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More skill than trait, or more trait than skill? Relations of (mis)matches between personality traits and social, emotional, and behavioral skills with adolescent outcomes

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Abstract

Personality traits and social, emotional, and behavioral (SEB) skills are closely related but incrementally predict life outcomes. This implies that although tightly connected, what a person *tends* to do (personality traits) and what they are *capable* of doing (skills) are not always perfectly aligned. In this study, we investigated whether matches and mismatches between traits and skills predict important life outcomes. We studied a diverse sample of high school students (N = 840) who self-reported their Big Five personality traits, five SEB skill domains, and an array of academic, social, and emotional outcomes. Using response surface analysis, we found that matching trait/skill levels did not confer a unique benefit for adolescents over the additive effects of traits and skills. In contrast, we found that trait/skill mismatches predicted outcomes, and in some cases, adolescents with mismatching trait/skills had the best and worst outcomes. Specifically, youth with higher skill levels relative to their traits reported better outcomes, and those with lower skills relative to their traits reported worse outcomes. Our findings provide insights into functioning that are missed by solely focusing on direct effects and show that SEB skills can enhance youth's personality strengths and buffer against shortcomings.

Plain language summary

Personality traits are how a person tends to think, feel, and behave, whereas social, emotional, and behavioral skills are how someone is capable of acting at their best. Although personality traits and skills are related, what people tend to do and what they are capable of doing are not always perfectly aligned. Some theories propose that people will have better life outcomes if they have matching levels of traits and skills, meaning they tend to act in ways that match their capabilities. Other theories propose that people will have better outcomes if they have mismatching trait and skill levels, meaning they are capable of acting at higher levels than they usual act. This study tested these competing hypotheses in a sample of 840 high school students. Results only supported the benefits of mismatching trait and skill levels. Specifically, we found that youth with higher skill levels relative to their traits reported better academic, social, and mental health outcomes. Additionally, we found that having high skills and high trait levels predicted better outcomes, even though having matching levels did not provide additional benefits. Together, our study suggests that having high skill levels can help people compensate for personality shortcomings and that having high levels of traits and skills can enhance someone's outcomes by allowing them to fully capitalize on their personality strengths.

Keywords

adolescence, non-cognitive skills, Big Five, personality traits, socioemotional skills, social and emotional learning, response surface analysis

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Introduction

Personality traits matter for life outcomes (Beck & Jackson, 2021; Ozer & Benet-Martínez, 2006; Roberts et al., 2007; Soto, 2019, 2021). People's social, emotional, and behavioral (SEB) skills also matter (Guo et al., 2022; Soto et al., 2022a, Soto et al., 2023). Whereas personality traits reflect how someone *tends* to think, feel, and behave, SEB skills reflect how someone is *capable* of thinking, feeling, and behaving. Although personality and skills are intertwined, they are not always perfectly matched. For example, someone who is usually quiet and prefers to be alone (reflecting a low level of social traits) could still be capable of stepping up to effectively lead a discussion or group project when needed (reflecting a high level of social skills). Conversely, someone could be quite talkative and chatty (high trait level) without demonstrating much conversational tact (low skill level).

Thus, the degree of match or mismatch between a person's traits and skills may matter for life outcomes—even beyond the main effects of skills and traits. Such (mis) matching between traits and skills may be especially influential during adolescence when youth's traits and skills are both developing at a rapid pace to fulfill new roles and responsibilities (Napolitano et al., 2021; Soto & Tackett, 2015). In this study, we expand on the established findings that personality and SEB skills predict important outcomes by exploring whether (mis)matches between traits and skills also predict outcomes during the formative adolescent years.

Relationship between personality traits and skills

Personality traits and SEB skills are distinct but functionally related constructs (Paulhus & Martin, 1987; Soto et al., 2021; Wallace, 1966). They are related because if someone is inclined to act in a certain manner—due to either their predisposition or situational demands—they must have some capacity to perform those behaviors. Consistent with this functional relationship, a growing body of work has found that the structures of personality traits and SEB skills align (Abrahams et al., 2019; Burrus & Brenneman, 2016; Martin et al., 2019; Walton et al., 2022). These structural results suggest that individual differences in traits and skills reflect the same core domains of cognitive, affective, and behavioral functioning. Specifically, SEB skills can be organized into five domains representing functional *capacities* that map onto the Big Five personality trait *tendencies* (Soto et al., 2022a): Agreeableness relates to Cooperation skills which involve capacities to maintain positive relations, Conscientiousness relates to Self-Management skills which involve capacities for pursuing goals and completing tasks, Emotional Stability (vs. Neuroticism) relates to Emotional Resilience skills involving capacities for regulating emotions, Extraversion relates to Social Engagement skills which involve capacities needed to engage with others, and Openness relates to Innovation skills involving capacities to engage with novel ideas and experiences. Supporting the idea that traits and skills reflect common domains of functioning, a joint structure of traits and SEB skills has been found across multiple studies (Primi et al., 2016; Walton et al., 2023).

