Research Report

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What Skills Are Most Important for Student Success?

Student and Parent/Caregiver Perspectives

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Conclusions

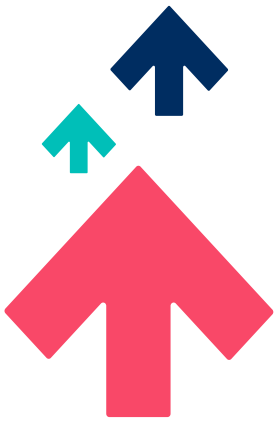
This study shows strong support for social and emotional (SE) skills from both students and parents/caregivers. Favorability of SE skills was consistently high across different demographic subgroups of students and parents/caregivers as well. Furthermore, when asked to list any skills associated with student success, both groups listed SE skills more frequently than any other skill category. Taken together, results show that SEL is perceived as a critical component of student success by both stakeholder groups.

So What?

Results from this study underscore the importance of SE skills from student and parent/caregiver perspectives. Furthermore, findings show more consistency across demographic subgroups than differences, further highlighting the universal perceived importance. These findings show SE skills are perceived as valuable and important in educational contexts.

Now What?

Given high levels of support for SE skills from both students and parents/caregivers, it is key to ensure students are receiving services and programming to help them develop SE skills. Additionally, opportunities for parental involvement in SE skill development would likely be well-received by parents and caregivers given their high levels of support.



What Skills Are Most Important for Student Success? Student and Parent/ Caregiver Perspectives

Dana Murano, Nola Daley, Jeremy Burrus, & Jason Way

A Framework for Academic and Workplace Success: The ACT Holistic Framework

In 2015, ACT developed a framework to describe the things that people need to know and be able and willing to do to succeed in school and at work (Camara et al., 2015). This framework is known as the ACT® Holistic Framework®, and it posits that success is multi-faceted. The Holistic Framework includes skills across various domains, which together can help individuals navigate transitions from kindergarten to career and to ultimately achieve life and workplace success. The four skill areas of the framework include core academic skills, cross-cutting capabilities, behavioral skills, and education and career navigation skills. Core academic skills include the domain-specific knowledge and skills necessary to perform essential tasks in the core content areas (English language arts, mathematics, and science; O'Connor et al., 2015). Cross-cutting capabilities include general knowledge and skills necessary to perform essential tasks across multiple academic content areas, such as information and communication technology, collaborative problem solving, critical thinking, creative thinking and innovation, and self-directed learning (Stoeffler & Daley, in press). Educational and career navigation skills include the personal characteristics, processes, and knowledge that individuals need to navigate their educational and career paths (Bobek & Zhao, 2015). These include skills such as making informed and personally relevant decisions and developing actionable, achievable plans. Finally, the behavioral skills domain includes interpersonal, self-regulatory, and task-related behaviors that are important for adaptation to and successful performance in workplace settings (Casillas et al., 2015).

Social and Emotional Skills

In the broader field of educational research, the ACT Holistic Framework's behavioral skills are more commonly known as the social and emotional (SE) skills taught by social and emotional learning (SEL) programs. SE skills can be defined as "individual capacities that (a) are manifested in consistent patterns of thoughts, feelings, and behaviours, (b) can be developed through formal and informal learning experiences, and (c) influence important socioeconomic outcomes throughout the individual's life" (Organisation for Economic Co-operation and Development [OECD], 2015, p. 34), and these include skills such as working hard, overcoming challenges, getting along with others, and managing stress effectively. SE skills have recently received an increasing amount of attention in the education space, in recognition of the fact that

students need more than just traditional academic skills to be successful (e.g., Aspen Institute, 2018; Mammadov, 2022; Weissberg et al., 2015). Evidence that these skills are considered to be important is provided by the fact that the most recent reauthorization of the federal Elementary and Secondary Education Act of 1965 and the Every Student Succeeds Act (ESSA) provides states and districts with increased flexibility on the use of federal funds and accountability measures, both of which can be used to support the development of SE skills in schools (Grant et al., 2017).

SE skills predict important education and work outcomes. In the K–12 space, they provide incremental validity for predicting academic grades above and beyond more traditional predictors like achievement test scores, demographics, and school characteristics (e.g., Casillas et al., 2012; Duckworth et al., 2012; Gaertner & McClarty, 2014; Mammadov, 2022). SE skills also predict procrastination, pro-social interactions, aggression, and conduct problems, all of which, in turn, facilitate (or impede) academic performance (e.g., Loveland et al., 2007). In addition, research shows that they predict persistence in secondary school across short intervals, such as absences during a school year, as well as longer ones, such as on-time high school graduation (e.g., Balfanz et al., 2007; Moore et al., 2016).

In the postsecondary space, they predict academic grades above and beyond the effects of cognitive tests (ACT® or SAT scores) and high school GPA (e.g., McAbee et al., 2014; Mammadov, 2022; Poropat, 2009; Richardson et al., 2012; Zyphur et al., 2008). Research also shows that SE skills are related to engagement in the academic and interpersonal environment of college, such as participating in class discussions, participating in extracurricular activities, and establishing relationships with peers (e.g., McClenney et al., 2006), all of which educational theory and research support as being important contributors to higher quality academic experiences and improved performance in college (e.g., Conley, 2011; Pascarella & Terenzini, 2005). In addition, they predict persistence in postsecondary settings, and these results hold up across a variety of time periods and different definitions of persistence (e.g., Robbins et al., 2004). These outcomes range from those focused on a single semester, such as class attendance in specific courses and dropped courses (e.g., Credé et al., 2010), to measures spanning multiple years, such as number of terms enrolled, credit hours completed, and time to degree attainment (e.g., McClenney et al., 2006).

Finally, SE skills also predict a broad range of work outcomes, including task performance, engaging in appropriate and ethical work conduct, use of interpersonal skills (e.g., leadership, teamwork), and other important outcomes like work satisfaction and perceived work stress (e.g., Barrick et al., 2001; Judge et al., 1999; Ones et al., 1993; Salgado, 2003; Van Iddekinge et al., 2012; Zell & Lesick, 2021). Often referred to as soft or essential skills in work contexts, SE skills are rated by organizations and supervisors as some of the most desired skills among employees. One example is a 2017 survey conducted by the National Association of Colleges and Employers (NACE) of 260 U.S. employers, who rated SE skills as the top attributes that employers sought in job candidates (NACE, 2017). Another is Google's Project Oxygen, which named SE skills as seven of the top eight most important qualities of Google's top employees

(Garvin et al., 2013). Finally, the 2020 McKinsey Global Survey on reskilling found that five of the top six (out of 25 total) skills that companies focused on reskilling during the COVID-19 pandemic were SE skills (Billing et al., 2021).

Educators and parents/caregivers also consider these skills to be important for success. In a survey of over 6,000 K–12 educators, 99% rated five SE skills as at least somewhat important to teach, and over 78% of them said each skill was at least somewhat important to assess (McVey et al., 2020). The Fordham Institute recently released a study that surveyed parents/caregivers of K–12 students about their attitudes toward SE skills (Tyner, 2021). The study found that there is broad support amongst parents/caregivers for teaching SE skills, although the term "social-emotional learning" is not as popular. Interestingly, differences in political affiliation emerged as the most pronounced differentiator among parents/caregivers rather than differences in race, class, or religion. Democrats tended to favor SEL-related programming more highly than Republicans, though favorability was high across political parties for all SEL-related skills.

Current Study

Given recent interest and increasing popularity of SEL in education settings, we surveyed students taking the ACT test and parents/caregivers of ACT test-takers on their beliefs around SE skills. Our study had three primary goals. First, we were interested in obtaining student and parent/caregiver perceived value levels of SE skills and their utility in students' academic success. Second, we were interested in asking, in an open-ended fashion, what skills students and parents/caregivers perceived as being most important to student success. That is, we were interested in whether skills cited were social and emotional in nature or if they encompassed other ACT Holistic Framework domains such as core academic skills, cross-cutting capabilities, or navigation skills. Last, we were interested in whether favorability ratings or skills perceived as most important to student success differed across student and parent/caregiver subgroups. Specifically, we examined differences across ACT fee waiver status, state political affiliation, student race/ethnicity, and student ACT score levels. We used a mixed-method survey approach to achieve these three goals.

