a group and feel that they belong to that group, the more social interest develops (Ansbacher, 1991). Nevertheless, social interest can also be developed in adulthood, as in the context of Adlerian therapy, the goal of which is to enhance the client's sense of belonging and encourage the adoption of behaviors and practices that foster community and social involvement. This is achieved by increasing the client's self-awareness and addressing and changing the client's core beliefs, life aspirations, and fundamental ideas (Dreikurs, 1997). Adler considered social interest the central indicator of mental health (Ansbacher, 1991). According to Adler (1938/1964), an individual whose social interest is sufficiently developed makes efforts to overcome and adapt to the major and inevitable difficulties of life. Such a person puts in an effort to contribute to humanity, to make the world a better place

for all, and to realize themselves. This tendency, which Adler called “courage,” involves taking action despite feeling afraid in a manner that aligns with what benefits society. Lost courage leads to problematic behavior (Corey, 2009). Further, Adler (1938/1964) postulated that social interest is exhibited in three basic tasks of life, namely the social task, which includes building friendships; the love task, which encompasses establishing intimacy; and the work task, which comprises contributing to society. Emphasizing that the problems individuals experience are in fact social, Adler (1938/1964) stated that the most important criterion of individuals’ level of participation in social life is their feeling of communality and social interest. Adler (1938/1964) believed that individuals whose pursuits are only for personal prestige and superiority over others lack adequate social interest, which can lead to mental health issues. According to Adler (1938/1964), such individuals hesitate to solve any or additional life tasks, which leads to psychopathology (Soyer, 2004). Indeed, decades of research have shown that higher levels of social interest are associated with lower levels of depression, anxiety, hostility (e.g., Crandall, 1991; Miranda & Umhoefer, 1998; Page & Wheeler, 1997), alienation (Leak & Williams, 1989a), life stress (Crandall, 1984), and marital dissatisfaction (Markowski & Greenwood, 1984). Conversely, a significant body of research has repeatedly demonstrated that social interest is positively related to positive personality traits such as internal locus of control (e.g., Hjelle, 1991; Leak & Williams, 1989a), altruism, and cooperation (Crandall & Harris, 1991), values such as equality and peace (Crandall, 1980, 1991) as well as helping tendency (Bubbenzer et al., 1991) and resilience and psychological hardiness (e.g., Ergüner-Tekinalp & Terzi, 2014; Leak & Williams, 1989a).

Mindfulness

Mindfulness, which has its origins in the teachings of Buddhism dating back 2,500 years, originally corresponds to the word *sati* in Pali—the language in which Buddha’s teachings were first recorded—which encompasses awareness, attention, and remembering to be aware and pay attention (Siegel et al., 2009). The fundamental principles of mindfulness can be traced throughout history and are a central aspect of all major wisdom traditions worldwide, such that mindfulness shares similarities with various philosophical beliefs and traditions, like ancient Greek philosophy, existentialism, and humanism. Similar beliefs and practices can also be found in the teachings of the Masnavi, Mevlana Celaleddin Rumi, a 13th-century Anatolian Sufi, one of the major scholars who established the foundation of Turkish sophism (Uzun & Kral,

2021), suggesting that mindfulness is, in fact, universal. The definition of mindfulness has evolved since its adoption into Western psychology; it has shifted from its roots and received a secular interpretation. The psychological construct of mindfulness may be used to describe a psychological trait (often referred to as *trait* or *dispositional mindfulness*), a practice of cultivating mindfulness, a state of mindfulness, or a psychological process (Germer et al., 2005). One of the most cited definitions of mindfulness is the awareness that arises through “paying attention in a particular way: on purpose, in the present moment and nonjudgmentally” (Kabat-Zinn, 1994, p. 4). According to Bishop et al. (2004), mindfulness encompasses two components: self-regulation of attention and adoption of a particular orientation toward one’s experiences. Self-regulation of attention involves nonlaborative observation and awareness of sensations, thoughts, or feelings from moment to moment. Orientation to experience refers to the kind of attitude that individuals hold toward their experience, specifically an attitude of curiosity, openness, and acceptance. Mindfulness has been theoretically and empirically associated with psychological health. Indeed, there is a wealth of evidence showing the positive effects of mindfulness-based interventions, such as mindfulness-based stress reduction (Kabat-Zinn, 1990) and mindfulness-based cognitive therapy (Segal et al., 2002). For instance, a meta-analysis demonstrated that such interventions have positive effects on mood and anxiety disorders (Hofmann et al., 2010).