Although strongly related, there are also conceptual and empirical distinctions between corresponding Big Five traits and skills. Conceptually, people can have abilities that exceed how they typically act. Empirically, traits and skills predict different outcomes, and increment one another in prediction (Soto et al., 2022b, 2023; Yoon et al., 2024), which suggests they are governed to some degree by separate mechanisms. The outcomes uniquely predicted by traits and skills are also consistent with their conceptual differences; for example, skills out-predict traits on the ACT achievement test, which measures maximal performance under optimal conditions rather than typical performance (Yoon et al., 2024). Traits and skills are also not perfectly correlated (e.g., convergent *r*s from .43 to .79; Lechner et al., 2022; Soto et al., 2022). The fact traits and skills are imperfectly aligned across people raises the possibility that they are at times mismatched (e.g., high skill and low trait). We next summarize several lines of work supporting the possibility that individual differences in *relative* trait and skill levels may shape social, emotional, and academic outcomes in addition to their direct, independent effects.

How might trait and skill (mis)matches shape life outcomes?

Various research traditions imply different hypotheses about how (mis)matches between corresponding personality traits and skills may relate to outcomes. One possibility is that a person who is capable of acting much differently than they tend to act in a given domain (*higher skill than trait*) would have better outcomes because they can rise to the occasion when needed, without the liabilities of trait extremity. Take, for instance, someone who has relatively higher Social Engagement skills than Extraversion (colloquially, the socially adept introvert). They can be conversational and friendly when hanging out with peers, and are therefore well-liked, but don't feel the need to spend so much time socializing that they neglect their schoolwork. Scholars across disciplines have long theorized that this ability to flexibly adjust behavior to different situations and social roles is highly adaptive (Goffman, 1959; Leary, 1957; Sheldon et al., 1997; Snyder, 1974).

Another possibility is that how someone tends to act is more consequential in the long run than how they are capable of acting. This possibility is supported by the large literature showing that personality traits incrementally predict life outcomes over intelligence, socioeconomic status, demographics, and other individual difference factors (Roberts et al., 2007; Waszczuk et al., 2022). Theoretically, the power of personality is explained by an accumulation of habitual behaviors. It may be that for most life outcomes, such cumulative everyday performance matters more than "peak" performance. Furthermore, being highly skilled in one domain can come with disadvantages such as being burdened with more demands and expectations or being pigeon-holed into limited roles at the expense of developing other skills. Therefore, having a *higher trait*

than skill may be better for life outcomes. For example, imagine someone with relatively higher levels of Conscientiousness than Self-Management skills. This person might be driven to work hard on all their assignments, despite their comparatively modest effectiveness to manage time and stay on task. In the long run, their tendency to persist despite lacking strong organizational skills may be what matters most for attaining positive outcomes, such as job performance (Anderson et al., 2001; Wilmot et al., 2019).

It is also possible that having *matching levels* of traits and SEB skills predict better outcomes. Theory and research on the importance of authenticity, identity coherence, self-discrepancies, and related concepts all suggest that consistency in how people act across roles and consistency in how they view different parts of themselves are key to healthy functioning (Block, 1961; Donahue et al., 1993; Fleeson & Wilt, 2010; Higgins, 1987; Kehl et al., 2021; Kernis & Goldman, 2005; Lecky, 1945; Rogers, 1959). People with more consistent self-views may have less of a discrepancy between their actual and ideal self, leading to greater security and stability, and better socio-emotional outcomes (Higgins, 1987). In contrast to the hypotheses presented above, these theories suggest that a person with mismatching trait and skill levels will have *worse* outcomes because they are often in situations where they must act "out of character" (e.g., being outgoing in social situations despite being low in Extraversion and being denied responsibilities despite being high in Conscientiousness).