Method

Participants

For the student survey, 20,000 11th-grade students who registered to take the ACT test were invited to participate in a survey following the December 13th, 2021, National ACT test administration. Students gave consent prior to starting and were informed that the survey was voluntary and unincentivized. All demographic information for survey respondents came from the ACT registration file. We also obtained respondents' ACT scores from the December 13th test administration. Overall, 1,270 students began the survey, 696 respondents completed at least one block of the survey, and 571 completed the survey in its entirety. For the 696 respondents who provided valid responses, 66.4% of students identified as female, 25.7%

identified as male, and 7.9% chose not to respond. For race/ethnicity status, 59.1% identified as White, 10.6% identified as Black/African American, 10.6% identified as Hispanic/Latino, 7.3% identified as Asian, 0.4% identified as American Indian/Alaska Native, 3.2% reported two or more races, and 8.7% preferred not to respond. The average ACT Composite score of the sample was 23.9, and 21.7% of the sample received a fee waiver to take the ACT test. Fee waivers are assigned to students by schools based on demonstrated economic need (e.g., students enrolled in free or reduced-price lunch programs at school, families receiving low-income public assistance or living in federally subsidized public housing). For combined household income before tax, 16.0% of families made less than $36,000, 14.1% of families made between $36,000 and $60,000, 22.2% of families made between $60,000 and $100,000, 22.2% of families made between $100,000 and $150,000, and 25.5% of families made more than $150,000. 54.3% of fathers and 63.2% of mothers held at least a 4-year bachelor's degree or higher.

For the parent/caregiver survey, a separate sample of 25,000 parents/caregivers of 11th-grade ACT test takers were invited to participate in a survey following the December 13, 2021, National ACT test administration. Parents/caregivers gave consent prior to starting and were informed that the survey was voluntary and unincentivized. Overall, 1,230 parents/caregivers began the survey, 664 respondents completed at least one block of the survey, and 591 completed the survey in its entirety. Gender and race/ethnicity information was not available for parents/caregivers, and any subgroup analyses based on gender, race/ethnicity, or fee-waiver status were based on their student's reported information. The students in this sample were 53.2% female, 46.1% male, and 0.7% chose not to respond. For race/ethnicity status, 63.9% identified as White, 11.1% identified as Black/African American, 6.9% identified as Hispanic/Latino, 2.1% identified as Asian, 0.9% identified as American Indian/Alaska Native, 3.0% identified as two or more races, and 2.6% chose not to respond. The average student ACT Composite score of the sample was 23.7, and 12.2% of students received a fee waiver to take the ACT test. For combined household income before tax, 9.6% of households made less than $36,000, 8.2% of households made between $36,000 and $60,000, 20.4% of households made between $60,000 and $100,000, 28.8% of households made between $100,000 and $150,000, and 33.1% of households made more than $150,000. 65.6% of fathers and 80.0% of mothers held at least a 4-year bachelor's degree or higher.

Materials

Students and parents/caregivers completed parallel versions of the same survey. The first survey item was an open-ended question with the following prompt: "In the spaces below, list the five skills that you think are most important for student success in school." Respondents were provided with five blanks to fill in with their chosen skills. The second survey item asked respondents to report if they were familiar with the terms "social and emotional skills" and "SEL" on a yes/no response scale. For the third item, respondents were provided with definitions of five SE skills corresponding to skills included in the ACT Holistic Framework (see Table 1). After receiving the definitions, respondents were asked to rate how important they believe each skill

is for success in school on a 1 (“not at all important”) to 5 (“extremely important”) scale. The fourth item presented the same five SE skills and asked respondents to select the one they perceived as most useful for colleges and universities to have information about.

Table 1. Social and Emotional Skill Definitions

Social and Emotional Skill	Definition
Sustaining Effort	Persistence, goal striving, reliability, dependability, and attention to detail at school
Getting Along with Others	Collaboration, empathy, helpfulness, trust, and trustworthiness
Maintaining Composure	Stress management, emotional regulation, a positive response to setbacks, and poise
Keeping an Open Mind	Creativity, inquisitiveness, flexibility, open-mindedness, and embracing diversity
Social Connection	Assertiveness, influence, a preference for social interaction, optimism, and enthusiasm

Data Analysis Procedure

Each survey contained a screening question to identify respondents as a student, parent/caregiver, school counselor, or other participant in the ACT registration process. Only student responses were included in the student survey and parent/caregiver responses in the parent/caregiver survey. Cases were also eliminated from the data set when respondents did not complete any survey questions or completed less than one full survey block. We retained incomplete response sets when respondents completed at least one section of survey items and used all completed responses for respective analyses. Descriptive and inferential statistics were computed for the close-ended survey items.

For the open-ended responses, a coding scheme was established by two subject matter experts to categorize each response into one of six categories. The categories were based on the ACT Holistic Framework (Camara, et al., 2015) and were established as follows: (a) core academic skills, (b) cross-cutting capabilities, (c) behavioral skills (referred to as social and emotional [SE] skills throughout this report), (d) education and career navigation skills, (e) contextual factors, and (f) other responses/not a skill. Table 2 provides examples of skills assigned to each category. Up to two codes could be assigned for each skill if a skill fell into more than one category (e.g., Communication, which is a cross-cutting capability and also SE skill). All open-ended responses were double-coded with coder agreement ranging from 93%–97%, and all disagreements were resolved through discussion.

Table 2. Skill Category Coding Scheme

Skill Category	Description	Example Skills
Core Academic Skills	Domain-specific knowledge and skills necessary to perform essential tasks in the core academic content areas of English language arts, mathematics, and science	Math English Science
Cross-Cutting Capabilities	General knowledge and skills necessary to perform essential tasks across academic content areas. This includes information and communication technology, collaborative problem solving, critical thinking, creative thinking and innovation, and self-directed learning	Critical thinking Problem solving Study skills
Social and Emotional Skills	Interpersonal, self-regulatory, and task-related behaviors important for adaptation to and successful performance in education and workplace settings	Organization Resilience Empathy
Education and Career Navigation Skills	Personal characteristics, processes, and knowledge that influence individuals as they navigate their educational and career paths (e.g., make informed, personally relevant decisions; develop actionable, achievable plans)	Attitudes toward Education Interests Self-efficacy
Contextual Factors	Factors, but not skills, in students' home and school lives that can contribute to student academic outcomes	Rigor of curriculum Common sense Maturity
Other	Responses that are not skills or cannot be classified into any other categories	Cognitive ability Common sense Maturity

Results

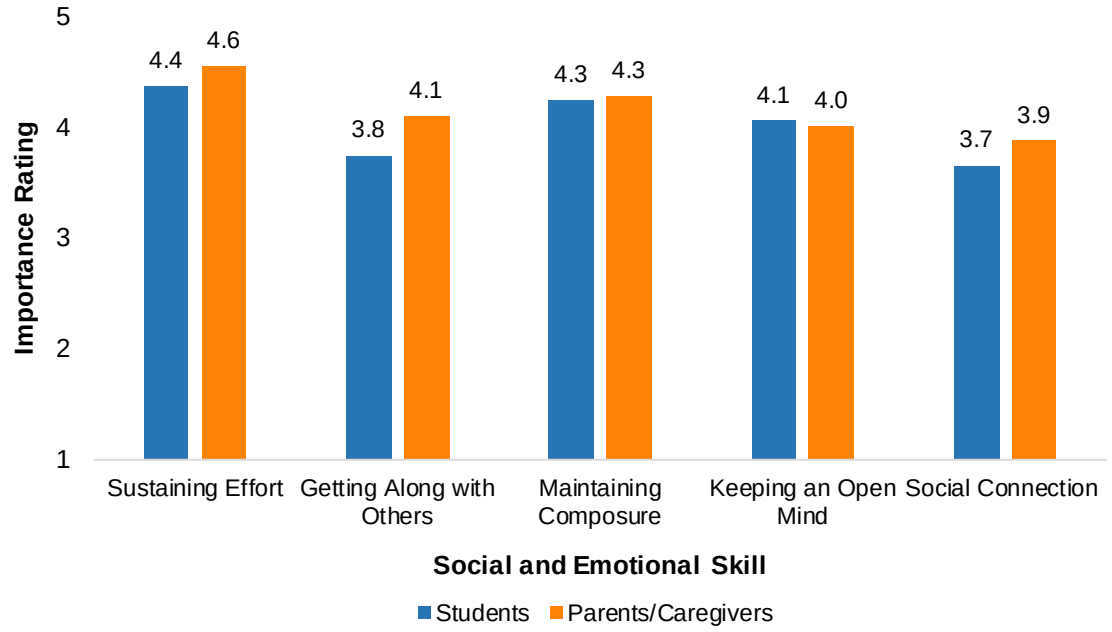
Familiarity with Social and Emotional Skills and SEL

First, we assessed students' and parent/caregivers' familiarity levels with two terms: "social and emotional skills" and "SEL," a commonly used acronym for "social and emotional learning." Overall, 77.1% of students and 87.0% of parents/caregivers were familiar with the term "social and emotional skills." However, only 11.2% of students and 33.1% of parents/caregivers were familiar with the term "SEL."