Such positive results have led to an increase in the theoretical interest in the psychological construct of mindfulness; in turn, that increased interest has enabled mindfulness to be investigated as an inherent ability or personality trait. Trait or dispositional mindfulness involves a characteristic tendency to maintain awareness of the present moment in a nonreactive and nonjudgmental way (Bishop et al., 2004; Brown & Ryan, 2003; Carlson & Brown, 2005; Carpenter et al., 2019; Medvedev et al., 2017). Studies confirm that individuals have this feature in varying levels, independent of their mindfulness practice (Brown et al., 2007; Kabat-Zinn, 1990). Many researchers have suggested that trait or dispositional mindfulness may develop as a function of positive early childhood experiences, such as growing up in a family environment characterized by responsivity, care, and respect for autonomy (Pepping & Duvenage, 2016; Ryan et al., 2007; Shaver et al., 2007).

The Link Between Social Interest and Mindfulness

Mindfulness practices are related to social interest, as both Adlerian theory and mindfulness emphasize interconnectedness. In one of his

earlier writings, Hanna (1996) posits that mindfulness practice can foster the “recognition, generation, and enhancement of empathy” and has significant outcomes for “enhancing awareness of community feeling and inspiring social interest in clinical settings” (p. 27). Another study relates to “intrinsic value orientation” (Brown & Kasser, 2005), which may be akin to social interest. Intrinsic values and social interest could be associated with each other depending on the orientation of such values toward community engagement and relationships. These researchers showed that intrinsic values and mindfulness boosted happiness and actions targeted at addressing environmental problems, suggesting that mindfulness and socially interested or intrinsic values may operate together to generate positive outcomes. More recently, Mahalingam (2019) put forth a comprehensive framework for mindfulness that combines elements of Buddhism, social justice, critical theory, and labor studies. He views mindfulness as a perspective that recognizes the interconnectedness of individuals’ lives and the fluidity of their identities, which are shaped by various privileges and marginalities. This approach promotes both personal growth and social change. Mahalingam’s mindful mindset framework consists of seven interrelated elements that promote a deeper understanding of the interconnected nature of everyone’s lives: compassion, sympathetic joy, situated intersectional awareness, negative capability, cultural humility, wonder, and generosity. Generosity allows individuals to acknowledge their dependence on the generosity and labor of others, both locally and globally. Compassion, sympathetic joy, and generosity foster authentic connections with others. Negative capability and situated intersectional awareness help individuals confront their prejudices. Wonder and cultural humility encourage an open-minded approach to differences (Mahalingam, 2019). Although mindfulness research in the interpersonal context is still in its infancy, the literature so far suggests that mindfulness is beneficial not only in intrapersonal contexts but also in interpersonal ones (e.g., Berry et al., 2020; Chen & Jordan, 2020; Iwamoto et al., 2020). For instance, trait or dispositional mindfulness was found to be a predictor of prosocial behavior across 12 studies (Donald et al., 2019). Surveying the mindfulness literature reveals several mechanisms through which mindfulness and prosocial behavior might be mutually linked. One mechanism has to do with the alteration of one’s sense of self. Specifically, it has been suggested that mindfulness eases extricating from the contents of the consciousness by viewing moment-by-moment experience with nonjudgmental acceptance (i.e., a process called *reperceiving*; see Shapiro et al., 2005, for a review). This mindset alleviates

self-referential thoughts and emotions, further minimizing boundaries between “I” and “they,” in turn enhancing empathy (Berry et al., 2018). Likewise, another mechanism concerns attention. It has been argued that mindfulness leads to increased self-regulatory capacity (e.g., affect regulation) and sustained attention (Chiesa et al., 2011). The greater attentional capacities (and the fewer impulsive or automatic processes), the higher the likelihood of observing and being aware of the needs of others in social contexts (Condon, 2019).

