

Creating inclusive schools to reduce health and well-being disparities

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Abstract

In the U.S., people with marginalized racial/ethnic, social class, sexual, and gender identities often have worse physical and mental health than people with more privileged identities. This paper reviews psychological research suggesting that inclusive school cultures can improve the health and well-being of those with marginalized identities. Specifically, we review two examples of sets of ideas and practices in schools that create more supportive environments: (a) ideas and practices that recognize and include diverse identities and (b) ideas and practices that support interdependent ways of thinking, feeling, and acting. We also speculate about the psychological and behavioral mechanisms by which each protects health and well-being, including reducing discrimination, increasing school belonging, strengthening positive ingroup identities, and allowing students to access culturally relevant support. We suggest that changing school cultures to make them more inclusive is one way to reduce health and well-being disparities.

KEYWORDS

race, ethnicity, social class, sexual orientation, health, well-being, schools

1 | INTRODUCTION

In the United States, people with marginalized racial/ethnic, socioeconomic, sexual, and gender identities face greater mental and physical health risks than those with more privileged identities. For example, people with lower

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socioeconomic status (SES) are more likely than those with higher SES to develop cardiovascular disease and diabetes, and they also have higher all-cause mortality rates (Abdalla et al., 2020; Bosworth, 2018; Hill-Briggs et al., 2020; Schultz et al., 2018). Black Americans, Native Americans, and in some cases, Latino/a/x and Hispanic Americans,¹ are also at greater risk for these poor health outcomes, even after accounting for SES (Centers for Disease Control and Prevention, 2013; Fan, 2017; Post et al., 2022). These diseases are diagnosed in adulthood. However, risk develops across the life course (Berenson & Srinivasan, 2005; Lynch & Smith, 2005). Socioeconomic and racial/ethnic disparities in early indicators of cardiovascular and metabolic risk are evident in adolescents and young adults (Galobardes et al., 2006; Goodman et al., 2007; P. H. Lam et al., 2021; Lefferts et al., 2017). Lesbian, gay, bisexual, transgender, queer, intersex, asexual, and other sexual and gender minority (LGBTQIA+) adolescents and young adults are also at risk for poor mental and physical health (Coker et al., 2010; McInroy et al., 2022; Price-Feeney et al., 2020; The Trevor Project, 2022).

These disparities stem largely from social and structural barriers (Barr, 2019; Hatzenbuehler, 2014; Priest et al., 2013; Williams & Jackson, 2005), but in the right contexts, people with marginalized identities are healthier. Protective laws and policies (e.g., anti-discrimination laws), access to good healthcare, opportunities for education and employment, and protection from physical violence (e.g., safe neighborhoods) all reduce their health risk (Barr, 2019; Hatzenbuehler, 2014, 2016; Mannoh et al., 2021; Powell-Wiley et al., 2022; Williams & Jackson, 2005). Psychosocial factors matter, too. Individuals with marginalized identities have better health and well-being when they regularly spend time in contexts where they are treated fairly, supported, and valued (Clendinen & Kertes, 2022; Dürrbaum & Sattler, 2020; Geronimus et al., 2016; Olson et al., 2016; Priest et al., 2013). Many people, groups, and organizations can provide this support, including families, peers, and community organizations (Clendinen & Kertes, 2022; D'Augelli et al., 2002; Muñoz-Plaza et al., 2002; Ryan et al., 2010). We focus on the role of schools. Specifically, this paper reviews psychological research demonstrating that students of color, students from lower social class backgrounds, LGBTQIA+ students, and others with marginalized identities have better health and well-being when they attend schools with inclusive cultures. We highlight two examples of inclusive school cultures: (a) a culture that *recognizes and includes people with diverse identities* and (b) a culture that *incorporates interdependent ideas and practices into the classroom*.

2 | OVERVIEW

2.1 | Why schools?

We focus on the role of schools because they are places where students spend a significant amount of time and encounter distinct social and cultural influences. During the K-12 years, American children spend over 6 h a day at school (National Center for Education Statistics, 2008). There, they develop socially, as well as academically (Sylvia, 1994). For example, schools offer children a chance to interact with adults outside of the family (i.e., teachers). Classmates also expose students to new social norms, which students often adopt, especially during adolescence (Laursen & Veenstra, 2021). Students who go onto college develop relationships with new peer groups and are exposed to novel social, political, and cultural ideas and practices (Nunn, 2021; Pascarella & Terenzini, 1991).