Perceived Importance of Social and Emotional Skills for Academic Success

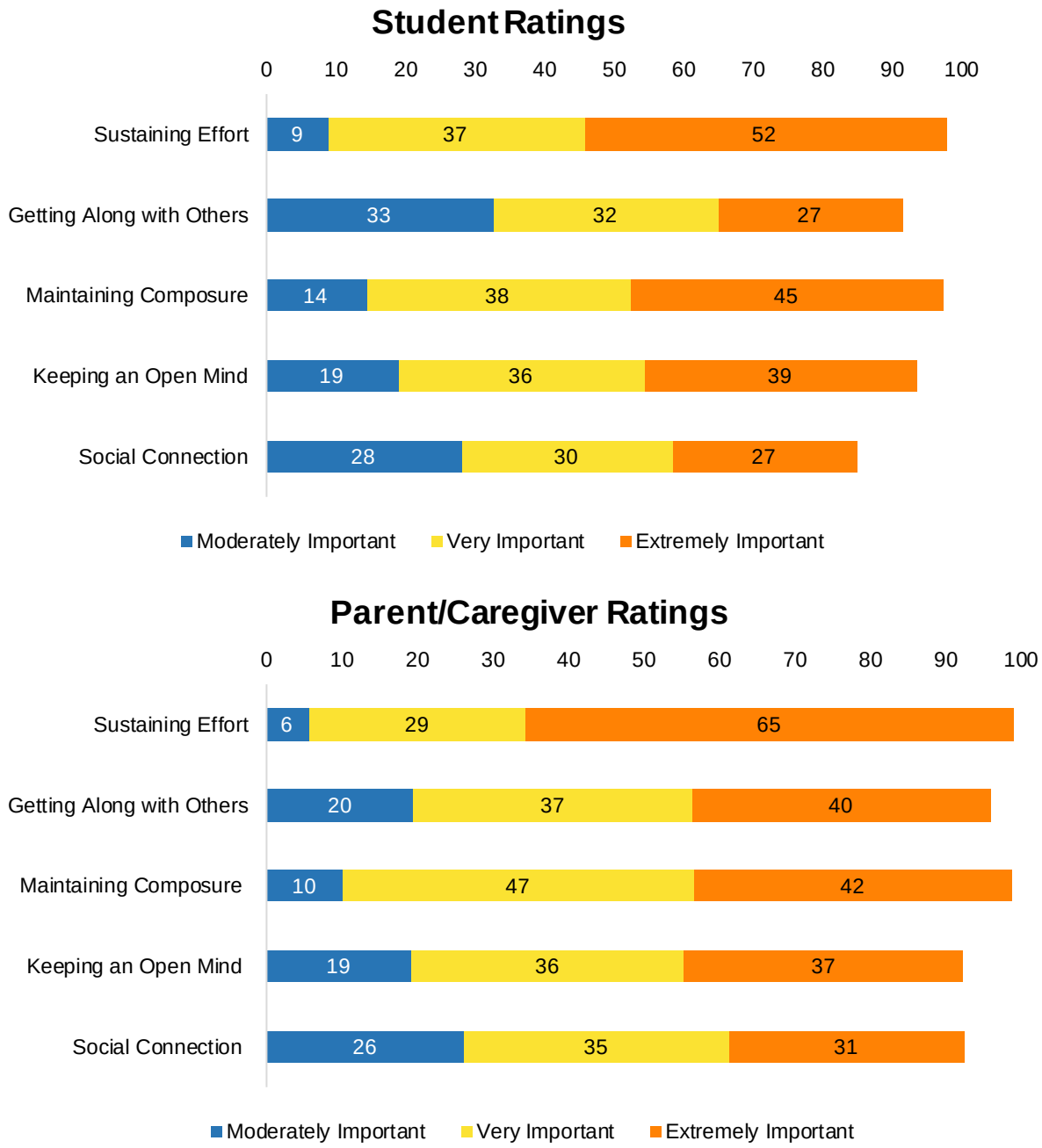
When presented with definitions of five SE skills, students and parents/caregivers were asked to rate how important they believed each skill is for success in school. Figure 1 shows the average importance ratings for each skill for students and parents/caregivers. Ratings were statistically significantly higher for parents/caregivers than students for three skills: Sustaining Effort (t = 4.47, p < .001), Getting Along with Others (t = 6.19, p < .001), and Social Connection (t = 3.81, p < .001). Figure 2 shows the percentage of respondents in each category who rated each skill as moderately important, very important, or extremely important.

Figure 1. Average Perceived Importance Ratings of Social and Emotional Skills for Students and Parents/Caregivers



Note. Student survey n = 620. Parent/caregiver survey n = 641. Respondents rated each skill between 1 and 5 with the following categories: 1 (not at all important), 2 (slightly important), 3 (moderately important), 4 (very important), 5 (extremely important). Higher scores represent higher perceived importance of each skill. Mean ratings for each skill are displayed.

Figure 2. Percentage of Students and Families Rating Each Skill as Moderately, Very, and Extremely Important



Note. Student survey *n* = 620. Parent/caregiver survey *n* = 641. Respondents rated each skill between 1 and 5 with the following categories: 1 (not at all important), 2 (slightly important), 3 (moderately important), 4 (very important), 5 (extremely important). Respondents who provided ratings in the 1 (not at all important) and 2 (slightly important) categories sum to below 15% for each skill and are not included in these figures.

Students and parents/caregivers were also asked to select which skill they perceived as being most important for success in postsecondary settings. Sustaining Effort was the most frequently selected skill by both students (54.5%) and parents/caregivers (64.6%). Keeping an Open Mind was selected by 16.9% of students and 12.5% of parents/caregivers. Maintaining Composure was selected by 14.4% of students and 9.7% of parents/caregivers. Getting Along with Others was selected by 7.4% of students and 7.0% of parents/caregivers. Social Connection was selected by 6.8% of students and 6.2% of parents/caregivers.

Open-Ended Responses: Responses by Category

To analyze the open-ended response data, we used the coding scheme described on (pg. 7) to categorize all responses on the skills respondents perceived as most important for student success in school. We examined skill category frequencies by the rank in which skills were listed as well as overall across the five rank positions (respondents could list five separate skills within their response). Of note, skills within responses were assigned to two categories if the skill truly represented both categories within the ACT Holistic Framework (e.g., communication, which falls under both the cross-cutting capability and a behavioral [SE] skill taxonomies). Approximately 20% of skills received code assignments to more than one category. We totaled the number of Holistic Framework category assignments for each of the five possible skills listed by students and parents/caregivers. We then computed the percentage of codes assigned to each Holistic Framework category for each of the five skill positions. Table 3 displays the percentage of code assignments within each Holistic Framework category listed in each skill position by students and parents/caregivers. Figure 3 shows the overall percentage of code assignments aggregated across all five skill rank positions for students and parents/caregivers.

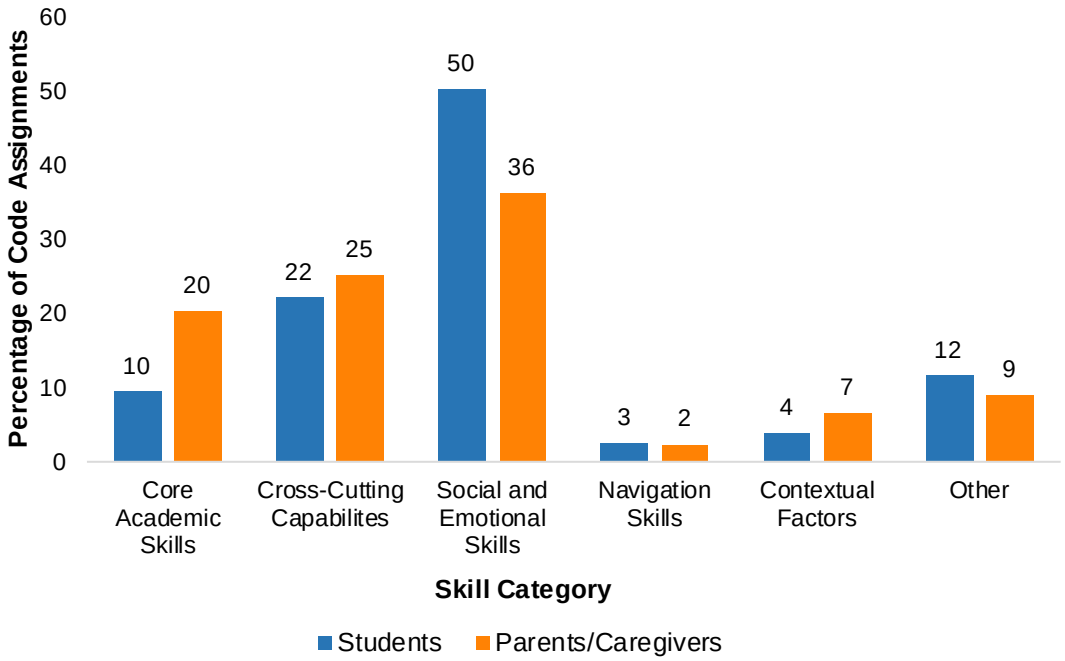
Table 3. Frequencies of Skill Category Code Assignment for Students and Parents/Caregivers