In this respect, the present study’s main goal is to investigate the mediating role of mindfulness in the relationship between social interest and psychological health. To the authors’ knowledge, no other studies have investigated the relationship between social interest, mindfulness, and psychological health. The present study expands on that limited research and examines the relationship between social interest, mindfulness, and psychological health.

METHOD

Participants

A total of 261 university students (200 females, 61 males) took part in the study. The sample size was not predetermined with respect to effect size. The participants’ ages ranged between 18 and 38 years ($M = 22.0$, $SD = 2.4$).

Procedure

The study was performed in accordance with the principles stated in the Declaration of Helsinki and the guidelines of the university’s institutional review board. Participation in the study was voluntary. Informed consent was obtained from participants at the beginning of the study. Due to conditions during the COVID-19 pandemic period, the convenient and snowballing sampling method was used. Participants were recruited from various courses, and extra course credit was given as an incentive. Data were collected online via Google Forms. Participants had to answer each question before they could submit the form. Completion of the online survey took approximately 15 minutes. The data were collected in March and April 2022.

Measures

Demographic Information Form

All participants filled out the demographic information form, which consisted of questions regarding participants’ age, gender, year of study, psychological birth order, familiarity with mindfulness, regularity and frequency of mindfulness practice (if applicable), and psychiatric history.

The Cognitive and Affective Mindfulness Scale–Revised (CAMS-R; Feldman et al., 2007) is a 4-point Likert scale (1 = *rarely/not at all*, and 4 = *almost always*) that was developed to measure individuals' mindful attitudes toward their inner experiences (Feldman et al., 2007). It consists of 10 items. The Turkish adaptation of the scale was carried out by Catak (2012), and Cronbach's alpha of the Turkish version of the total scale was .77. In the current study, Cronbach's alpha of the Turkish version of the total scale was .72.

The Social Interest Inventory (SII; Soyer, 2004) is a 5-point Likert scale (0 = *strongly disagree*, and 4 = *strongly agree*) that was developed to measure individuals' level of social interest (Soyer, 2004). It consists of 52 items. The Cronbach's alpha of the scale was .88 (Soyer, 2004). In the current study, Cronbach alpha's of the total scale was .93.

The Mental Health Continuum–Short Form (MHC-SF; Lamers et al., 2011) is a 6-point (0 = *never*, and 6 = *every day*) Likert scale developed to measure emotional well-being and aspects of psychological and social functioning (Lamers et al., 2011). It consists of 14 items. The scale was adapted to Turkish by Demirci and Akın (2015). Cronbach's alpha of the Turkish version of the total scale was .90 (Demirci & Akın, 2015). In the current study, Cronbach's alpha of the Turkish version of the total scale was .93.

Data Analysis

Descriptive statistics, internal consistencies, and bivariate correlations were analyzed on IBM SPSS Statistics for Mac, Version 26.0. Mediation analysis was also performed using IBM SPSS Statistics for Mac, Version 26.0, via Hayes's (2018) PROCESS macro for SPSS (Release 3.4.1). Mean effects and confidence intervals were estimated by applying Hayes's (2018) bootstrapping procedure with 5,000 resamples. For confidence intervals, to conclude for mediation, the assumption that a 95% confidence interval (CI) must not include zero was accepted.

RESULTS

Preliminary Analyses

Before the main analyses, multivariate and univariate outliers and the normality of the data were checked. The data had a normal distribution. Descriptive analysis was then conducted on the variables. Table 1 provides the demographic characteristics of the sample.

As depicted in Table 1, most of the sample (37.9%) were third-year students. This was followed by second-year (25.7%) and fourth-year (20.7%) students. Regarding psychological birth order, the majority of

Table 1. Demographic Characteristics of the Sample

Demographics	<i>M</i>	<i>SD</i>	<i>n</i>	%
Gender				
Female			200	76.6
Male			61	23.4
Age	22.0	2.4		
Class year				
Freshman			20	7.7
Sophomore			67	25.7
Junior			99	37.9
Senior			54	20.7
Master's			19	7.3
Doctorate			2	.8
Psychological birth order				
First born			65	24.9
Middle born			31	11.9
Youngest			109	41.8
Only child			56	21.5
Are you familiar with mindfulness?				
Yes			184	70.5
No			77	29.5
Do you regularly practice mindfulness?				
Yes			66	25.3
No			195	74.7
How often do you practice mindfulness?				
Once a week			40	15.3
2-3 times a week			31	11.9
4-5 times a week			4	1.5
Almost every day			1	0.4
Have you previously been diagnosed with a mental illness?				
Yes			38	14.6
No			223	85.4

