

EMPIRICAL ARTICLE

The social, emotional, and behavioral skill antecedents to college students' volunteering during the COVID-19 pandemic

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Abstract

The disruptions to community functioning caused by the COVID-19 pandemic spurred individuals to action. This empirical study investigated the social, emotional, and behavioral (SEB) skill antecedents to college students' volunteering during the COVID-19 pandemic ($N = 248$, $Mage = 20.6$). We assessed eight SEB skills at the onset of a volunteering program, and students' volunteer hours were assessed 10-weeks later. Approximately 41.5% of the sample did not complete any volunteer hours. Higher levels of perspective taking skill, abstract thinking skill, and stress regulation were associated with more time spent volunteering. These results suggest that strength in particular SEB skills can prospectively predict prosocial civic behaviors.

KEYWORDS

civic engagement, socioemotional competencies

INTRODUCTION

The COVID-19 pandemic has disrupted the social, economic, and physical well-being of people around the world. Due to the crises caused by the pandemic, many in the United States turned to community organizations for support and essential services (Kulish, 2020), and early evidence suggests that the community needs created by the pandemic spurred individuals to volunteer in their communities (Churchill, 2020; Sin et al., 2021; Yazdani et al., 2022). Past work has explored how individual differences in personal qualities relate to volunteering in childhood, adolescence, and young adulthood (Atkins et al., 2005; Carlo et al., 2005; Cemalcilar, 2009; Metzger et al., 2016, 2018; Obradović & Masten, 2007; Oosterhoff et al., 2021). This empirical study builds upon that literature by investigating how social, emotional, and behavioral (SEB) skills predict volunteering for students, ages 18 to 25, who were engaged in a university-wide volunteering initiative to ameliorate the negative community impacts of the COVID-19 pandemic.

Volunteering during late adolescence

Having a civically engaged populace is critical for healthy democracies (Flanagan & Levine, 2010), and civic exploration during late adolescence is foundational in forging civic

and political identities that set the course for future civic participation (Finlay et al., 2010). Volunteering during adolescence has been linked to later civic behaviors (Eisenberg et al., 2009; Finlay et al., 2010; Hart et al., 2007; Obradović & Masten, 2007) and better health outcomes, more years of education, and higher socioeconomic status in adulthood (Ballard et al., 2019; Kim & Morgül, 2017; Moorfoot et al., 2015). Encouragingly, recent cohorts of adolescents are more likely to volunteer than adolescents from prior decades (Flanagan & Levine, 2010; Syvertsen et al., 2011; Wray-Lake et al., 2017). This growth in volunteering during adolescence is hypothesized to be a result of community service and service-learning requirements in schools (Flanagan & Levine, 2010; Spring et al., 2008; Youniss & McIntosh, 2010).

However, although more adolescents are volunteering than in the past, volunteering tends to decrease between the ages of 18 and 24, even as other civic indicators such as political interest, electoral participation, and political voice increase (Wray-Lake et al., 2017, 2020). While volunteering trajectories in late adolescence vary according to gender, religiosity, educational achievement, and post-secondary expectations, all groups ultimately demonstrate declines in volunteering after age 18 (Wray-Lake et al., 2017). A critical context to investigate volunteering during late adolescence is in colleges and universities, as approximately 63% of high school completers immediately enroll at 4-year and 2-year institutions (NCES, 2022).

However, past reviews have noted that civic engagement opportunities at institutions of higher education are often available as extracurricular experiences rather than core curricula (Finlay et al., 2010). Therefore, it is critical to understand how psychological resources, such as social, emotional, and behavioral (SEB) skills (Soto et al., 2021), may promote sustained volunteering during the transition from adolescence to young adulthood, specifically in the context of college where many students are afforded opportunities to participate in extracurricular volunteering experiences.

Defining SEB skills

In recent years, work in education, developmental psychology, motivational psychology, and economics has illuminated how personal qualities can serve as predictors of positive development (Durlak et al., 2011; Heckman & Kautz, 2012; Kautz et al., 2014; Nagaoka et al., 2015). Soto et al. (2021) defined a subset of these personal qualities as SEB skills: a person's capacities to maintain social relationships, regulate emotions, and manage goal- and learning-directed behaviors. SEB skills are what a person *can do* when the situation calls for it, rather than what they *tend to do* averaged across situations (Soto et al., 2021). This distinction differentiates SEB skills, a person's capacity for a behavior, from traits, a person's "average" level of a behavior. For example, a student may tend to (and may prefer to) follow others' lead in group settings, but in a situation where a group project for school is stagnating, the student can tap into their leadership skills to rally the group towards progress.

From a skills perspective, volunteering could be understood in terms of capacity for expressing behaviors, particularly during late adolescence. In other words, between family, work, and academic obligations and attractive leisure activities such as hanging out with friends or engaging with social media, the decision to volunteer likely evokes the utilization of higher levels of SEB skills to balance commitments, volunteering, and leisure activities (Napolitano et al., 2021; Oesterle et al., 2004). Furthermore, given the context of the COVID-19 pandemic and the disruptions and stressors across multiple domains of adolescents' lives (Benner & Mistry, 2020), volunteering likely requires a higher than normal level of effort.

Assessing SEB skills

Many have noted that several of the prominent socioemotional skill¹ frameworks are multidimensional and hierar-

¹We employ the singular "skill" when it modifies the following word such as "skill framework, skill measure, skill facet, skill domain, or skill loading." We also use the singular "skill" when we refer to a specific type of skill such as abstract thinking skill. When referring to the multidimensional construct, we use the plural (e.g., SEB skills).

chical (Abrahams et al., 2019; Lechner et al., 2022; Napolitano et al., 2021; Soto et al., 2021; Walton et al., 2021). That is, SEB skills span a range of social, emotional, and self-regulatory capacities, and specific SEB skill facets can be organized under superordinate SEB skill domains. Recent taxometric work on the Behavioral, Emotional, and Social Skills Inventory (BESSI) demonstrated a hierarchical five-domain structure in which specific SEB skill facets converged and defined the following skill domains: (1) social engagement skills—capacities used to actively engage with other people, (2) cooperation skills—capacities used to maintain positive social relationships, (3) emotional resilience skills—capacities used to regulate emotions and moods, (4) self-management skills—capacities used to effectively pursue goals and complete tasks, and (5) innovation skills—capacities used to engage with novel ideas and experiences (Soto et al., 2022). Figure 1 presents the organization of SEB skill facets within these domains. SEB skills in the BESSI are assessed by asking participants to rate *how well* they can perform a particular behavior. This measurement approach emphasizes that SEB skills are trainable capacities that individuals can utilize at different levels given the context.