Survey	*N*	Core Academic Skills	Cross-Cutting Capabilities	Social and Emotional Skills
Students	Skill 1 (*n*=813)	9.4%	27.1%	53.5%
	Skill 2 (*n*=784)	10.6%	22.4%	50.4%
	Skill 3 (*n*=752)	10.0%	21.8%	50.3%
	Skill 4 (*n*=745)	9.0%	20.0%	49.1%
	Skill 5 (*n*=723)	8.5%	18.5%	47.7%
Parents/ Caregivers	Skill 1 (*n*=770)	21.7%	30.1%	37.8%
	Skill 2 (*n*=734)	24.8%	24.7%	36.5%

Survey	*N*	Core Academic Skills	Cross-Cutting Capabilities	Social and Emotional Skills
	Skill 3 (*n*=743)	21.3%	27.1%	35.7%
	Skill 4 (*n*=692)	17.7%	23.0%	35.5%
	Skill 5 (*n*=667)	15.6%	20.7%	35.8%
Survey	***N***	**Navigation Skills**	**Contextual Factors**	**Other**
Students	Skill 1 (*n*=813)	1.5%	1.5%	7.0%
	Skill 2 (*n*=784)	2.3%	3.7%	10.4%
	Skill 3 (*n*=752)	2.4%	2.4%	13.2%
	Skill 4 (*n*=745)	5.8%	5.8%	12.6%
	Skill 5 (*n*=723)	6.5%	6.5%	15.6%
Parents/ Caregivers	Skill 1 (*n*=770)	2.3%	3.8%	4.3%
	Skill 2 (*n*=734)	1.9%	5.0%	7.1%
	Skill 3 (*n*=743)	1.7%	2.6%	7.4%
	Skill 4 (*n*=692)	2.6%	7.9%	12.8%
	Skill 5 (*n*=667)	3.3%	9.9%	14.7%

Note. Code assignments are reported as percentages because *N*s differ for each skill in each sample. *N*s represent the total number of codes assigned within each skill rank position, not the number of valid responses.

Figure 3. Overall Percentages of Code Assignments Across Responses



Note. Total *n* of code assignments = 3,817 for students and 3,606 for parents/caregivers. The percentage of responses in each Holistic Framework is shown to respondents' answers to the following prompt: "In the spaces below, list the five skills that you think are most important for student success in school."

Social and Emotional Skills Categorization

Within the category of SE skills, we were also interested in which SE skills were represented most frequently in student and parent/caregiver responses. We coded for all six skills in the ACT behavioral skills framework (see skill and definitions listed in Table 1). All responses that received an initial code into the SE skills category received a secondary code, further categorizing them into one of the six SE skill categories as determined by the ACT behavioral skills framework. We totaled the number of behavioral skills category assignments for each skill initially categorized as an SE skill across all five responses for students and parents/caregivers. We then computed the percentage of behavioral skill codes assigned to each category from the total of codes assigned. Each skill only received one SE skill code. Table 4 shows the frequencies of code assignments into each SE skill category aggregated across all skill response positions.

Table 4. Frequencies of Social and Emotional Skills Code Assignments for Students and Parents/Caregivers

Social and Emotional Skill	Students (*n* = 1,918 code assignments)	Parents/Caregivers (*n* = 1,302 code assignments)
Sustaining Effort	61.7%	57.7%
Getting Along with Others	17.4%	21.7%
Maintaining Composure	4.1%	6.6%
Keeping an Open Mind	9.6%	8.9%
Social Connection	5.1%	3.2%
Acting Honestly	2.0%	1.8%

Open-Ended Responses: Presence of Social and Emotional Skill Response

Given the increasing popularity of SE skills in educational contexts, we were interested in determining how many response sets contained an SE skill within them. Both the student and parent/caregiver surveys allowed for entry of five separate skills. Response sets ranged from having all SE skills (e.g., resilience, teamwork, discipline, positivity, hard work), to having a combination of SE skills amongst other skills (e.g., study skills, English, math, reading, time management), to having no SE skills (e.g., logical reasoning, mathematics, grammar, reading comprehension, writing). Of 655 valid student response sets, 580 (88.5%) contained an SE skill. Of 638 valid parent/caregiver responses, 491 (77.0%) contained an SE skill.

We were also interested in the frequency of SE skills listed compared to core academic skills. Compared to the 580 response sets that contained SE skills, only 188 (28.8%) of student responses contained a core academic skill. 127 (19.4%) respondents listed both an SE skill and core academic skill within their response set. For parents/caregivers, 327 (51.3%) response sets included a SE skill. 206 responses (32%) included both an SE skill and core academic skill. Overall, SE skills were listed more frequently than core academics in both the student and parent/caregiver samples, though parents/caregivers did list core academic skills more frequently than students.

Open-Ended Responses: All Skills Listed

Last, we examined all open-ended responses to determine which skills students and parents/caregivers considered most important for student success. We computed frequencies for how many times each term appeared across response sets. Figure 4 displays the top 30 most frequent responses for students, and Figure 5 displays the top 30 most frequent responses for parents/caregivers.