Table 2. Descriptive Statistics and Correlations Between Measures

	<i>M</i>	<i>SD</i>	CAMS-R	SII	MHC-SF
CAMS-R	28.51	4.56	1		
SII	169.15	22.67	.40*	1	
MHC-SF	47.20	13.67	.53*	.64*	1

Note. CAMS-R measures mindfulness; SII, social interest; and MHC-SF, psychological health.

* $p < .01$

the sample were the oldest child (41.8%). This was followed by the youngest child (24.9%) and only child (21.5%). With regard to familiarity with mindfulness practice, most of the sample (70.5%) reported having familiarity. However, only 25.3% of the participants reported practicing mindfulness regularly during the week. Finally, most of the sample (85.4%) reported no history of psychiatric diagnosis. The summary statistics for means and standard deviations of mindfulness, social interest, and psychological health are shown in Table 2. Pearson product-moment correlation was used to determine relationships between mindfulness, social interest, and psychological health.

As shown in Table 2, a significant, positive correlation was found between social interest and psychological health ($r = .64, p < .01$). There was also a positive correlation between social interest and mindfulness ($r = .40, p < .01$). Finally, a significant, positive correlation was found between mindfulness and psychological health ($r = .53, p < .01$).

To examine gender differences in each measure of the study, a series of independent sample *t*-tests was employed. Results of the analyses revealed a significant difference in social interest scores between females ($M = 170.92, SD = 21.75$) and males ($M = 163.31, SD = 24.74$); $t(259) = 2.316, p = .021$. Similarly, a significant difference in mindfulness scores between females ($M = 28.17, SD = 4.38$) and males ($M = 29.63, SD = 4.9$) was also found, $t(259) = -2.217, p = .027$. However, results showed no significant mean difference in psychological health scores between females ($M = 47.32, SD = 13.78$) and males ($M = 46.82, SD = 13.39$), $t(259) = .250, p = .80$.

To investigate the effect of psychological birth order on social interest, mindfulness, and psychological health, a series of one-way analyses of variance (ANOVA) were performed. The results of the analyses revealed that there was a statistically significant difference in mean social interest score between at least two groups ($F_{3,257} = 2.792, p = .041$). The Scheffe post hoc test found that the mean value of social interest was significantly

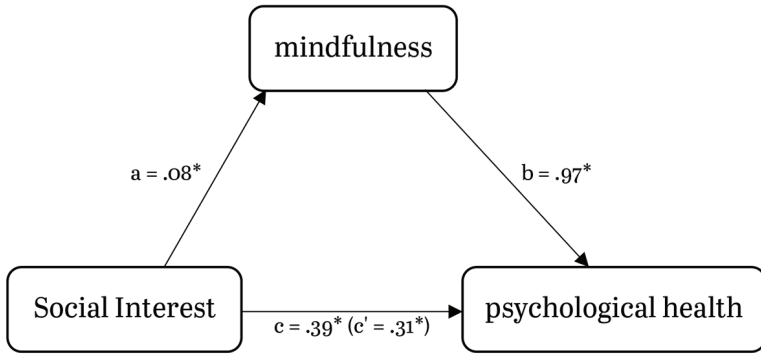


Figure 1. Mediation model. Unstandardized coefficients are reported. Arrows represent associations with significance levels ($*p < .001$). Lowercase letters represent pathways through predictor to mediator (a) mediator to predicted (b) and predictor to predicted (c for total effect, c' for direct effect). Figure by authors.

different between firstborn ($M = 173.51, SD = 20.68$) and middle-born participants ($M = 159.38, SD = 22.31$) ($p = .042, 95\% CI [.3397, 27.90]$). However, results showed no significant difference in mean mindfulness ($F_{3, 257} = 1.814, p = .145$) or psychological health ($F_{3, 257} = .922, p = .431$) scores among firstborn, middle-born, youngest, and only-child participants.