SEB skills and volunteering

Previous research has linked volunteering with personal qualities conceptually related to several SEB skill domains. To select the particular skill facets for this study, listed and defined in Table 1, the first and second author reviewed the 32 BESSI skill facets with the following criteria in mind: (1) the subset of skills would capture all five domains in the BESSI framework (self-management, innovation, social engagement, cooperation, and emotional resilience skills) and (2) prior empirical or conceptual work has linked these skills—or similar constructs—to volunteering. These selections were then presented to all other members of the research team, who reviewed and approved the selections based on their expertise in SEB skills and adolescent development. Furthermore, we focus on particular SEB skill facets rather than a general SEB skill domain measure because facets more closely related to the outcomes of interest offer greater predictive power over domain general measures (Möttus, 2016; Stewart et al., 2022). We describe the literature supporting the inclusion of these skills below.

Social engagement and cooperation skills

Some scholars have noted that civic skills are extensions of social skills (Obradović & Masten, 2007). Social and cooperative skills may be particularly important for volunteering as it is often distinguished as a prosocial civic behavior (Carlo & Padilla-Walker, 2020; Eisenberg et al., 2009; Wray-Lake et al., 2020). Personal qualities related to social and

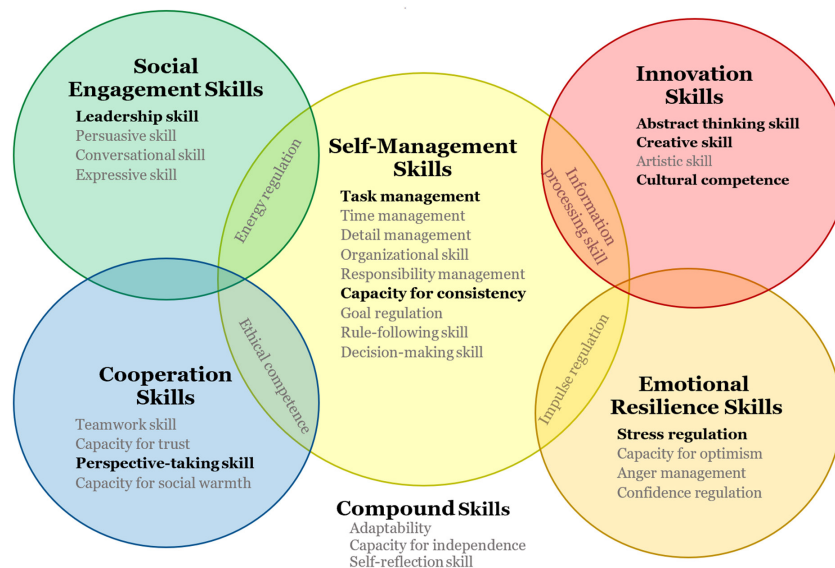


FIGURE 1 The behavioral, emotional, and social skills inventory. Adapted from Soto et al. (2022). Results of both exploratory and confirmatory factor analysis support the organization of skill facets within respective skill domains (Lechner et al., 2022; Soto et al., 2022). Social, emotional, and behavioral skills measured in this empirical work are bolded.

TABLE 1 Operational definitions of SEB skills

| SEB skill | Definition |
|--------------------------|--|
| Task management | Capacity to work persistently to complete tasks and achieve goals |
| Leadership skill | Capacity to assert oneself and speak to a group |
| Creative skill | Capacity to generate new ideas |
| Perspective-taking skill | Capacity to understand other people's thoughts and feelings |
| Stress regulation | Capacity to regulate anxiety, fear, and stress |
| Capacity for consistency | Capacity to reliably perform routine tasks |
| Abstract thinking skill | Capacity to engage with abstract ideas |
| Cultural competence | Capacity to understand and appreciate different cultural backgrounds |

Abbreviation: SEB, social, emotional, and behavioral.

cooperative behavior such as empathy have been linked to prosocial behavior toward strangers during early adolescence and increases in prosocial behaviors and volunteering across adolescence (Metzger et al., 2018; Padilla-Walker & Christensen, 2011; van der Graaff et al., 2018). In addition, adolescents and children have described individuals engaged in volunteering as leaders, suggesting leadership capacities may be important for understanding volunteering during late adolescence (Metzger et al., 2016).

More generally, the Big Five traits of extraversion and agreeableness, which share similar behavior referents to social engagement and cooperation SEB skill domains, respectively, (Napolitano et al., 2021; Soto et al., 2022), positively predict volunteering during middle and late adolescence (Carlo et al., 2005; Eisenberg et al., 2009; Moore

et al., 2014). Taken together, these findings suggest the capacity to enact high levels of cooperation skills and social engagement skills such as *perspective-taking skill* and *leadership skill* may promote volunteering (see also Soto et al., 2022).

Emotional regulation and self-management skills

Emotional regulation skills have also been hypothesized to be important to understanding adolescent civic engagement and prosocial behaviors (Carlo & Padilla-Walker, 2020; Wray-Lake & Syvertsen, 2011). Although one recent study found no connection between emotional regulation skills in youth and volunteering (Metzger et al., 2018), the specific skill of *stress regulation* may be critical for understanding volunteering during the COVID-19 pandemic as emerging research suggests that pandemic-related stressors decrease adolescents' empathetic concern for others and their helping behaviors (Sabato et al., 2021; van de Groep et al., 2020).

Moreover, during late adolescence, youth have considerable freedom to direct their own behaviors relative to younger adolescents. Therefore, self-management skills take on increasing importance as adolescents start planning for their future and directing their development (Napolitano et al., 2021; Nurmi, 2004). Indeed, intentional self-regulation capacities have been linked to civic actions, including higher levels of community service, among 5th to 12th graders (Le et al., 2022). *Task management* and *capacity for consistency*, skills reflecting the capacities to maintain consistent effort on and commitment to important tasks, may be especially important for sustaining volunteering (Soto et al., 2022).

Innovation skills

Finally, many scholars emphasize that the capability to forge civic identity is only made possible by the cognitive transitions that take place during adolescence (e.g., Wray-Lake & Syvertsen, 2011). Adolescence is marked by advances in prosocial reasoning skills and future orientation (Eisenberg et al., 2009; Kuhn, 2009; Nurmi, 2004; Smetana & Villalobos, 2009). While advances in prosocial reasoning do not always lead to increases in prosocial behaviors (Eisenberg et al., 2009; Wray-Lake et al., 2016), the capacity to enact high levels of innovation skills, such as *abstract thinking skill*, may help promote volunteering during late adolescence via the integration of abstract values, such as altruism and civic responsibility, into adolescents' attitudes, beliefs, and identity (Metzger & Smetana, 2010; Napolitano et al., 2021; Wray-Lake & Syvertsen, 2011).