Often, American schools are run by and cater primarily to individuals with privileged identities (e.g., White, straight, cisgender people with financial resources). This excludes and alienates students with marginalized identities (Fryberg, Troop-Gordon, et al., 2013; Kohli et al., 2017; Stephens, Markus, & Phillips, 2014; Toomey et al., 2012; see also Cheryan & Markus, 2020). At the same time, schools can be set up to be more inclusive. Most psychological research on inclusive schools focuses on improving motivation and academic performance (e.g., Celeste et al., 2019; Dittmann & Stephens, 2017; Steele, 2011). Here, we review a subset of the work on inclusive schools that explores inclusive schools' links to health and well-being.

2.2 | Defining inclusive school cultures

Following the model of cultural psychology, we define culture as a dynamic set of ideas and practices in everyday worlds (Adams & Markus, 2004; Markus & Connor, 2014; Markus & Kitayama, 2010). In the case of schools, these ideas include the schools' values and teachers' beliefs about the "right" way to be a successful student (Fryberg & Markus, 2007; Levine et al., 2019; Stephens, Markus, & Phillips, 2014). Practices include the content of the curriculum, the extracurricular activities available, and expectations about how students will behave (Brannon & Lin, 2021; Goudeau & Croizet, 2017; Heck et al., 2013; Snapp et al., 2015; Stephens, Markus, & Phillips, 2014). These ideas and practices reinforce each other (Markus & Connor, 2014; Markus & Kitayama, 2010). They also shape and are shaped by individuals within the context (i.e., the school) (Ma et al., 2022; Markus & Kitayama, 2010; Michel, 2014).

Our review focuses on two sets of ideas and practices that psychological research has linked to better health and well-being among students with marginalized identities. The first is *recognizing and including people with diverse identities*. This includes explicitly acknowledging and valuing diversity, incorporating diverse perspectives into coursework and extracurricular activities, and treating students equitably (Bottiani et al., 2017; Brannon & Lin, 2021; Hatzenbuehler & Keyes, 2013; Levine et al., 2019; Stephens et al., 2015). The second set of ideas and practices are those that reflect an *interdependent model of being a student*. Typical American schools promote independence (e.g., independent thinking, self-expression) (Stephens, Hamedani, & Destin, 2014; Stephens, Fryberg, et al., 2012). However, many students of color and students from lower social class backgrounds have greater experience with interdependence (e.g., connecting with and learning from others). Consequently, they feel at home in schools that prioritize interdependence (Brannon et al., 2015; Covarrubias et al., 2016; Stephens, Hamedani, & Destin, 2014). Below, we review the psychological literature demonstrating the links between each set of ideas and practices and the health and well-being of students with marginalized identities.² In each section, we also speculate about what psychological and behavioral mechanisms underlie these associations.

2.3 | Measures of health and well-being

Our review includes research examining a range of health and well-being indicators. Some studies assess physiological changes (e.g., increases in cortisol) in response to laboratory stressors. These short-term changes have negative long-term effects on health if regularly repeated (Hamer & Steptoe, 2012; McEwen, 1998; Raber, 1998). Other studies assess markers of cardiometabolic risk, such as levels of inflammation (in blood or saliva) or insulin resistance. These increase in response to chronic stress and are early indicators of risk for cardiovascular disease and diabetes (Berenson & Srinivasan, 2005; Morrison et al., 2007). Some additional studies include self-reports of health behaviors, most commonly alcohol and drug use. Finally, studies that focus on well-being include measures of life satisfaction, symptoms of depression or anxiety (though not typically clinical diagnoses), and other indicators of social and emotional health.³