Figure 4. Frequencies of Top 30 Skills Listed by Students

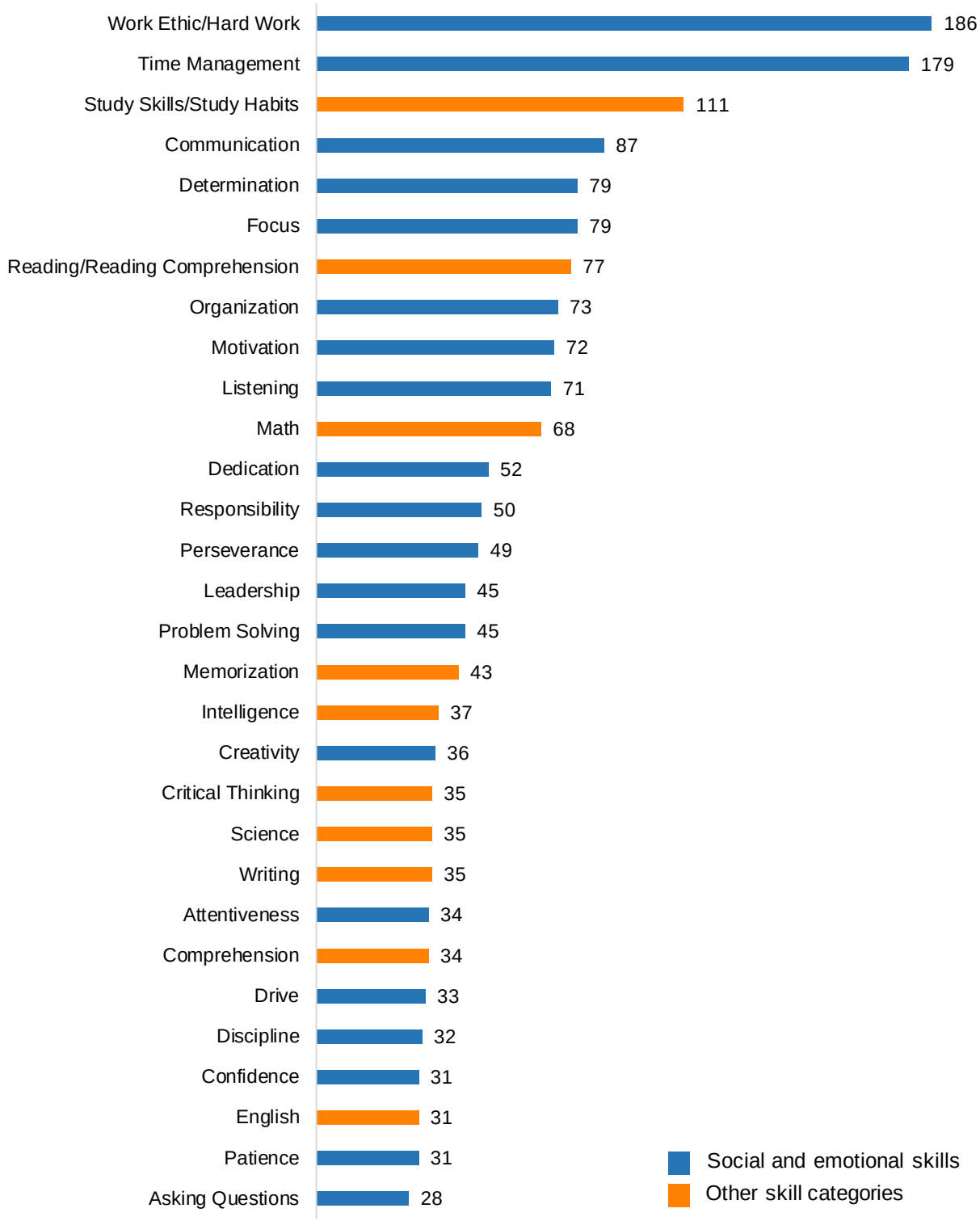
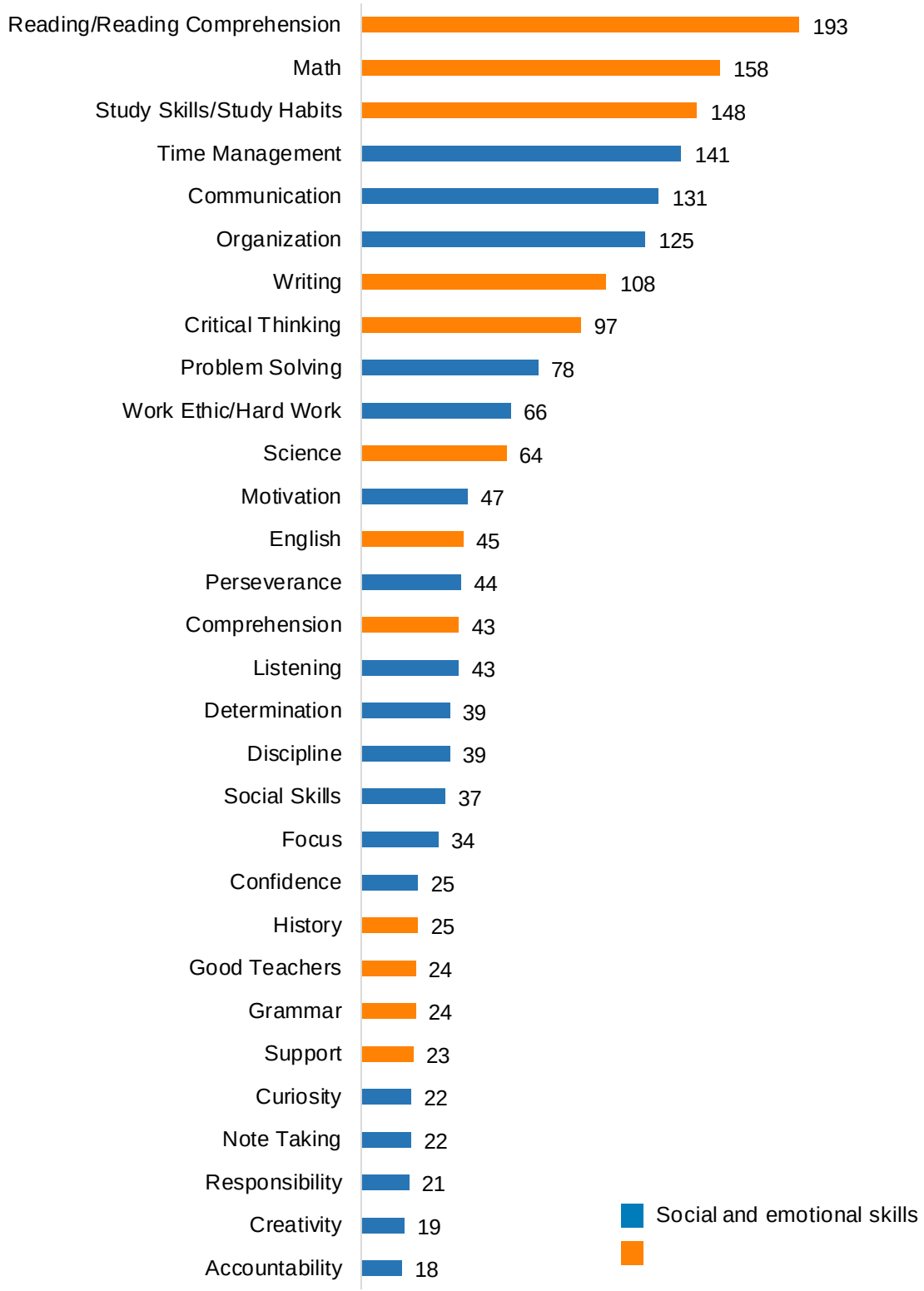


Figure 5. Frequencies of Top 30 Skills Listed by Parents/Caregivers



Subgroup Differences

In addition to these overall results, we also examined potential subgroup differences in student and parent/caregiver responses. We analyzed results by four main subgroups: ACT fee waiver status, state political affiliation, student ACT scores, and student race/ethnicity category. For ACT fee waiver status, we examined differences in both student and parent/caregiver results based on if students received a fee waiver versus did not receive a fee waiver. For political affiliation, we based this on the respondents' *state of residence* using data from Gallup 2017. Because we did not directly collect individual political affiliation, we assigned each respondent the political affiliation corresponding to their state of residency. Table A9 shows the sample size for each study based on state and the corresponding political affiliation assigned to each state. We examined differences between individuals from states that were categorized by Gallup as "Democratic leaning" (i.e., greater average Democratic versus Republican political affiliation) versus states that were not Democratic leaning. While self-reported political affiliation would have been preferred, we did not have this data available for respondents and therefore used respondents' state membership to determine the state's political leaning. For ACT scores, we examined differences in student responses for those who scored below the national average on the ACT (a score of 21; ACT, 2022) compared to those who scored at this average or above. Finally, for student race/ethnicity category, student race/ethnicity was reported as one of the following: (a) Black/African American, (b) American Indian/Alaskan Native, (c) White, (d) Hispanic/Latino, (e) Asian, (f) Native Hawaiian/Other Pacific Islander, (g) Two or more races, or (h) Prefer not to respond. The analyses below examine differences across four of these groups, including: (a) Black/African American, (b) White, (c) Hispanic/Latino, and (d) Asian. These groups were selected due to larger sample sizes in comparison to the remaining groups. We only had race/ethnicity information for students. As such, parent/caregiver responses were analyzed based on their student's race/ethnicity.

Analytic Plan

Tables A1 to A4 in the appendix include all descriptive statistics for all subgroup comparisons on familiarity and the open-ended responses for students (A1 and A2) and parents/caregivers (A3 and A4). Chi-square tests of independence were run to examine potential subgroup differences in terms of the proportion of individuals who reported being familiar with the terms "social and emotional skills" and "SEL." Additionally, chi-square tests of independence were run to examine potential subgroup differences in the proportion of individuals who included SE skills and core academic skills in their open-ended responses. Tables A5 to A8 in the appendix include all descriptive statistics and all subgroup comparisons on SE skill importance ratings for students (A5 and A6) and parents/caregivers (A7 and A8). For all dichotomous categories (i.e., fee waiver status, state political affiliation, ACT scores), we computed independent samples t-tests on reported importance for each of the five skills. For race/ethnicity, we fit one-way ANOVA models with each of the four race/ethnicity categories on reported importance for each of the five skills. Subgroup differences reaching statistical significance are reported in the sections below. We also report effect sizes for all significant differences in the form of Hedges *g*

(standardized mean differences), η_p^2 (effect of a variable in an ANOVA model), φ (2x2 contingency tables), and Cramer's V (contingency tables larger than 2x2).

Student Sample

Fee Waiver Status

Regarding familiarity, a greater proportion of students who did not receive fee waivers reported being familiar with "SEL" compared to students who did receive few waivers; X^2 (1, N = 651) = 5.07, p = .024, and φ = .09. Regarding SE skill importance, rated importance was greater for Sustaining Effort for students who did not receive fee waivers versus students who did receive few waivers; t(578) = 2.41, p = .016, and g = .24. The opposite pattern of results occurred for Keeping an Open Mind. Rated importance was greater for students who received fee waivers versus students who did not receive few waivers; t(578) = 2.39, p = .017, and g = .24.