Creativity has been hypothesized to be linked to civic engagement, but adolescents and children have ranked this character strength as weakly associated with civic outcomes such as volunteering (Metzger et al., 2016). Volunteering during the COVID-19 pandemic may require the capacity to utilize high levels of *creative skill* in order to innovate new approaches to engaging in service when traditional approaches, such as in-person volunteering, are not available or safe (Lachance, 2021). In addition, given that many volunteering opportunities are oriented toward low-income and marginalized communities and past reviews indicate that volunteers typically come from advantaged backgrounds (Eisenberg et al., 2009; Flanagan & Levine, 2010; Levinson, 2010), the capacity to tap into high levels of *cultural competence* may help youth to understand and get along with people from different backgrounds and encourage sustained volunteering.

The present study

The present study sought to investigate the SEB skill antecedents of student volunteers engaged in a university-wide community volunteering initiative during the COVID-19 pandemic. Here, we use a short-term longitudinal design where SEB skills were measured in a pre-program questionnaire and volunteering was assessed 10 weeks later. The current study was guided by the following question: How are SEB skills related to college students' volunteering during the COVID-19 pandemic? We hypothesized that higher levels of each of the selected SEB skills would prospectively predict more time spent volunteering.

METHOD

Participants

Data were collected from university students ($N = 248$) who were participating in We CU, a service recognition program at the University of Illinois at Urbana-Champaign

(UIUC), during two recruitment periods.² Table 2 provides descriptive statistics of the sample. Most participants identified as female (76.6%), averaged about 20.6 years old ($SD = 1.5$), and were undergraduate students (89.3%). Regarding racial and ethnic background, 40.5% of the sample was Asian, 30% was White, 16% was Latina/o/x, 8.4% was Black, 4.2% was Middle Eastern/North African, and 0.8% indicated another race or ethnicity. The sample was diverse with regards to family income, and close to one-third (32.2%) of the participants were first-generation college students.

We CU launched in the summer of 2020 to ameliorate the negative community impacts of COVID-19 by connecting student volunteers with community organizations in need of support. Between June 1, 2020 and December 18, 2020, We CU scholars completed over 6309 h of outreach with 44 community organizations. During the summer recruitment period, 232 students registered for We CU, and 202 of these students (87.1%) consented to be a part of the research study. During the fall recruitment period, 80 students registered for We CU, and 62 of these students (77.5%) consented to be a part of the research study. For students who participated in both the summer and fall sessions, only the summer data were used, so that data for all participants reflected their first 10 weeks of participation. Participants who were 26 or older ($N = 16$) were not included in the analytic sample.

Data collection procedures

The We CU program was advertised via university-wide emails in May of 2020 and September 2020. These emails invited interested students to register for an online information session about the program. Any UIUC student could attend the information session and participate in the We CU program.

During the information session, participants were informed about the types of service opportunities available, special distinctions they could achieve during the program, and how to use *Givepulse*—an online platform where they could register for service projects and track their volunteer hours. Participants were informed that students who accumulated 40 volunteer hours during the summer term, or 20h during the fall term, would receive special recognition at an awards ceremony later in the term. These benchmarks were chosen so that all students could achieve 300 service hours in a 4-year graduation timeline—resulting in special distinction as a We CU scholar at graduation. All students who attended information sessions were e-mailed a link to

²The demographic composition of the summer and fall participants did not differ in terms of gender, race and ethnicity, student level, or family income. However, more first-generation college students participated in the fall program (48.3% of the fall sample) compared to the summer program (26.8% of the summer sample) [χ^2 ($df = 1, 239$) = 8.96, $p = .003$]. Fall participants were also, on average, younger ($M = 20.0$, $SD = 1.6$) than summer participants ($M = 20.8$, $SD = 1.5$) [F ($df = 1, 253$) = 10.34, $p = .001$], likely reflecting the fact that the fall sample included students in their first semester of college.

TABLE 2 Descriptive statistics for analytic sample

| Variable | Full sample | Summer sample | Fall sample |
|------------------------------|-------------|---------------|-------------|
| | Mean (SD)/% | Mean (SD)/% | Mean (SD)/% |
| Gender | | | |
| Male | 22.5% | 25.1% | 14.6% |
| Female | 76.6% | 74.3% | 83.6% |
| Nonbinary | 0.82% | 0.55% | 1.64% |
| Not reported | 1.61% | 2.14% | 0% |
| Ethnicity | | | |
| Asian | 40.5% | 44.3% | 29.51% |
| White | 30.0% | 29.5% | 31.1% |
| Latinx | 16.0% | 11.9% | 27.9% |
| Black | 8.43% | 8.52% | 8.20% |
| Middle Eastern/North African | 4.22% | 5.11% | 1.64% |
| Other | 0.84% | 0.57% | 1.64% |
| Not reported | 4.43% | 5.88% | 0% |
| Age | 20.6 (1.5) | 20.8 (1.5) | 20.0 (1.6) |
| Income | | | |
| <20,000 | 9.54% | 7.93% | 14.3% |
| 20,000–34,999 | 15.0% | 17.1% | 8.93% |
| 35,000–49,999 | 7.72% | 7.92% | 7.14% |
| 50,000–74,999 | 17.3% | 14.6% | 25.0% |
| 75,000–99,999 | 11.8% | 12.8% | 8.93% |
| 100,000–149,999 | 19.1% | 20.1% | 16.1% |
| Over 150,000 | 19.5% | 19.5% | 19.6% |
| Not reported | 11.3% | 12.3% | 8.20% |
| Student status | | | |
| Undergraduate | 89.3% | 88.5% | 91.8% |
| Graduate | 10.7% | 11.5% | 8.20% |
| Not reported | 1.61% | 2.14% | 0% |
| First generation | | | |
| Yes | 32.2% | 26.8% | 48.33% |
| No | 67.8% | 73.2% | 51.67% |
| Not reported | 3.63% | 4.28% | 1.64% |
| Volunteering | | | |
| Total hours | 17.4 (20.9) | 19.2 (22.7) | 11.5 (12.6) |
| Zero hours | 41.5% | 44.9% | 31.1% |
| Some hours | 20.6% | 16.6% | 32.8% |
| Benchmark hours | 37.9% | 38.5% | 36.1% |
| N | 248 | 187 | 61 |

Note: All participants who indicated Hispanic or Latina/Latino/Latinx heritage were coded as Latino/a/x. Summer participants and fall participants were given different hour benchmarks (40 in the summer, 20 in the fall) to achieve special recognition.

the We CU *GivePulse* page on the first day of the program, June 1, 2020–October 1, 2020, for the summer and fall sessions, respectively.