3 | RECOGNIZING AND INCLUDING DIVERSE IDENTITIES

One set of inclusive ideas and practices involves recognizing and including people with diverse identities. Under this umbrella, we group together ideas and practices such as recognizing and valuing students with marginalized identities in rhetoric and policies (Hatzenbuehler & Keyes, 2013; Levine et al., 2019), acknowledging that students' identities shape their experiences at school (Stephens et al., 2015; Stephens, Hamedani, & Destin, 2014), ensuring that diverse identities are represented in the curriculum and extracurricular activities (Brannon & Lin, 2021; Rheinschmidt-Same et al., 2017), and treating students equitably (Bottiani et al., 2017; Chen et al., 2021; Hatzenbuehler & Keyes, 2013). For example, a school might claim (e.g., on their website or in other rhetoric) that they value students with marginalized

identities and then back up this claim by incorporating these groups' perspectives into the curriculum and protecting people with these identities from unfair treatment.

3.1 | Ideas linked to health and well-being

Students with marginalized identities are healthier when they attend schools where the prevalent ideas recognize and include people with diverse identities. For example, students of color who attend middle schools with mission statements that mention the value of racial/ethnic diversity exhibit lower risk for later developing cardiovascular disease and diabetes across multiple indicators of cardiometabolic health (Levine et al., 2019). Similarly, first-generation college students (i.e., students whose parents have not attended college) benefit from hearing a panel in which speakers discuss how social class shapes students' college experiences. After hearing this message (vs. a control), they display lower anabolic-balance reactivity, an indicator of physiological thriving, in response to a stressor (Stephens et al., 2015). Finally, gay and lesbian middle and high school students are less likely to report attempting suicide when they attend schools in districts with anti-bullying policies that include sexual orientation as a protected category (Hatzenbuehler & Keyes, 2013).

Students with marginalized identities may derive a particular benefit from attending schools where these types of ideas are prevalent. However, all students may benefit to some extent. One study found that all middle and high school students—including those with privileged identities and those who held multiple marginalized identities—reported more school belonging and were less likely to report feeling depressed or considering suicide when they perceived that others in their school respected identity-related differences (Bourne et al., in preparation; see also Brannon, 2018).

3.2 | Practices linked to health and well-being

This rhetoric supporting diversity is likely effective because schools put these values into practice. For example, schools may include the perspectives of members of marginalized groups in the curriculum. When schools do this, students with marginalized identities have better health and well-being. African American and Latino/a/x students who are exposed to positive aspects of their groups' histories and cultures in college (e.g., in ethnic studies classes) report higher institutional belonging, fewer depressive symptoms, fewer health-related absences from class, and better overall health (Brannon & Lin, 2021). Similar patterns exist for lesbian, gay, bisexual, transgender, and questioning middle and high school students. They feel safer and experience less bullying when their schools teach LGBTQ-inclusive curricula (Snapp et al., 2015).

Representation outside of class—such as in extracurricular activities—also matters. Lesbian, gay, bisexual, and transgender middle and high school students who participate in events organized by their schools' gay-straight alliances—or simply have such an organization in their school—feel a greater sense of school belonging, are less likely to consume alcohol, and report less psychological distress (Heck et al., 2013; Toomey & Russell, 2013; Truong & Zongrone, 2022). At the college level, living in ethnic-themed dorms protects Latino/a students from the heightened levels of inflammation (i.e., cardiovascular risk) that are typically associated with concerns about discrimination (Rheinschmidt-Same et al., 2017).

In addition to increasing the diversity of curricular and extracurricular representation, schools that recognize and value diversity are also more likely to have equitable disciplinary practices. In many middle and high schools, Black and Latino/a/x or Hispanic students are disciplined more frequently than their White classmates, which undermines their sense of trust and engagement in school (Aud et al., 2011; Okonofua et al., 2016). In schools that recognize the value of diversity, however, these racial gaps in discipline rates are smaller (Levine et al., 2019). Relatively equitable disciplinary practices appear to benefit racially marginalized students' health and well-being. Black students who

attend schools where there are smaller racial gaps in suspension rates feel a greater sense of school belonging and exhibit fewer symptoms of poor mental health (Bottiani et al., 2017). Although there is less work examining disciplinary disparities and physical health, Black students in high schools with smaller racial gaps in discipline rates are also less likely to have to exert self-control in order to be academically successful (Chen et al., 2021). Striving for academic success without having to exercise great self-control is, in turn, linked to lower insulin resistance, indicating lower cardiometabolic risk (Chen et al., 2021).