ACT Score

Regarding SE skill importance, rated importance was greater for Sustaining Effort for students who scored average or above on the ACT versus students who scored below average on the ACT; t(577) = 2.80, p = .005, and g = .26. In contrast, rated importance for Keeping an Open Mind was greater for students who scored below average on the ACT versus those that scored average or above on the ACT; t(577) = 2.10, p = .036, and g = .19. Additionally, rated importance for Social Connection was greater for students who scored below average on the ACT versus those that scored average or above on the ACT; t(577) = 2.74, p = .006, and g = .24. Regarding the inclusion of an SE skill within open-ended response sets, a greater proportion of students who scored average or above on the ACT included an SE skill compared to students who scored below average on the ACT; X^2 (1, N = 612) = 14.77, p < .001, and φ = .16. In contrast, a greater proportion of students who scored below average on the ACT included a core academic skill compared to students who scored average or above on the ACT; X^2 (1, N = 610) = 4.14, p = .042, and φ = .08.

Race/Ethnicity

Rated importance on Keeping an Open Mind differed by race/ethnicity; F(3, 539) = 4.65, p = .003,and η_p^2 =0.03. Post-hoc t-tests using the Tukey HSD correction revealed greater rated importance of this skill for students who identified as Black/African American versus students who identified as White; p = .005 and g = .46. No other differences were statistically significant. Additionally, the inclusion of SE skills within open-ended response sets also differed by race/ethnicity; X^2 (3, N = 572) = 8.24, p = .041, and φ = .12. Follow-up chi-square tests of independence found a lower proportion of students identifying as Black/African American included an SE skill in comparison to students identifying as Hispanic (X^2 [1, N = 138] = 3.90, p = .048, and φ = .17) and Asian (X^2 [1, N = 112] = 5.40, p = .02, and φ = .22). Additionally, a lower proportion of students identifying as White included an SE skill in comparison to students identifying as Asian (X^2 [1, N = 434] = 4.38, p = .036, and φ = .10).

Political Affiliation

Regarding familiarity, a greater proportion of students who were from Democratic-leaning states reported being familiar with "SEL" compared to students that were not from Democratic-leaning states; X^2 (1, N = 651) = 16.31, p < .001, and φ = .16. Regarding the inclusion of an SE skill within open-ended response sets, a greater proportion of students who were from Democratic-leaning states included an SE skill compared to students that were not from Democratic-leaning states; X^2 (1, N = 613) = 8.79, p = .003, and φ = .12.

Parent/Caregiver Data

Fee Waiver Status

Similar to the results above, rated importance for Keeping an Open Mind was greater for parents/caregivers of students who received a fee waiver versus parents/caregivers of students who did not receive a few waiver; t(582) = 2.98, p = .003, and g = .37. Regarding the inclusion of an SE skill within open-ended response sets, a greater proportion of parents/caregivers of students who did not receive fee waivers included an SE skill in comparison to parents/caregivers of students who received a fee waiver; X^2 (1, N = 581) = 26.80, p < .001, and φ = .22. In contrast, for the inclusion of a core academic skill within open-ended response sets, a greater proportion of parents/caregivers of students received fee waivers included an academic skill in comparison to parents/caregivers of students who did not receive a fee waiver; X^2 (1, N = 581) = 4.18, p = .041, and φ = .09.

Race/Ethnicity

For Sustaining Effort, rated importance differed by student race/ethnicity; F(3, 538) = 3.56, p = .014, and η_ρ^2 =0.02. Post-hoc t-tests using the Tukey HSD correction revealed lower rated importance for parents/caregivers of students identifying as Asian compared to parents/caregivers of students identifying as Black/African American (p = .012, g = .90) or White (p = .009, g = .87). No other post-hoc comparisons were significantly different. Rated importance of Keeping an Open Mind also differed by student race/ethnicity; F(3, 538) = 6.15, p < .001, and η_ρ^2 =0.03. Post-hoc t-tests using the Tukey HSD correction revealed greater rated importance for parents/caregivers of students identifying as Black/African American versus parents/caregivers of students identifying as Hispanic/ Latino (p = .021, g = .56) or White (p = < .001, g = .63). No other post-hoc comparisons were significantly different. For Maintaining Composure, rated importance differed by student race/ethnicity; F(3, 538) = 3.51, p = .015, and η_ρ^2 =0.02. Post-hoc t-tests using the Tukey HSD correction revealed greater rated importance for parents/caregivers of students identifying as Black/African American versus parents/caregivers of students identifying as Asian (p = .026, g = .94). No other post-hoc comparisons were significantly different.

The inclusion of SE skills within open-ended response sets also differed by student race/ethnicity; X^2 (3, N = 539) = 17.29, p = .001, and V = .18. Follow-up chi-square tests of independence found a lower proportion of parents/caregivers of students identifying as

Black/African American included an SE skill in comparison to parents/caregivers of students identifying as White (X^2 [1, N = 482] = 17.28, p < .001, and φ = .19). Additionally, the inclusion of core academic skills also differed by student race/ethnicity; X^2 (3, N = 539) = 12.11, p = .007, and V = .15. Follow-up chi-square tests of independence found a greater proportion of parents/caregivers of students identifying as Black/African American included a core academic skill in comparison to parents/caregivers of students identifying as White (X^2 [1, N = 482] = 6.59, p = .010, and φ = .12), Hispanic s(X^2 [1, N = 116] = 9.83, p = .002, and φ = .29), and Asian (X^2 [1, N = 87] = 4.92, p = .027, and φ = .24).

Political Affiliation

Rated importance of Keeping an Open Mind was greater for parents/caregivers from Democratic-leaning states versus states that were not Democratic leaning; t(581) = 2.49, p = .013, and g = .22. Additionally, a greater proportion of parents/caregivers who were from Democratic-leaning states included an SE skill compared to parents/caregivers that were not from Democratic-leaning states; X^2 (1, N = 580) = 11.68, p = .001, and φ = .14. In contrast, for core academic skills, a greater proportion of parents/caregivers who were not from Democratic-leaning states included a core academic skill compared to parents/caregivers who were from Democratic-leaning states; X^2 (1, N = 580) = 8.61, p = .003, and φ = .12.

Discussion

The current study had three main goals. The first goal was to examine the extent to which students and parents/caregivers value social and emotional (SE) skills. Overall, ratings of perceived importance were high for both students and parents/caregivers (*M*s ranged from 3.75 to 4.56 out of 5). Additionally, both students and parents/caregivers selected Sustaining Effort as the most important SE skill for success in postsecondary settings. This finding aligns well with recent meta-analytic work showing that, of all SE skills evaluated, Sustaining Effort is the strongest predictor of academic achievement in postsecondary settings (ρ = .26; Mammadov, 2022).

The second goal of this study was to examine, in an open-ended fashion, the skills that students and parents/caregivers list as being most important to student success in school. While both students and parents/caregivers listed a variety of skills that spanned each of the four Holistic Framework categories, SE skills were listed most frequently by students and parents/caregivers. Students were more likely than parents/caregivers to include SE skills in their skill lists. Additionally, similar to the closed-ended responses, Sustaining Effort was the most frequently represented SE skill in student and parent/caregiver responses. When looking at individuals' full response sets, a similar pattern emerged. SE skills were included within response sets by the majority of both students (88.5%) and parents/caregivers (77%). In contrast, fewer students (28.8%) and parents/caregivers (51.3%) included core academic skills in their response sets, a surprising finding given the importance of core academic skills for student success.

The final goal was to examine if student and parent/caregiver responses differed across four demographic subgroups. Regarding fee waiver status, one consistent difference across students and parent/caregivers was greater ratings of importance for Keeping an Open Mind for students and parents/caregivers who demonstrated financial need (i.e., those eligible for fee waivers) in comparison to students who were ineligible for fee waivers. For race/ethnicity, we found consistent differences across students and parents/caregivers on ratings of Keeping an Open Mind and the inclusion of SE skills in the open-ended responses. Rated importance of Keeping an Open Mind was greater, but the likelihood of including an SE skill was lower for students identifying as Black/African American and their parents/caregivers compared to other races/ethnicities. For political affiliation, although some recent research highlights the potential divisiveness of SEL (Tyner, 2021), we found more similarities than differences based on state political affiliation. The only consistent difference across students and parents/caregivers was that those from Democratic-leaning states were more likely to include an SE skill in their open-ended response than those who were not from Democratic-leaning states. There were no consistent differences across students and parents/caregivers, however, in favorability ratings for any of the five skills. Finally, for ACT scores, we only examined students' responses, and several differences occurred as detailed above (i.e., Sustaining Effort, Keeping an Open Mind, Social Connection, the inclusion of SE and academic skills).