When students first entered the We CU *GivePulse* page, they were presented with the informed consent. Students

who indicated they did not want to participate in the study could still participate in the We CU program. After giving informed consent, participants completed the pre-program questionnaire and continued to the We CU *GivePulse* page. Once on *GivePulse*, participants could choose to participate in over 70 volunteer projects during the two 10-week service periods. Each volunteer project listed the hour requirement per week and any special skills that were required to complete the project. Example volunteer projects included sewing masks for low-income families, creating content for community organizations' social media pages and websites, and translating community organizations' resources into languages other than English.³

After registering for projects, participants were connected with the community organization and could begin tracking service hours. Participants were reminded weekly via a program newsletter to track their volunteer hours, and any participant could contact We CU staff for assistance. Summer participants had a deadline of August 10, 2020, to complete and submit their hours for distinction, and fall participants had a deadline of December 18, 2020, to complete and submit their hours for distinction. The study procedure was approved by the UIUC Institutional Review Board (Protocol #20915).

Measures

Demographics

Participants indicated their gender, age, race/ethnicity, and family income in the pre-program questionnaire (<https://osf.io/s8q7p>). Participants could choose between a variety of gender options. Because <1% of participants indicated a gender identity other than male or female, gender was coded as binary (0 = female, 1 = male). To indicate racial and ethnic background, participants answered "What is your race/ethnicity?" Because of small sample sizes for some racial and ethnic groups, categories were combined for analyses. Dummy variables were created for White, Asian/Pacific Islander, and Other racial and ethnic backgrounds (including Black, Latino/a/x, Middle Eastern/North African, and Other). Other racial and ethnic backgrounds was used as the reference group in regression analyses.

Participants indicated their family's income by selecting one of seven responses to the question "Please indicate your approximate family household income (1 = Less than \$20,000 to 7 = Over 150,000)." Family income was then coded as numeric with 1 indicating the lowest family income option. Participants also indicated whether they were an undergraduate or graduate student and if they were a first-generation college student.

³Costs incurred while participating in service including transportation costs and supply costs (e.g., cloth for masks) were reimbursed by the We CU program.

SEB skills

Social, emotional, and behavioral skills were indexed by a subset of skill facets assessed by the BESSI, version 1.0 (Soto et al., 2022), in the pre-program questionnaire. Each BESSI item describes a specific thought, feeling, or behavior (e.g., the perspective-taking skill item “Take another person’s perspective”). To emphasize the BESSI’s focus on SEB skills rather than traits, participants rated how well they could enact that behavior on a 5-point scale reflecting their level of expertise (1 = Not at all well [Beginner level]; 2 = Not very well [Advanced beginner level]; 3 = Pretty well [Intermediate level]; 4 = Very well [Advanced level]; 5 = Extremely well [Expert level]). In addition, in the instructions, we specified that how well you can do a task is different from how often you perform the task or how much you enjoy doing the task. Each SEB skill was measured by six items, with omega reliabilities ranging from 0.94 and 0.97 ($M = 0.96$) in the present sample.

Volunteering

Throughout each of the 10-week service periods, participants tracked their volunteer hours using an hour-minute format on *GivePulse* and included where they completed the hours along with a short description of what they did during those hours. We CU staff reviewed and approved hours submitted by the participants. Summer volunteers, on average, submitted hours 11.4 times ($SD = 9.3$) during the 10-week summer session, and fall volunteers, on average, submitted hours 6.3 times during the 10-week fall session ($SD = 5.8$). The average number of hours for each submission was 5.7 ($SD = 8.1$) for summer participants and 3.9 ($SD = 4.4$) for fall participants.

Because over 40% of students completed zero hours and the benchmark number of hours set by the program (40 in the summer and 20 in the fall) was heavily advertised throughout the program, three dummy codes were created for students’ participation level: completed zero hours, completed some hours but less than the We CU benchmark, and completed or exceeded the benchmark number of hours. Most participants who met the benchmark did not exceed the benchmark by more than a few hours. For example, 68% of fall participants who met the benchmark completed 22 h or less, and 69% of summer participants completed 45 h or less. In addition, only one participant in the fall completed more than 40 h, exemplifying the importance of the benchmark for understanding participants’ volunteer hours.

Data analysis plan

We first conducted confirmatory factor analyses (CFAs) to determine how well items from the BESSI represented latent SEB skills. Then, we used structural equation models

to investigate relations between SEB skills and volunteering. Chi-square tests, root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), and the Comparative Fit Index (CFI) were used to evaluate model fit (Kline, 2016). An RMSEA value below 0.05, an SRMR value below 0.08 and a CFI value above 0.95 are typical cut-off values for determining a good fit to the data (Hu & Bentler, 1999; Kline, 2016).

Although all participants expressed interest in volunteering, 41.5% of participants completed 0 volunteer hours. Because the number of volunteer hours completed by the end of the 10-week program was not normally distributed, we utilized multigroup measurement invariance techniques to test for differences in latent SEB skill loadings and means (intercepts) across four levels of participation—zero hours, any hours, some hours but not the benchmark, and benchmark number of hours. As a necessary precursor to testing whether different levels of volunteering corresponded with differences in latent means of SEB skills, we first tested for configural and scalar measurement invariance in SEB skills across levels of participation: (1) zero versus any hours of volunteering and (2) zero hours, some hours, and benchmark hours of volunteering. Configural invariance indicates that the organization of SEB skills is supported across the groups of comparison, and scalar invariance indicates that mean differences in the latent SEB skills captures all mean differences in the shared variance of the items (Putnick & Bornstein, 2016). We also conducted multinomial regressions in which volunteering levels (zero, some, and benchmark) were regressed on each SEB skill and sociodemographic variables.

All analyses were conducted in Mplus 8, and models were fitted using the WLSMV estimator for ordinal indicators unless otherwise noted (Muthén & Muthén, 2017). Full information maximum likelihood estimation was utilized to account for missingness in the dataset. The data, analytic syntax, and participant survey are available at: (<https://osf.io/2xamk>).