3.3 | Possible psychological and behavioral mechanisms

There are several reasons why schools' recognition and inclusion of diverse identities could protect health. These include reducing discrimination, increasing feelings of belonging, strengthening friendships and promoting positive intergroup contact, and creating positive ingroup identities. First, in institutions that recognize and promote diversity, members of privileged groups exhibit lower levels of prejudice, and students with marginalized identities are less likely to experience discrimination and bullying (Day et al., 2020; Lessard et al., 2020; Plaut et al., 2018; van Ryn et al., 2015). This could protect students with marginalized identities in three ways. First, reducing the discrimination and bullying that they personally experience would reduce their risk for poor mental health, unhealthy sleep patterns, poor cardiovascular health, and other problems associated with perceived discrimination (Arseneault et al., 2010; Brody et al., 2015; Goosby et al., 2015; Huynh & Gillen-O'Neel, 2016). Second, it could reduce the extent to which they experience vicarious discrimination (e.g., hearing about friends' experiences), which is also associated with poor health (Louie & Upenieks, 2022; Wofford et al., 2019). Third, it could reduce their anxiety about anticipated discrimination, which has been linked to multiple indicators of health risk (Chan & Mendoza-Denton, 2008; Dai & Levine, 2023; Gordon et al., 2020; Rheinschmidt-Same et al., 2017).

Second, instead of experiencing discrimination, students with marginalized identities feel a sense of belonging in schools where ideas and practices recognize and include diverse perspectives (Bottiani et al., 2017; Brannon et al., 2015; Phillips et al., 2016; Stephens, Fryberg, et al., 2012; Toomey & Russell, 2013). Students who feel this way behave in healthier ways, report fewer symptoms of depression and anxiety, have better self-rated health, and visit the doctor less frequently (Resnick et al., 1997; Shochet et al., 2006; Walton & Cohen, 2011).

Third, schools that recognize and include students with diverse identities might allow students to develop friendships with ingroup and outgroup members and increase the likelihood of positive intergroup contact with outgroup members. These types of social connections protect health and well-being. When people with identities that are marginalized within a school (e.g., African Americans in Predominantly White Institutions) have opportunities at school to engage with their own group's ideas and practices, they connect more with members of their ingroup (Brannon et al., 2015; Brannon & Lin, 2021). Relationships with ingroup members, in turn, reinforce institutional belonging and are linked to better life satisfaction, higher self-esteem, fewer depressive symptoms, fewer health-related school absences, better self-rated health, and lower levels of inflammation (Brannon & Lin, 2021; Dane & MacDonald, 2009; Leath et al., 2022; Ysseldyk et al., 2018).

In addition, opportunities to learn about marginalized groups' histories and cultures help students with privileged identities (e.g., White students) to understand the perspectives of their peers with marginalized identities, opening up the door for more meaningful contact, positive intergroup interactions, and stronger friendships by reducing bias (Bonam et al., 2019; Brannon & Walton, 2013; Plaut, 2014; V. J. Taylor et al., 2019). Among those with marginalized identities, friendships with outgroup members are associated with higher life satisfaction and other indicators of emotional well-being (Bagci et al., 2018; Graham, 2018). They also buffer people with marginalized identities against the health costs of anxiety about anticipated discrimination (Page-Gould et al., 2014). Even in the absence of close friendships, meaningful interactions with outgroup members have benefits. College students with marginalized racial and social class identities who have more cross-race and cross-class interactions experience a higher sense of belonging and a reduced sense of identity threat on campus (Carey et al., 2022). Both are associated with better mental and physical health (Major & Schmader, 2018; Resnick et al., 1997; Walton & Cohen, 2011).

Finally, students in schools that recognize and include diverse identities may derive health benefits from feeling positively about their own identities. There has been less research on this point than on other mechanisms we propose. However, scholars studying the experiences of students with marginalized racial identities have theorized that positive race-related experiences at school promote stronger racial identities and ingroup pride (Brannon, 2023; Saleem & Byrd, 2021). This is supported by empirical evidence that students who have opportunities to learn about their racial/ethnic background at school become more connected to their racial group (Byrd & Legette, 2022). In turn, strong racial identities buffer individuals against the physical and mental health costs of discrimination (Brody et al., 2015; Sellers et al., 2003). Positive views of one's racial group are also linked to good health outcomes, such as fewer depressive symptoms and healthier eating habits (Lewis et al., 2018; Ratner et al., 2013; Settles et al., 2010).