Main Analysis

Mediation analysis was performed to examine the indirect effect of social interest through mindfulness on psychological health. The mediation model included social interest (i.e., scores on the SII) as the independent variable, mindfulness (i.e., scores on the CAMS-R) as the mediator, and psychological health (i.e., scores on the MHC-SF) as the dependent variable. Results revealed that the model (Figure 1) was significant $F_{1, 259} = 49.9730, p < .001, R^2 = .16$.

As shown in Figure 1, social interest was a significant predictor of mindfulness ($B = .0810, SE = .0115, p < .001, 95\% CI [.0584, .1035]$). Similarly, the direct effect of social interest on psychological health was found to be significant ($B = .3864, SE = .0288, p < .001, 95\% CI [.3298, .4431]$). In terms of indirect (mediated) effects, the results indicated that social interest had a significant indirect effect on psychological health via mindfulness ($B = .0787, SE = .0183, 95\% BCa CI [.0467, 1180]$). The fact that both the direct and indirect effects exit and point in the same direction indicates a complementary mediation (Zhao et al., 2010).

DISCUSSION

The main aim of this study was to explore mindfulness's mediation of the relationship between social interest and psychological health. Results of the preliminary analyses showed that all three variables are positively correlated. Specifically, the strongest relationship was found between social interest and psychological health. This was followed by mindfulness and psychological health and social interest and mindfulness, respectively. Regarding group differences, the results revealed that female participants have significantly higher scores in social interest and mindfulness than male participants do. Furthermore, firstborn participants were found to score significantly higher in social interest than middle-born participants. Finally, the mediation analysis demonstrated an indirect effect of social interest on psychological health via mindfulness in university students. This result supports the notion that higher levels of social interest are related to higher levels of mindfulness, which in turn is associated with improved psychological health.

The findings of the present study are consistent with the Individual Psychology literature that has highlighted the significance of social interest in psychological health (e.g., Nikelly, 2005; Schwartz et al., 2003). Specifically, the results indicate that individuals with higher levels of social interest are psychologically healthier than those with lower levels of social interest. This conclusion fits with Adler's view that social interest is a protective factor that buffers feelings of inferiority and thus promotes better coping and adjustment to difficult life events (Crandall & Putman, 1980). Likewise, researchers found that the inadequate development of social interest in early life resulted in struggles with psychological difficulties in adult life (Guzick et al., 2004; Nikelly, 2005).

Regarding the relationship between social interest and mindfulness, the current study demonstrates that individuals who have higher levels of social interest are also more likely to hold mindful attitudes toward their inner experiences in daily life. That is no surprise, as numerous studies (e.g., Johnson et al., 2003; Pepping & Duvenage, 2016) indicate that both psychological constructs are closely associated with positive parent-child relationships. Thus, it is possible to argue that factors similar to the ones that cultivate social interest (e.g., being helpful and supportive, emotionally, and behaviorally expressive; Amerikaner et al., 1994; Leak & Williams, 1989b) also cultivate mindfulness. Indeed, Kabat-Zinn and Kabat-Zinn's (1997) conceptualization of *mindful parenting*—a concept that identifies the mindfulness-based processes toward parents, children, and family relationships—comprises three elements, namely empathy, acceptance (i.e., unconditional acceptance of the child

as a separate human being with their own thoughts, feelings, and views) and sovereignty (i.e., appreciation and encouragement of the child's inner selves) is strongly aligned to *positive discipline*, a child-rearing method inspired by the work of Alfred Adler and Rudolph Dreikurs that posits that the need to belong is a driving force in human behavior. The approach views misbehavior in children as a result of their faulty private logic about how to feel a sense of belonging. Consequently, a critical aspect of this child-rearing method is to educate parents and educators on the misguided beliefs that children may possess and to apply various techniques to foster a sense of belonging in children, which serves as their underlying objective (Gfroerer et al., 2013).