RESULTS

Descriptive statistics

Table A1 in the appendix provides item-level means and standard deviations for the BESSI items. At the conclusion of the service period, 41.5% of students had tracked zero volunteer hours, 20.6% had tracked some volunteer hours but less than the benchmark established by the program, and 37.9% had completed or exceeded the benchmark number of volunteer hours. Participants in the summer and fall cohorts significantly differed in their volunteering with more participants in the fall completing some hours (32.8%) than participants in the summer (16.6%) (X^2 [$df = 2, 237$] = 8.05, $p = .02$). More participants who identified as Asian completed the benchmark number of hours (46.9%) than participants from other racial and ethnic backgrounds

TABLE 3 Bivariate latent correlations among SEB skills and volunteering

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|-----------------------------|------|------|------|------|------|------|------|-----|
| 1. Task management | - | | | | | | | |
| 2. Leadership skill | .46* | - | | | | | | |
| 3. Creative skill | .37* | .60* | - | | | | | |
| 4. Perspective-taking skill | .41* | .44* | .56* | - | | | | |
| 5. Stress regulation | .59* | .41* | .38* | .38* | - | | | |
| 6. Capacity for consistency | .56* | .31* | .26* | .44* | .36* | - | | |
| 7. Abstract thinking skill | .41* | .56* | .63* | .56* | .40* | .34* | - | |
| 8. Cultural competence | .36* | .38* | .50* | .69* | .41* | .31* | .60* | - |
| 9. Volunteering hours | .28* | .10 | .20* | .18* | .24* | .24* | .18* | .10 |

Abbreviation: SEB, social, emotional, and behavioral.

* $p < .05$.

TABLE 4 Fit indices for configural and scalar models across levels of participation

| | Zero versus any hours | | Zero, some, benchmark | | Some, benchmark | |
|-----------------|-----------------------|----------------|-----------------------|----------------|-----------------|----------------|
| | Configural | Scalar | Configural | Scalar | Configural | Scalar |
| X^2 | 2540 | 2659 | 3502 | 3725 | 2282 | 2398 |
| CFI | 0.982 | 0.983 | 0.987 | 0.987 | 0.989 | 0.990 |
| RMSEA | 0.042 | 0.039 | 0.037 | 0.035 | 0.035 | 0.034 |
| SRMR | 0.074 | 0.074 | 0.086 | 0.087 | 0.088 | 0.089 |
| ΔX^2 | - | 124 (df = 141) | - | 224 (df = 240) | - | 122 (df = 120) |
| Δ in CFI | - | -0.001 | - | 0.0 | - | -0.001 |

Note: The change in chi-squared statistic and change in CFI is compares the configural and scalar models. The p -values for the change in chi-squared statistic were not significant.

Abbreviations: CFI, comparative fit index; RMSEA, root mean square error of approximation; SRMR, standardized root mean square residual.

(average = 30.5%). Neither gender nor family income were related to volunteering.⁴

Confirming the structure of SEB skills and examining associations with volunteering hours

Existing research on the BESSI suggests that items adequately index their underlying SEB skills (Soto et al., 2022). Therefore, we began by conducting CFAs to test whether the BESSI items could adequately model the eight SEB skills simultaneously. We specified an initial model in which each set of six indicators loaded onto its respective SEB skill factor, and the SEB skill factors' intercorrelations were freely estimated. This model provided good fit to the data (X^2 [df = 1052] = 1501, $p < .001$, CFI = 0.983, RMSEA = 0.042, SRMR = 0.055) (Hu & Bentler, 1999; Kline, 2016). Item loadings on the latent SEB skill factors ranged from 0.71 to 0.98. Correlations between SEB skill factors ranged from 0.26 to

0.69, with a mean of 0.45, indicating that skills related positively with each other, but could also be distinguished from one another. Table 3 presents the skill factors' intercorrelations, as well as their correlations with number of volunteering hours as a continuous measure.⁵

Establishing measurement invariance in SEB skills across levels of volunteering

Table 4 presents goodness-of-fit indices for the configural and scalar models for volunteering groups. Because the change in chi-squared between the configural and scalar models across groups was non-significant and the change in CFI was $< .01$ (Cheung & Rensvold, 2002), we concluded that the model of SEB skills had similar factor loadings and intercepts across levels of volunteering. These results allow us to directly compare SEB skill means between groups. All subsequent analyses were based on the best fitting measurement invariance model.

⁴These findings replicated in regression analyses where the number of volunteer hours was regressed on sociodemographic variables. However, once sociodemographics and SEB skills were added to the same model, race and ethnicity no longer predicted volunteering. These results are available in the supplemental materials (see Table S1).

⁵In the supplemental materials, we also report the results of regression analyses in which a continuous measure of volunteering hours was regressed on (1) sociodemographics, (2) SEB skills, and (3) sociodemographics and SEB skills.

Do SEB skills predict volunteering?

After establishing scalar measurement invariance, latent means between groups could be compared on the same metric. Table 5 presents standardized mean differences of SEB skills across participation levels. Standardized latent mean differences are equivalent to Cohen's d effect sizes and reported as such. Consistent with our hypotheses, in the two group comparison, participants who completed volunteer hours reported higher levels of perspective-taking skill ($d = .356, p = .044$) and abstract thinking skill ($d = .309, p = .038$) than participants who did not complete any volunteer hours. These latent mean differences correspond to small to medium effect sizes in terms of Cohen's d .

In the three group comparisons, a p -value of .025 was used to correct for the nested nature of the test. A different skill was implicated when making comparisons between the three levels of participation. Participants who completed or exceeded the benchmark number of hours reported higher levels of stress regulation ($d = .379, p = .024$) than those who did not complete any hours and those who completed some volunteer hours but did not meet the benchmark ($d = .703, p = .001$). The latter latent mean difference corresponds to a medium effect size in terms of Cohen's d . No other findings were statistically significant.

Partly consistent with our hypotheses, these results highlight perspective-taking skill, abstract thinking skill, and stress regulation as especially potent skill predictors of volunteering. Moreover, the measurement invariance results reported above indicate that these findings reflect the effects of SEB skills themselves, rather than measurement artifacts due to group differences in item or scale functioning.

As a robustness check, we also conducted eight multinomial regression analyses in which the three volunteering groups were regressed on each SEB skill. These analyses also included program session, gender, first generation college student status, family income, and racial and ethnic background as controls. The multinomial regression models were fitted with the maximum likelihood with robust standard errors estimator (MLR) in Mplus. The results of these models are presented in Table 6. Participants were less likely to have completed 0 h and some hours if they had higher levels of task management (0 h $OR_{\text{Benchmark}} = 0.67$, some hours $OR_{\text{Benchmark}} = 0.66$) and stress regulation (0 h $OR_{\text{Benchmark}} = 0.67$, some hours $OR_{\text{Benchmark}} = 0.53$). Participants who had higher levels of abstract thinking skill were less likely to have completed zero hours ($OR_{\text{Some}} = 0.64$, $OR_{\text{Benchmark}} = 0.71$).