4 | INCORPORATING INTERDEPENDENCE

A second way to promote health and well-being among students with marginalized identities is to incorporate interdependent ideas and practices into school cultures.⁴ Typical American schools, like other mainstream American institutions, prize the independent ideas of individualism, self-reliance, self-expression, and freedom (Fryberg & Markus, 2007; Markus, 2016; Markus & Kitayama, 2010; Stephens, Markus, & Phillips, 2014). American teachers and administrators frequently value independent thinking and encourage students to pursue personal interests (Dittmann et al., 2020; Fryberg & Markus, 2007; Markus, 2016; Stephens, Fryberg, et al., 2012). When it comes to promoting health and well-being, many American schools encourage students to identify and express their emotions, reflecting an independent emphasis on sharing one's internal thoughts and feelings (Gilar-Corbí et al., 2018; Gonser, 2022; Tominey et al., 2017; Tsai & Lu, 2018).

These independent norms are familiar to White students from more privileged social class backgrounds, who tend to have been exposed to them outside of school from a young age. However, the White, middle class contexts that cultivate an independent sense of self are a relative anomaly (Henrich et al., 2010; Markus, 2016, 2017). Students who grow up with fewer resources and more economic uncertainty necessarily learn to work with others, adjust to group preferences, and fulfill social obligations. Hence, they develop a more interdependent sense of self (Phillips et al., 2020; Stephens, Markus, & Phillips, 2014). Students of color also exhibit more interdependence, again because many of the contexts in which they have grown up emphasize connection to others (Brannon et al., 2015; Covarrubias et al., 2016; Fryberg, Covarrubias, & Burack, 2013; Fu & Markus, 2014).⁵ Students from lower social class backgrounds, students of color, and others who are socialized to behave in more interdependent ways are, therefore, often hindered by independent classroom practices. However, they excel in educational environments that recognize and encourage interdependence (Covarrubias et al., 2016; Dittmann et al., 2020; Stephens, Fryberg, et al., 2012).

4.1 | Ideas linked to health and well-being

Students from lower social class backgrounds and students of color are healthier when they attend schools that endorse interdependent ideas. First-generation college students, African American students, and Native students who are exposed to or endorse interdependent ideas experience a better sense of fit and connection to others in their schools (Brannon et al., 2015; Phillips et al., 2016; Stephens, Fryberg, et al., 2012), factors that promote better health and well-being (Resnick et al., 1997; Shochet et al., 2006; Walton & Cohen, 2011). In addition, first-generation college students exhibit relatively small increases in cortisol following a stressful task if they have previously read that their college values the interdependent constructs of community, connection, and collaboration but larger cortisol spikes if they have read that their college values independent constructs such as personal exploration, self-expression, and creating one's own intellectual journey (Stephens, Townsend, et al., 2012). These findings are consistent with a larger literature linking exposure to and endorsement of interdependent ideas to health and well-being among adults with more experience in interdependent contexts (e.g., people of color, people from lower social class backgrounds;

Abdou et al., 2010; Campos et al., 2008; Kitayama et al., 2010; Levine, 2017; Levine, Atkins, et al., 2016). They are also consistent with the finding that African American and Latina/o/x youth who are higher in familism, a value system that emphasizes commitment to one's family, exhibit lower levels of pro-inflammatory cytokine production in response to a bacterial challenge, an indicator of lower cardiovascular risk (Chiang et al., 2019). Schools that endorse these values are likely to promote the health of students with these identities as well.