Taken together, we found the greatest number of subgroup differences for Keeping an Open Mind and the inclusion of an SE skill in the open-ended responses. Other differences were less consistent across subgroups and samples. Despite these differences, ratings of importance were generally high across all subgroups (lowest $M = 3.59$ out of 5 for any subgroup), and a majority of individuals included an SE skill in their open-ended response set (lowest was 55% for any subgroup). Additionally, the differences we found tended to involve small or medium effects, except for several of the follow-up comparisons between parents/caregivers of students identifying as Asian compared to parents/caregivers of students of other races/ethnicities. However, some caution is warranted in interpreting these effects as the sample size of parents/caregivers of Asian students was small ($n = 14$), and effect size estimates are unstable with small samples (Lakens & Evers, 2014). Overall, these results suggest each of the subgroups we examined viewed these five SE skills as important, were familiar with the term "social and emotional skills," and included SE skills when asked to list skills important to student success.

The current study used a mixed-method survey approach to examine students' and parents'/caregivers' beliefs about social and emotional skills. Although this approach's strengths include a large sample of students and parents/caregivers, several limitations are also notable. First, we did not directly ask respondents their political affiliation. We used their state of residence to approximate political affiliation using data on statewide averages from 2017. A more direct measure may have uncovered greater subgroup differences based on political affiliation, as we essentially examined political leaning at the state level rather than at the individual level. Similarly, we did not collect data on parent/caregiver demographics directly and instead relied on data from their students. In addition, the current sample involves students and

parents/caregivers of students who registered to take the ACT test. As such, these are likely primarily college-bound students. Future research should aim to replicate these results with broader samples of students with varying postsecondary plans. Additionally, generalizability of these results is limited given both samples had above-average ACT scores, household income levels, and limited representation of non-White racial/ethnic groups. Last, we recognize the prompt for the open-ended responses asked respondents to list skills most important for student success "in school." The focus on the school setting could have elicited more responses in the SE and core academic skill Holistic Framework categories given the salience of these skills in school settings. Alternatively, skills within the navigation framework may have been listed more frequently when discussing transitions between school and postsecondary institutions, or school and the workforce. Though results from this study underscore the importance of SE skills in school settings, it remains the case that all skills across the Holistic Framework (core academic skills, cross-cutting capabilities, behavioral skills, and navigation skills) are important constituents of success from school to the workforce.

Conclusion

Results from this study suggest students and parents/caregivers value SE skills and see these skills as a critical component of student success. All of the SE skills examined in this study were rated as important to success in school, with Sustaining Effort selected most frequently as the skill most important to postsecondary success. Students and parents/caregivers also frequently included SE skills when asked what skills are important to student success in an open-ended format. In addition, across different subgroups, SE skills were consistently rated as important and frequently included in the open-ended responses. Taken together, results show strong student and parent/caregiver support for SE skills and their role in student success.

Notes

1. More information on fee waiver eligibility criteria can be found here: *https://www.act.org/content/dam/act/unsecured/documents/FeeWaiver.pdf*
2. Acting Honestly is an additional skill in ACT's behavioral skills framework that was not included in the surveys. It is defined as: the extent to which a person values and adheres to ethical and moral standards of behavior, as well as personal level of humility (Casillas et al., 2015).

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Appendix

Table A1. Subgroup Analyses on Student Familiarity and Open–Ended Responses by Fee Waiver Status, Political Affiliation, and ACT Score

Survey Question	No Waiver	No Waiver *N*	Waiver	Waiver *N*	χ^2	*p*	φ
% Who have heard of SE skills	78%	501	73%	150	2.03	.155	.06
% Who have heard of SEL	13%	501	6%	150	5.07	.024	.09
Response set includes an SE skill	89%	472	87%	141	.77	.382	.04
Response set includes a core academic skill	29%	472	30%	139	.14	.712	.02
% Who have heard of SE skills	78%	501	73%	150	2.03	.155	.06
Survey Question	**Democratic Lean**	**Democratic Lean *N***	**Non-Democratic Lean**	**Non-Democratic Lean *N***	χ^2	**p**	**φ**
% Who have heard of SE skills	79%	223	76%	428	1.11	.291	.04
% Who have heard of SEL	18%	223	8%	428	16.31	< .001	.16
Response set includes an SE skill	94%	211	86%	402	8.79	.003	.12
Response set includes a core academic skill	25%	211	31%	400	2.93	.087	.07
Survey Question	**Below Average ACT**	**Below Average ACT *N***	**Average and Above**	**Average and Above *N***	χ^2	***p***	**φ**
% Who have heard of SE skills	76%	204	78%	446	.34	.558	.02
% Who have heard of SEL	10%	204	12%	446	.49	.484	.03
Response set includes an SE skill	81%	192	92%	420	14.77	< .001	.16
Response set includes a core academic skill	35%	191	26%	419	4.14	.042	.08

Table A2. Subgroup Analyses on Student Familiarity and Open–Ended Responses by Race/Ethnicity

Survey Question	Black/ African American	Black/African American *N*	White	White *N*	Hispanic/ Latino	Hispanic/ Latino *N*	Asian	Asian *N*	X^2	*p*	V
% Who have heard of SE skills	75%	73	78%	411	69%	74	78%	51	3.12	.374	.07
% Who have heard of SEL	8%	73	11%	411	8%	74	20%	51	5.00	.172	.09
Response set includes an SE skill	84%	68	87%	390	94%	70	98%	44	8.24	.041	.12
Response set includes a core academic skill	29%	68	29%	388	30%	70	23%	44	.91	.823	.04

Table A3. Subgroup Analyses on Parent/Caregiver Familiarity and Open–Ended Responses by Fee Waiver Status and Political Affiliation

Survey Question	No Waiver	No Waiver *N*	Waiver	Waiver *N*	X^2	*p*	φ
% Who have heard of SE skills	87%	520	89%	81	.07	.796	.01
% Who have heard of SEL	34%	520	28%	81	1.14	.285	.04
Response set includes an SE skill	81%	503	55%	78	26.80	< .001	.22
Response set includes a core academic skill	49%	503	62%	78	4.18	.041	.09
Survey Question	**Democratic Lean**	**Democratic Lean *N***	**Non-Democratic Lean**	**Non-Democratic Lean *N***	X^2	*p*	φ
% Who have heard of SE skills	90%	196	87%	404	1.47	.226	.05
% Who have heard of SEL	34%	196	33%	404	.95	.950	.003
Response set includes an SE skill	86%	194	74%	386	11.68	.001	.14
Response set includes a core academic skill	42%	194	55%	386	8.61	.003	.12

Table A4. Subgroup Analyses on Parent/Caregiver Familiarity and Open–Ended Responses by Race/Ethnicity

Survey Question	Black/ African American	Black/ African American *N*	White	White *N*	Hispanic/ Latino	Hispanic/ Latino *N*	Asian	Asian *N*	X^2	*p*	V
% Who have heard of SE skills	93%	74	87%	424	87%	46	86%	14	2.49	.477	.07
% Who have heard of SEL	35%	74	34%	424	41%	46	29%	14	1.35	.717	.05
Response set includes an SE skill	59%	73	81%	409	77%	43	79%	14	17.29	.001	.18
Response set includes a core academic skill	67%	73	51%	409	37%	43	36%	14	12.11	.007	.15

Table A5. Subgroup Analyses on Student SE Skill Importance Ratings by Fee Waiver Status, Political Affiliation, and ACT Score

SE Skill	No Waiver		Waiver							
	M (SD)	*N*	*M (SD)*	*N*	*t*	*df*	*p*	*g*	lower	upper
Sustaining Effort	4.42 (.7)	452	4.23 (.8)	128	2.41	578	.016	.26	0.0	0.4
Getting Along with Others	3.76 (1.0)	452	3.77 (.9)	128	–0.07	578	.944	–.01	–0.2	0.2
Maintaining Composure	4.23 (.8)	452	4.34 (.8)	128	–1.37	578	.171	–.13	–0.3	0.1
Keeping an Open Mind	4.01 (1.0)	452	4.23 (.8)	128	–2.39	578	.017	–.23	–0.4	0.0
Social Connection	3.66 (1.1)	452	3.7 (1.0)	128	–0.43	578	.667	–.04	–0.2	0.2
SE Skill	**Democratic Lean**		**Non-Democratic Lean**							
	M (SD)	*N*	*M (SD)*	*N*	*t*	*df*	*p*	*g*	lower	upper
Sustaining Effort	4.40 (.8)	205	4.37 (.8)	375	0.52	578	.603	.04	–0.1	0.2
Getting Along with Others	3.79 (.9)	205	3.75 (1.0)	375	0.46	578	.645	.04	–0.1	0.2
Maintaining Composure	4.30 (.8)	205	4.23 (.8)	375	1.00	578	.318	.09	–0.1	0.3
Keeping an Open Mind	4.04 (1.0)	205	4.07 (.9)	375	–0.37	578	.711	–.03	–0.2	0.1
Social Connection	3.67 (1.1)	205	3.67 (1.1)	375	0.02	578	.984	.00	–0.2	0.2