Participants also were less likely to complete 0 h if they had higher levels of creative skill ($OR_{\text{Benchmark}} = 0.63$), perspective-taking skill ($OR_{\text{Benchmark}} = 0.74$), and capacity for consistency ($OR_{\text{Benchmark}} = 0.68$). These findings bolster the measurement invariance findings by demonstrating that associations between SEB skills and volunteering are consistent after accounting for sociodemographics.

DISCUSSION

The present study sought to test the connections between SEB skills and volunteering during the COVID-19 pandemic using a short-term longitudinal design. Building on previous studies showing that personal qualities related to social and cooperative behavior such as empathy, extroversion, and agreeableness relate to volunteering (e.g., Carlo et al., 2005; Metzger et al., 2018; Moore et al., 2014), our findings also suggest that perspective-taking skill promotes volunteering in late adolescence. In addition, the current study extends previous work by demonstrating that SEB skills related to emotion regulation and engagement with novel ideas are *also* important for understanding volunteering during late adolescence. Although all participants indicated interest in volunteering, those who were capable of enacting higher levels of perspective-taking skill and abstract thinking skill completed more volunteer hours by the end of the 10-week volunteering period. Empathy has been consistently linked to civic engagement and prosocial behaviors (Eisenberg et al., 2009; Metzger et al., 2018; Padilla-Walker & Christensen, 2011; van der Graaff et al., 2018), and some scholars have highlighted that the cognitive transitions of adolescence, which include increases in abstract thinking capabilities, enable adolescents to form civic identities (Wray-Lake & Syvertsen, 2011). We speculate that the capability of utilizing higher levels of perspective-taking skill could have promoted volunteering if volunteers actively thought of the needs of others relative to their own immediate wants and needs when deciding whether to volunteer. Furthermore, thinking deeply about the disparate consequences of the COVID-19 pandemic due to social stratification mechanisms could have also promoted volunteering.

Findings also indicated that an additional SEB skill was important when comparing different levels of volunteering. Stress regulation differentiated volunteers who met or exceeded the We CU benchmark from non-volunteers and volunteers who completed a few hours. Past work has hypothesized that emotional regulation capacities are important in understanding youth civic and prosocial behaviors (e.g., Carlo & Padilla-Walker, 2020; Wray-Lake & Syvertsen, 2011), but recent cross-sectional work has found no links between emotional regulation during adolescence and volunteering (Metzger et al., 2018). The present, longitudinal findings suggest that during late adolescence, the capacity to regulate anxiety in stressful situations, such as during midterm exams, could help volunteers balance their academic and personal obligations and sustain their volunteer work.

Taken together, the finding that higher levels of perspective-taking, abstract thinking, and stress regulation skills were related to later volunteering underscores the important supportive role that social, emotional, and innovation-related developmental competencies play in adolescents' civic behaviors (Metzger et al., 2018; Wray-Lake & Syvertsen, 2011). Additionally, recent work indicates that during the COVID-19 pandemic, adolescents have reported

TABLE 5 Differences in latent SEB skill means across levels of volunteering

| | Zero versus any | | | Zero versus some | | | Zero versus benchmark | | | Some versus benchmark | | |
|--------------------------|-----------------|-------|-------------|------------------|-------|-------------|-----------------------|-------|-------------|-----------------------|-------|-------------|
| | β | SE | CI | β | SE | CI | β | SE | CI | β | SE | CI |
| Task management | .220 | 0.146 | -0.07, 0.51 | -.076 | 0.196 | -0.46, 0.31 | .362* | 0.172 | 0.03, 0.70 | .393* | 0.195 | 0.01, 0.78 |
| Leadership skill | .141 | 0.137 | -0.13, 0.41 | .150 | 0.184 | -0.21, 0.51 | .134 | 0.154 | -0.17, 0.44 | -.01 | 0.184 | -0.37, 0.35 |
| Creative skill | .237 | 0.137 | -0.03, 0.51 | .090 | 0.163 | -0.23, 0.41 | .348* | 0.157 | 0.04, 0.66 | .305 | 0.205 | -0.10, 0.71 |
| Perspective-taking skill | .356* | 0.176 | 0.01, 0.70 | .348 | 0.234 | -0.11, 0.81 | .351 | 0.204 | -0.05, 0.75 | -.02 | 0.236 | -0.46, 0.46 |
| Stress regulation | .116 | 0.145 | -0.17, 0.40 | -.375 | 0.193 | -0.75, 0.00 | .379** | 0.168 | 0.05, 0.71 | .703*** | 0.205 | 0.30, 1.1 |
| Capacity for consistency | .244 | 0.146 | -0.04, 0.53 | .031 | 0.173 | -0.31, 0.37 | .338 | 0.176 | -0.01, 0.68 | .334 | 0.219 | -0.10, 0.76 |
| Abstract thinking skill | .309* | 0.149 | 0.02, 0.60 | .392 | 0.206 | -0.01, 0.80 | .254 | 0.162 | -0.06, 0.57 | -.127 | 0.187 | -0.49, 0.24 |
| Cultural competence | .194 | 0.159 | -0.12, 0.50 | .407 | 0.263 | -0.11, 0.92 | .098 | 0.160 | -0.22, 0.41 | -.249 | 0.189 | -0.61, 0.12 |

Note: Latent SEB Skill mean differences are in standardized units of the reference group of each pairing. Zero is the reference group for the first three columns. Some is the reference group when compared to the benchmark. Significant associations are bolded.

Abbreviation: CI, 95% confidence intervals; SEB, social, emotional, and behavioral.

* $p < .05$, ** $p < .025$, *** $p < .01$.

less empathetic concern for others and less helping behaviors (Sabato et al., 2021; van de Groep et al., 2020). These three particular SEB skills may be particularly important for understanding how some adolescents continued to engage in prosocial behavior during the pandemic.

We found mixed results for three other skills. In the latent correlations and robustness analyses, higher levels of task management, creative skill, and capacity for consistency were associated with more volunteering. However, in the latent means comparisons, these skills did not meet the threshold for statistical significance. Future work with a larger sample should further investigate the associations between goal-oriented self-regulatory capacities, creative thinking capacities, and volunteering.

Leadership skill and cultural competence were not linked to volunteering. It could be possible that volunteering opportunities provided by We CU may have required that volunteers be more "team players" than leaders. It may also be possible that the capability of utilizing higher levels of leadership skill was related to expressing interest in volunteering but not necessarily following through with volunteering behavior. Furthermore, many of the volunteering opportunities provided by We CU were 100% remote due to COVID-19. The capability of using high levels of cultural competence may be more important when volunteers are directly serving communities that differ from their own. Future work is needed to determine how contextual factors of volunteering influence the relationship between SEB skills and volunteering.