4.2 | Practices linked to health and well-being

Interdependent practices in schools also support the health and well-being of students from lower social class backgrounds and students of color. The most direct evidence for this comes from the study mentioned previously that examined first-generation college students' cortisol levels in response to a laboratory stressor. In addition to highlighting the interdependent or independent ideas noted above, the manipulation emphasized that the college encouraged interdependent practices, such as learning from professors and conducting collaborative research, or independent practices, such as sharing one's ideas with professors and conducting independent research (Stephens, Townsend, et al., 2012). As mentioned earlier, after reading about ways that the college's culture was interdependent (vs. independent), first-generation students experienced smaller increases in cortisol in response to a stressor.

Research on cultural differences in support-seeking practices further supports the idea that students who are relatively interdependent are healthier when they behave in interdependent ways. While social support benefits everyone's health, it can be sought out in a relatively independent or interdependent manner. Independent contexts promote support seeking in which individuals explicitly express their emotions and rely on others to tend to their needs (Kim et al., 2008; Tsai & Lu, 2018). However, Asian individuals, who tend to be relatively interdependent, are less likely to explicitly ask for support. Instead, they prefer to avoid burdening others and benefit when they receive support without disclosing their emotions (Kim et al., 2008; Tsai & Lu, 2018).⁶ Consistent with these different cultural models, White American college-aged adults have smaller increases in cortisol in response to a stressor and lower circulating levels of inflammation (i.e., lower cardiovascular risk) when they explicitly seek support and express their emotions to others (Chiang et al., 2019; S. E. Taylor et al., 2007). In contrast, Asian American college-aged adults are healthier when they remind themselves of their social connections without explicitly unburdening themselves to others (S. E. Taylor et al., 2007). These findings are consistent with a larger literature showing that people with more experience in interdependent contexts have better health and well-being when they think and feel in more interdependent ways (Levine, Miyamoto, et al., 2016; Miyamoto & Ryff, 2022; Yoo & Miyamoto, 2018).

4.3 | Possible psychological and behavioral mechanisms

There are several reasons why incorporating interdependence into classrooms might improve health. These include reducing negative judgments directed towards students, increasing students' sense of fit and belonging in school, and providing students with culturally normative social support. First, incorporating interdependent ideas and practices into schools may improve health by reducing negative judgments and discrimination directed at students who are relatively interdependent. Cultural psychologists have theorized that in typical independent American classrooms, teachers fail to see the value in students' interdependent ways of thinking and learning (Fryberg, 2012; Markus & Hamedani, 2019). However, learning about cultural variation in independence and interdependence increases open-mindedness and understanding. People who have taken a cultural psychology course and earned a high grade (i.e., effectively learned the material) see more value in different ways of thinking, feeling, and acting and are less likely to judge others who behave in accordance with different cultural expectations (Buchtel, 2014). We speculate that, by extension, in classrooms where interdependence is recognized and valued, students with marginalized racial/ethnic and social class identities might experience less discrimination. As noted previously, directly experiencing discrimination (Brody et al., 2015; Goosby et al., 2015; Huynh & Gillen-O'Neel, 2016), vicariously experiencing discrimination (Louie & Upenieks, 2022; Wofford et al., 2019), and feeling anxiety about anticipated discrimination (Chan & Mendoza-Denton, 2008; Dai &

Levine, 2023; Gordon et al., 2020; Rheinschmidt-Same et al., 2017) are linked to poor mental and physical health. As a result, schools that reduce the negative judgments and discrimination directed at relatively interdependent students by incorporating interdependent ideas and practices into classrooms will protect students' health.

Second, schools that incorporate interdependence likely protect the health of students who are more interdependent by increasing the fit and sense of belonging that they experience at school. Several studies demonstrate that when people think, feel, and act in ways that fit the norms of their context (e.g., their country or local community), they have better health and well-being, including fewer symptoms of depression and anxiety and lower cardiovascular disease risk (Dressler et al., 2012, 2016, 2018; Fulmer et al., 2010; Yoo & Miyamoto, 2018). Research has demonstrated this with many different norms, including norms about independence and interdependence (Kitayama et al., 2010; Levine, 2017; Levine, Miyamoto, et al., 2016). In addition, students of color and students from lower social class backgrounds (i.e., students who are relatively interdependent) feel a greater sense of belonging in interdependent school environments (Brannon et al., 2015; Phillips et al., 2016). As noted previously, school belonging is linked to better health and well-being (Resnick et al., 1997; Shochet et al., 2006; Walton & Cohen, 2011).