SE Skill	Below Average ACT		Average and Above							
	M (SD)	*N*	*M (SD)*	*N*	*t*	*df*	*p*	*g*	lower	upper
Sustaining Effort	4.24 (.8)	173	4.44 (.8)	406	–2.80	577	.005	–.26	–0.4	–0.1
Getting Along with Others	3.78 (1.0)	173	3.75 (.9)	406	0.30	577	.764	.03	–0.1	0.2
Maintaining Composure	4.27 (.7)	173	4.26 (.8)	406	0.13	577	.897	.01	–0.2	0.2
Keeping an Open Mind	4.18 (.8)	173	4.00 (.8)	406	2.10	577	.036	.24	0.0	0.4
Social Connection	3.85 (.9)	173	3.59 (1.0)	406	2.74	577	.006	.27	0.1	0.4

Table A6. Subgroup Analyses on Student SE Skill Importance Ratings by Race/Ethnicity

SE Skill	Black/ African American		White		Hispanic/ Latino		Asian					
	M (SD)	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*F*	*df*	*p*	η^2
Sustaining Effort	4.35 (.8)	60	4.40 (.8)	371	4.34 (.7)	68	4.50 (.6)	44	.51	3, 539	.674	.003
Getting Along with Others	3.70 (1.0)	60	3.78 (1.0)	371	3.68 (.9)	68	3.86 (.9)	44	.44	3, 539	.728	.002
Maintaining Composure	4.42 (.6)	60	4.21 (.9)	371	4.34 (.8)	68	4.43 (.6)	44	2.09	3, 539	.100	.01
Keeping an Open Mind	4.40 (.7)	60	3.96 (1.0)	371	4.21 (.8)	68	4.16 (.9)	44	4.65	3, 539	.003	0.03
Social Connection	3.65 (1.0)	60	3.68 (1.1)	371	3.56 (1.1)	68	3.86 (.9)	44	.74	3, 539	.529	.004

Note. Respondents rated each skill between 1 and 5 with the following categories: 1 (not at all important), 2 (slightly important), 3 (moderately important), 4 (very important), 5 (extremely important). Higher scores represent higher perceived importance of each skill.

Table A7. Subgroup Analyses on Parent/Caregiver SE Skill Importance Ratings by Fee Waiver Status and Political Affiliation

SE Skill	No Waiver		Waiver							
	M (SD)	*N*	*M (SD)*	*N*	*t*	*df*	*p*	*g*	lower	upper
Sustaining Effort	4.56 (.7)	511	4.52 (.8)	73	0.49	582	.627	0.06	–0.2	0.3
Getting Along with Others	4.07 (.9)	511	4.26 (.9)	73	–1.68	582	.093	–0.21	–0.5	0.0
Maintaining Composure	4.27 (.7)	511	4.40 (.7)	73	–1.43	582	.153	–0.18	–0.4	0.1
Keeping an Open Mind	3.97 (1.0)	511	4.33 (.9)	73	–2.98	582	.003	–0.37	–0.6	–0.1
Social Connection	3.86 (1.0)	511	3.97 (1.0)	73	–0.95	582	.344	–0.12	–0.4	0.1
SE Skill	**Democratic Lean**		**Non-Democratic Lean**							
	M (SD)	*N*	*M (SD)*	*N*	*t*	*df*	*p*	*g*	lower	upper
Sustaining Effort	4.60 (.6)	192	4.54 (.7)	391	1.04	581	.299	0.09	–0.1	0.3
Getting Along with Others	4.11 (.8)	192	4.09 (.9)	391	0.321	581	.749	0.03	–0.2	0.2
Maintaining Composure	4.30 (.7)	192	4.28 (.7)	391	0.248	581	.805	0.02	–0.2	0.2
Keeping an Open Mind	4.16 (.9)	192	3.95 (1.0)	391	2.49	581	.013	0.22	0.0	0.4
Social Connection	3.90 (1.0)	192	3.85 (1.0)	391	0.536	581	.592	0.05	–0.1	0.2

Table A8. Subgroup Analyses on Parent/Caregiver SE Skill Importance Ratings by Race/Ethnicity

SE Skill	Black/ African American		White		Hispanic/ Latino		Asian					
	M (SD)	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*F*	*df*	*p*	η^2
Sustaining Effort	4.61 (.5)	69	4.58 (.6)	415	4.50 (.7)	44	4.00 (1.1)	14	3.56	3, 538	.014	.02
Getting Along with Others	4.22 (.9)	69	4.10 (.9)	415	4.00 (1.0)	44	3.64 (1.1)	14	1.86	3, 538	.135	.01
Maintaining Composure	4.51 (.6)	69	4.27 (.5)	415	4.30 (.8)	44	3.93 (.8)	14	3.51	3, 538	.015	.02
Keeping an Open Mind	4.48 (.8)	69	3.96 (.8)	415	3.95 (1.2)	44	3.93 (.9)	14	6.15	3, 538	< .001	.03
Social Connection	4.09 (.9)	69	3.88 (.9)	415	3.59 (1.1)	44	3.71 (1.1)	14	2.41	3, 538	.066	.01

Note. Respondents rated each skill between 1 and 5 with the following categories: 1 (not at all important), 2 (slightly important), 3 (moderately important), 4 (very important), 5 (extremely important). Higher scores represent higher perceived importance of each.

Table A9. Sizes and Political Affiliations by State

State	Student Sample Size	Parent Sample Size	% Democrat	% Republican	Democratic Advantage	Code in Current Study
AK	0	3	31	52	–21	Not Democratic Leaning
AL	14	16	35	50	–5	Not Democratic Leaning
AR	40	33	36	45	–9	Not Democratic Leaning
AZ	7	4	40	42	–2	Not Democratic Leaning
CA	13	10	51	30	21	Democratic Leaning
CO	5	7	46	37	9	Democratic Leaning
FL	43	33	42	39	3	Democratic Leaning
GA	38	23	42	40	2	Democratic Leaning
HI	0	1	50	28	22	Democratic Leaning
IA	14	14	42	42	0	Not Democratic Leaning
ID	6	3	31	53	–22	Not Democratic Leaning
IL	22	23	50	33	17	Democratic Leaning
IN	4	4	41	43	–2	Not Democratic Leaning
KS	19	14	34	48	–14	Not Democratic Leaning
KY	15	18	41	45	–4	Not Democratic Leaning

State	Student Sample Size	Parent Sample Size	% Democrat	% Republican	Democratic Advantage	Code in Current Study
LA	54	44	40	43	–3	Not Democratic Leaning
MA	5	4	57	26	31	Democratic Leaning
MD	6	6	56	28	28	Democratic Leaning
MI	6	5	45	38	7	Democratic Leaning
MN	13	17	47	37	10	Democratic Leaning
MO	45	50	38	45	–7	Not Democratic Leaning
MS	32	47	38	45	–7	Not Democratic Leaning
MT	3	1	37	51	–14	Not Democratic Leaning
NC	14	11	44	39	5	Democratic Leaning
ND	1	1	28	56	–28	Not Democratic Leaning
NE	16	8	35	50	–15	Not Democratic Leaning
NJ	11	15	48	33	15	Democratic Leaning
NM	2	3	48	34	14	Democratic Leaning
NV	4	2	42	39	3	Democratic Leaning
NY	14	11	52	29	23	Democratic Leaning
OH	29	25	41	42	–1	Not Democratic Leaning

State	Student Sample Size	Parent Sample Size	% Democrat	% Republican	Democratic Advantage	Code in Current Study
OK	14	16	35	49	–14	Not Democratic Leaning
PA	6	10	46	41	5	Democratic Leaning
RI	1	1	48	27	21	Democratic Leaning
SC	6	4	37	47	–10	Not Democratic Leaning
SD	8	5	35	52	–17	Not Democratic Leaning
TN	35	41	35	47	–12	Not Democratic Leaning
TX	32	30	38	41	–3	Not Democratic Leaning
UT	17	13	29	56	–27	Not Democratic Leaning
VA	4	5	45	38	7	Democratic Leaning
WA	4	4	49	34	15	Democratic Leaning
WI	12	5	43	41	2	Democratic Leaning
WV	10	5	40	44	–4	Not Democratic Leaning
WY	7	5	27	56	–29	Not Democratic Leaning

Note. All information on political affiliation (i.e., % Democrat, % Republican, and Democratic advantage) are from Gallup, 2017. Sample sizes include only individuals who had data for at least one of the results included in the subgroup analyses based on state political affiliation.

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