The context of this study was an elective volunteering program at a large university. Because late adolescence marks the last time many individuals are engaged in a formal social institution, scholars have stressed that colleges and universities should offer opportunities for students to engage in civic life (Finlay et al., 2010; Flanagan & Levine, 2010). It could be possible that students with strength in particular SEB skills select into civically oriented extracurricular opportunities such as We CU. Furthermore, stress regulation differentiated those who completed the program versus those who did not. A possible explanation is that students may have disengaged from volunteering to manage the stressors in their life. These points underscore the importance of having civic opportunities, such as service learning, embedded in college curricula so that more students with diverse skillsets have both access and support to engage in civic life.

Limitations and future directions

Though this study has some important strengths, including its temporal separation between the assessment of SEB skills and volunteering and its accessibility to students from a broad range of backgrounds, there are also important limitations. For one, it is well-documented that college students' civic engagement is not representative of all similar-aged youth's civic engagement (Finlay et al., 2010; Flanagan & Levine, 2010). For example, adolescents who anticipate graduating from a 4-year post-secondary institution differ significantly on several civic

TABLE 6 Multinomial logistic regression results of each SEB skill predicting levels of volunteering

| Group membership | Predictor | Reference group | | | |
|------------------|--------------------------|---------------------|---------------------------|-----------------|-----------------------------|
| | | Some hours | | Benchmark hours | |
| | | B (SE) | Odds ratio [CI] | B (SE) | Odds ratio [CI] |
| Zero hours | Task management | .01 (0.19) | 1.01 [0.70, 1.5] | -.40* (0.18) | 0.67** [0.47, 0.94] |
| | Leadership skill | -.13 (0.34) | 0.92 [0.61, 1.4] | -.15 (0.16) | 0.86 [0.63, 1.2] |
| | Creative skill | -.12 (0.18) | 0.88 [0.62, 1.3] | -.41* (0.17) | 0.67** [0.48, 0.93] |
| | Perspective-taking skill | -.29 (0.20) | 0.74 [0.50, 1.1] | -.30 (0.16) | 0.74* [0.54, 1.0] |
| | Stress regulation | .23 (0.20) | 1.26 [0.85, 1.9] | -.40* (0.17) | 0.67** [0.48, 0.94] |
| | Capacity for consistency | -.01 (0.18) | 0.89 [0.62, 1.3] | -.39* (0.17) | 0.68** [0.49, 0.94] |
| | Abstract thinking skill | -.44* (0.19) | 0.64** [0.44, .94] | -.34* (0.16) | 0.71** [0.52, 0.98] |
| | Cultural competence | -.24 (0.21) | 0.79 [0.53, 1.2] | -.18 (0.16) | 0.84 [0.61, 1.2] |
| Some hours | Task management | - | - | -.41* (0.20) | 0.66* [0.44, 0.98] |
| | Leadership skill | - | - | -.07 (0.22) | 0.93 [0.61, 1.4] |
| | Creative skill | - | - | -.28 (0.19) | 0.75 [0.52, 1.1] |
| | Perspective-taking skill | - | - | -.01 (0.21) | 0.99 [0.66, 1.5] |
| | Stress regulation | - | - | -.64** (0.21) | 0.53*** [0.35, 0.81] |
| | Capacity for consistency | - | - | -.27 (0.20) | 0.76 [0.52, 1.1] |
| | Abstract thinking skill | - | - | .10 (0.21) | 1.10 [0.74, 1.6] |
| | Cultural competence | - | - | .06 (0.21) | 1.06 [0.71, 1.6] |
| Benchmark hours | Task management | .41* (0.20) | 1.51 [1.0, 2.3] | - | - |
| | Leadership skill | .11 (0.33) | 1.07 [0.70, 1.6] | - | - |
| | Creative skill | .28 (0.19) | 1.33 [0.92, 1.8] | - | - |
| | Perspective-taking skill | .01 (0.21) | 1.01 [0.67, 1.5] | - | - |
| | Stress regulation | .64** (0.21) | 1.89* [1.2, 2.8] | - | - |
| | Capacity for consistency | .27 (0.20) | 1.31 [0.89, 1.9] | - | - |
| | Abstract thinking skill | -.10 (0.21) | 0.91 [0.61, 1.4] | - | - |
| | Cultural competence | -.06 (0.21) | 0.94 [0.63, 1.4] | - | - |

Note: Logistic regression coefficients and odds ratios were obtained from models that simultaneously controlled for program session, gender, first generation college student status, family income, and racial and ethnic background. Significant findings are bolded.

Abbreviation: CI, 95% confidence intervals; SEB, social, emotional, and behavioral.

* $p < .05$, ** $p < .01$, *** $p < .001$.

indicators including increased likelihood of working in political campaigns, voting, engaging in activism, and volunteering than adolescents who do not have such aspirations (Syvertsen et al., 2011). College students also have greater access to civic opportunities than similar aged youth (Finlay et al., 2010). In addition, as noted above, the participants who registered for the We CU program likely differed from other students who did not register. Thus, future work can compare the SEB skills of college and non-college youth who do versus do not express an interest in volunteering.

This study also does not account for socialization factors that have been implicated in volunteering. Indeed, previous work has linked youth volunteering with the influence of parents and peers (Eisenberg et al., 2009; McLellan & Youniss, 2003; van Goethem et al., 2014). Religiosity has also been indicated as an important predictor of volunteering (Eisenberg et al., 2009; Wray-Lake et al., 2017). Thus, future work would benefit from assessing the civic engagement of adolescents' important social partners as well as youth's

religiosity, which may affect their own decisions about whether and how much to volunteer.

Furthermore, the extent to which the COVID-19 pandemic influenced the relationship between SEB skills and volunteering in this sample is unclear. We speculate that skill-volunteering relations should generalize to the post-pandemic context. However, the constraints on behavior imposed by the pandemic might make SEB skills especially important. In which case, these skill-volunteering relations might be weaker post-pandemic. Future research could explore these possibilities. In a similar vein, we do not know how these participants' civic trajectories will be influenced by their participation in We CU. Long-term longitudinal work is needed to determine how volunteering in response to the global pandemic influences future civic engagement trajectories.

Finally, SEB skills that were not measured in this study could be relevant for volunteering. For example, rule following skill has been recently linked to volunteering in an adolescent sample (Soto et al., 2022). Other work emphasizes

that the capacity to trust differentiates those who are civically engaged from those who are not civically engaged (Flanagan et al., 2005; Jennings & Stoker, 2004; Syvertsen et al., 2011; Wilson, 2000). Thus, future work can assess a larger array of SEB skills.