Finally, this study has also demonstrated that, in addition to its direct influence on psychological health, social interest has an indirect influence on psychological health through mindfulness. According to Siegel (2021), individuals' sense of identity and belonging can have a significant effect on their well-being in all aspects of their lives. *The self* refers to a combination of subjective experience, perspective, and agency, which make up the experience of the self in the world. *Subjective experience* involves the sensory feel of life, *perspective* refers to one's point of view, and *agency* involves the sense of being in control of one's actions and behavior. Together, the three elements contribute to the overall experience of self. In the early stages of life, those who care for individuals, such as parents and other attachment figures, shape their subjective experience, perspective, and agency through interactions. Neglect of the self at that time can lead to feelings of shame when the subjective experience and perspective are not acknowledged and to humiliation when agency is oppressed. In contrast, interactions that promote a sense of respect and acceptance, ones in which individuality is valued and connections are formed, can be seen as the foundation for trust and a sense of belonging. When individuals' authentic inner experience is acknowledged, their subjective experience is honored, their perspective is respected, and their agency is supported. These conditions allow the self to feel a sense of belonging in that particular community. As discussed by the Me + We (MWe) framework put forth by Siegel (2021, 2022), the process or experience of becoming self (known as *selfing*) is influenced by cultural context. In modern societies, there is a strong emphasis on individuality, leading to a *solo-self* perspective. However, if individuals can recognize and connect both individual and collective aspects, then ways of being would not only be accepted but also valued and supported.

We suggest that mindfulness may be the key mechanism through which an integrated self is cultivated within society in those individuals

who have high levels of social interest, given that being mindful and aware in the present moment enables individuals to stay connected to their observing self (self-as-context) and avoid becoming consumed by their thoughts and concepts (i.e., overidentification and fusion with the conceptualized self; see Hayes & Gregg, 2000). This change in self-perception results in a sense of connection to others and to the universe (Harris, 2008). This is to say, as posited by Shapiro et al. (2005) and Berry et al. (2018), one way that social interest contributes to psychological health can be via promoting disengagement from mental states by holding an attitude of curiosity, openness, and acceptance, and thus reducing boundaries between the self and others, and in turn increasing empathic concern and compassion toward others. Similarly, it is possible that social interest has an indirect influence on psychological health through increased sustained attention and self-regulatory capacity. As Condon (2019) suggested, it might be that lower impulsivity and a lesser tendency to be in a semiconscious mental state called automatic pilot, being focused on the present moment (i.e., being mindful), helps individuals become aware of the needs of others in their community and thus engage in compassionate action, which in return is associated with constructive styles of life and psychological health.

The current study is one of the first to examine the link between social interest, mindfulness, and psychological health; thus, the findings have important implications for clarification of the mechanisms through which social interest influences psychological health. Nevertheless, certain limitations should also be noted. First, most of the sample consisted of female participants; therefore, gender differences demonstrated in social interest and mindfulness scores as a part of preliminary analyses should be interpreted with caution. Similarly, the fact that there were an unequal number of participants in groups of psychological birth-order positions might have reduced the power of the analyses. Hence, it is suggested that these variables be reexamined in future studies. Second, the current study was conducted with healthy university students. Therefore, it may be problematic to generalize the present findings to individuals who have a psychiatric diagnosis or to individuals with less formal education. Third, given the correlational nature of this study, no cause-and-effect relationships can be drawn. Further studies are needed to clarify the role of mindfulness in the relationship between social interest and psychological health. Moreover, longitudinal studies might be useful in demonstrating the influence of social interest and mindfulness on psychological health over time. Similarly, well-designed experimental studies that examine the effects of mindfulness-oriented

interventions on the link between social interest and psychological health are warranted.

In conclusion, the present study provides empirical evidence that illuminates the largely unexplored relationship between social interest, mindfulness, and psychological health. The results demonstrate that social interest is related to psychological health both directly and indirectly via mindfulness. The outcome of the present study is expected to be beneficial for mental health professionals, as mindfulness training can be used to promote social interest (and vice versa) in different populations. For instance, community and school counselors may incorporate training in the principles of mindfulness and techniques into their parent training groups. Similarly, including courses about mindfulness and its techniques in psychology graduate programs would allow future clinicians to start cultivating more of a mindful presence in their lives, thereby increasing the altruistic social interest behaviors of themselves and their clients.

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Melisa Sevi Koç, PhD, is a clinical/counseling psychologist. She works as an assistant professor of psychology at Istanbul Aydın University.

Bilge Uzun, PhD, is the founder of Mindful Schools Institute and the president of the International Adler Institute in Turkey. She works as a professor of counseling psychology at Bahçeşehir University.