Finally, students who are relatively interdependent may have better health and well-being in schools with interdependent cultures because they have better access to culturally normative social support. Social support protects health and well-being, particularly during times of stress (Chu et al., 2010; Cohen, 2004; Cohen & McKay, 1984; Uchino, 2006). However, people who are relatively interdependent cope differently with stressors (e.g., by adjusting to, rather than influencing, the situation) and benefit from different types of social support than people who are relatively independent (Campos & Kim, 2017; Cross, 1995; Kim et al., 2008; A. G. Lam & Zane, 2004). As noted earlier, students are healthier when they cope with stress in culturally normative (i.e., independent or interdependent) ways (Chiang et al., 2019; S. E. Taylor et al., 2007). By extension, if schools recognize and encourage interdependent models of social support seeking alongside independent ones, students of color, students from lower social class backgrounds, and others who are relatively interdependent will be healthier.

5 | CONCLUSION

When the prevalent ideas and practices in schools support students of color, students from lower social class backgrounds, LGBTQIA+ students, and others with marginalized identities, these students have better health and well-being. Building these types of inclusive cultures in more schools could, therefore, help to reduce health and well-being disparities. The literature on cultural change suggests that when institutions such as schools dismantle inequitable cultural norms and support individuals from diverse backgrounds, students with marginalized identities thrive academically (Brady et al., 2017; Markus & Hamedani, 2019). These same changes could help them to thrive mentally and physically as well.

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CONFLICT OF INTEREST STATEMENT

The authors have no known conflicts of interest to disclose.

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ENDNOTES

¹ Latino/a/x and Hispanic Americans have lower rates of cardiovascular disease and all-cause mortality than many other racial/ethnic groups but higher rates of diabetes (Fan, 2017; Post et al., 2022), although rates of all health indicators vary across subgroups (i.e., country of origin) of Latino/a/x and Hispanic Americans.

- ² Research in education has identified multiple ways to make schools more inclusive. These include multicultural education (Banks, 1996, 2013) and the related approach of culturally responsive pedagogy (Gay, 2010; Ladson-Billings, 1995). Students of color and others with marginalized identities have better well-being when they attend schools that use these approaches (Cholewa et al., 2014; Kundu, 2019). In addition, partnerships between schools and community organizations increase students' access to healthcare (e.g., by connecting them to providers) and promote healthier behaviors (e.g., through community-based sports programs) (Madsen et al., 2013; Vaillancourt & Amador, 2014). Fully reviewing these extensive literatures in education is beyond the scope of this paper. We focus primarily on research in psychology.
- ³ In general, indices of psychological well-being (e.g., depressive symptoms) are correlated with markers of physical health risk (e.g., inflammation) (Colasanto et al., 2020; Deverts et al., 2010). However, in some circumstances, students from disadvantaged backgrounds have good mental health but poor physical health (Brody et al., 2013; Gaydosh et al., 2018; Miller et al., 2020). Researchers have theorized that mental and physical health trajectories diverge in this way when students use high-effort coping strategies to succeed in schools that are not set up to support their success (Chen et al., 2022; Destin, 2019). Thus, we expect the supportive school environments that we review will promote good mental *and* physical health.
- ⁴ Most research linking interdependence to health and well-being among students of color and students with lower social class backgrounds has used college student samples. However, research focused on academic outcomes shows that, elementary, middle, and high school students with these identities benefit from being in schools that emphasize interdependence (Covarrubias et al., 2016; Fu & Markus, 2014; Iyengar & Lepper, 1999). Therefore, we expect that schools with more interdependent cultures would promote the health and well-being of younger students with these identities as well.
- ⁵ Little research has examined the effects of interdependence in schools on LGBTQIA+ students. Therefore, we focus this section on students with marginalized racial and social class identities.
- ⁶ This interdependent approach to social support, is prevalent in East Asian contexts. However, the type of interdependence prevalent in Latino/a/x contexts emphasizes emotional expression and encourages people to actively seek and provide support in order to affirm relationships (Campos & Kim, 2017). Consequently, Latino/a/x students might have better health and well-being in schools that encourage students to actively seek support.

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