This study focused on SEB skills as an antecedent of civic engagement during late adolescence, and little is known about whether and how volunteering influences SEB skill development. SEB skills are hypothesized to be more malleable than trait-like personal qualities (Duckworth & Yeager, 2015; Soto et al., 2021), and there is some evidence from qualitative work that suggests that time spent volunteering helps volunteers hone their social skills (Khasanzyanova, 2017). Future work could examine whether time spent volunteering promotes change in SEB skills.

In addition, although we argue that volunteering could be understood in terms of capacities to enact a behavior, additional work is needed to clarify the mechanism by which SEB skills support sustained volunteering. Experimental studies and studies using other longitudinal methods such as daily reports could provide additional insight into how individuals utilize their skill capacities to participate in civic life (Oosterhoff et al., 2021).

CONCLUSION

Early evidence suggests that the crises caused by the COVID-19 pandemic spurred community-based action, though little is known about the antecedents of this outpouring of prosocial behavior, particularly for adolescents. This study sought to understand the SEB skill antecedents of college students' volunteering during the COVID-19 pandemic. The current study provides empirical evidence suggesting that strength in particular SEB skills including perspective-taking, abstract thinking skill, and stress regulation prospectively predict civic behaviors like volunteering in late adolescence. These findings contribute to our understanding of adolescent civic engagement and prosocial behavior during times of crisis.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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APPENDIX

TABLE A1 BESSI item level descriptive statistics

| Item label | Description | Scoring | Mean | SD |
|------------------|--|---------|------|------|
| Task management | | | | |
| BESSI_172 | Concentrate on a task | 1–5 | 4.04 | 0.74 |
| BESSI_76 | Focus on my work | 1–5 | 4.05 | 0.76 |
| BESSI_44 | Get started on tasks | 1–5 | 3.71 | 0.90 |
| BESSI_108 | Keep myself from getting distracted | 1–5 | 3.41 | 0.92 |
| BESSI_12 | Keep working until a task is finished | 1–5 | 3.94 | 0.91 |
| BESSI_140 | Work efficiently, without wasting time | 1–5 | 3.62 | 0.84 |
| Leadership skill | | | | |
| BESSI_65 | Assert myself as a leader | 1–5 | 3.61 | 0.90 |
| BESSI_161 | Convince people to follow my lead | 1–5 | 3.47 | 0.93 |
| BESSI_129 | Give a speech | 1–5 | 3.19 | 1.08 |
| BESSI_1 | Lead a group of people | 1–5 | 3.53 | 0.94 |
| BESSI_33 | Make decisions for a group of people | 1–5 | 3.55 | 0.96 |
| BESSI_97 | Take charge of a situation | 1–5 | 3.69 | 0.91 |

TABLE A1 (Continued)

| Item label | Description | Scoring | Mean | SD |
|--------------------------|--|---------|------|------|
| Creative skill | | | | |
| BESSI_112 | Come up with creative ideas | 1–5 | 3.66 | 0.99 |
| BESSI_176 | Come up with new ideas | 1–5 | 3.72 | 0.91 |
| BESSI_16 | Find new ways to do things | 1–5 | 3.76 | 0.91 |
| BESSI_144 | Invent things | 1–5 | 2.97 | 1.01 |
| BESSI_48 | Put ideas together in a new way | 1–5 | 3.65 | 0.91 |
| BESSI_80 | Use my imagination | 1–5 | 3.85 | 0.96 |
| Perspective-taking skill | | | | |
| BESSI_34 | Feel compassion for other people | 1–5 | 4.50 | 0.74 |
| BESSI_98 | Respect people's feelings | 1–5 | 4.52 | 0.71 |
| BESSI_130 | Sense other people's needs | 1–5 | 4.28 | 0.81 |
| BESSI_2 | Sympathize with other people's feelings | 1–5 | 4.47 | 0.73 |
| BESSI_66 | Take another person's perspective | 1–5 | 4.43 | 0.67 |
| BESSI_162 | Understand how other people feel | 1–5 | 4.41 | 0.74 |
| Stress regulation | | | | |
| BESSI_133 | Calm down when I'm feeling anxious | 1–5 | 3.47 | 0.97 |
| BESSI_69 | Cope with stress | 1–5 | 3.55 | 0.91 |
| BESSI_101 | Relax when I'm feeling tense | 1–5 | 3.46 | 0.95 |
| BESSI_165 | Settle down when I'm feeling nervous | 1–5 | 3.42 | 0.91 |
| BESSI_5 | Stay calm in stressful situations | 1–5 | 3.76 | 0.93 |
| BESSI_37 | Stop myself from worrying | 1–5 | 3.00 | 1.11 |
| Capacity for consistency | | | | |
| BESSI_169 | Do tasks that are routine or repetitive | 1–5 | 3.99 | 0.87 |
| BESSI_137 | Do the same task over and over again | 1–5 | 3.93 | 0.90 |
| BESSI_73 | Follow a consistent routine | 1–5 | 4.04 | 0.91 |
| BESSI_41 | Keep doing a task, even if it's boring | 1–5 | 3.75 | 0.89 |
| BESSI_105 | Repeat a standard procedure many times | 1–5 | 3.98 | 0.84 |
| BESSI_9 | Repeat a task consistently | 1–5 | 4.02 | 0.81 |
| Abstract thinking skill | | | | |
| BESSI_68 | Discuss complicated topics and ideas | 1–5 | 3.95 | 0.82 |
| BESSI_164 | Feeling curious about ideas | 1–5 | 4.30 | 0.72 |
| BESSI_36 | Have intellectual or philosophical discussions | 1–5 | 4.06 | 0.95 |
| BESSI_100 | Think about the nature of the world | 1–5 | 4.10 | 0.90 |
| BESSI_132 | Think deeply about things | 1–5 | 4.24 | 0.85 |
| BESSI_4 | Understand abstract ideas | 1–5 | 3.89 | 0.95 |
| Cultural competence | | | | |
| BESSI_96 | Appreciate different cultures | 1–5 | 4.48 | 0.68 |
| BESSI_192 | Get along with people from different backgrounds | 1–5 | 4.47 | 0.71 |
| BESSI_32 | Learn about other cultures | 1–5 | 4.41 | 0.74 |
| BESSI_128 | Study other languages or cultures | 1–5 | 3.99 | 0.94 |
| BESSI_64 | Understand people from different backgrounds | 1–5 | 4.31 | 0.78 |
| BESSI_160 | Understand people's cultural identities | 1–5 | 4.25 | 0.82 |

Abbreviation: BESSI, behavioral, emotional, and social skills inventory.