A final possibility is that the level at which traits and skills match matters. For example, *matching at high levels* of traits and SEB skills may have multiplicative benefits for life outcomes because a person is consistently playing to their strengths. For example, an extraverted person with strong social engagement skills may particularly benefit from the fact that they are both willing to take on leadership roles and highly effective once in them, leading to especially high social status and well-being. Conversely, *matching at low levels* of traits and skills may lead to exponentially worse outcomes because a person may lack the minimum psychological and behavioral resources needed in certain situations. For example, an unconscientious person with poor self-management skills will likely do their best to avoid taking initiative or having responsibility. However, if required to take on a leadership role with responsibility over other people, they may lack both the willingness and capacity to function at all effectively in it, therefore experiencing an especially large decline in status and well-being.

Importance of trait/skill (mis)matches for adolescent outcomes

Trait/skill mismatches may be especially relevant for predicting outcomes during adolescence. Across the high school years, youth take on new roles and responsibilities that demand new behavioral repertoires (Napolitano et al., 2021). Much of the turmoil in adolescence may be explained by normative lags between increasing academic and social expectations placed on youth and their ability to consistently meet those expectations (Denissen et al., 2013; Nigg, 2017; Soto & Tackett, 2015). For example, some youth may fall behind in class because they may not yet know how to effectively use organization methods that their more demanding classes require. Thus, variation in how well-matched youth's SEB skills are to their newly acquired role-related traits may be a source of risk or resilience. Youth with a wider discrepancy between their traits and skills may experience greater disruptions in maturity (e.g., self-regulation) than their peers leading to worse outcomes, whereas youth who develop both the requisite traits and skills for their new roles may have especially positive outcomes. Knowing whether relative trait/skill levels predict outcomes has the potential to reveal nuanced insights into why certain youth fare better or worse during the adolescent years, beyond those insights that would be gleaned from looking at either traits or skills alone.

The current study

In summary, the literature supports competing (but not mutually exclusive) hypotheses about how matches and mismatches between traits and skills matter for functioning. We therefore conducted the present study to investigate whether such (mis)matches between traits and skills predict key life outcomes during adolescence. Specifically, we studied a sample of diverse high schoolers who self-reported their personality traits, SEB skills, and an array of academic, social, and emotional outcomes, and for whom school-reported outcomes (e.g., grades) were also available. Data for the current study has been previously analyzed to evaluate the incremental validity of personality traits and SEB skills for predicting outcomes (Soto et al., 2022b). The current study builds on those previous results to explore whether the *relationship* between traits and skills also predicts outcomes in adolescence. We used response surface analysis (Shanock et al., 2010) to map out all possible combinations of skill and trait levels to evaluate the divergent hypotheses about how (mis)matching will relate to functioning. Due to the plausible competing hypotheses discussed above, our study aims were largely exploratory and this study was not pre-registered.

Methods

Participants and procedures

Participants were high school students ($N = 840$) drawn from the Character Lab Research Network, a consortium of schools across the United States that worked collaboratively with scientists to advance scientific insights that help kids thrive (Duckworth et al., 2019). Most participants were between 14 and 18 years old ($M = 15.6$, $SD = 1.2$) representing all high school grade levels (27.9% 9th grade, 28.5% 10th grade, 28.6% 11th grade, 15.1% 12th grade, and 0.1% not reported). The sample was roughly balanced on gender (56% female) and racially/ethnically diverse (59.3% White/Caucasian, 38.5% Hispanic/Latino, 20.8% Black/African American, 8.2% Asian/Asian American, 1.3% another race, 2.0% multiracial, and 8.2% not reported[1]).

Participants in this study completed an online survey on the Qualtrics platform. Potential participants were excluded if they (1) completed the survey in less than one-third of the median completion time, (2) failed either of the two attention-check items within the three survey blocks, or (3) answered less than 90% of the items. Administrative data (e.g., grades) were also reported by participants' schools.

Measures

Big Five personality traits. Big Five personality traits were measured using the 15-item extra-short form of the Big Five Inventory-2 (BFI-2-XS; Soto & John, 2017a, 2017b). The BFI-2-XS items are short, descriptive phrases that respondents rate on an agreement scale ranging from 1 = *disagree strongly* to 5 = *agree strongly*. For this study, we reverse scored Neuroticism as Emotional Stability so that all traits were keyed in a socially desirable direction.

Social, emotional, and behavioral skills. SEB skills were measured using the 45-item short form of the Behavioral, Emotional, and Social Skills Inventory (BESSI-45; Sewell et al., 2024; Soto et al., 2022). The BESSI-45 is designed to measure five major skill domains: Self-Management, Social Engagement, Cooperation, Emotional Resilience, and Innovation Skills. Each item is a short phrase describing a thought, feeling, or behavior. Respondents rate how well they can perform that behavior on a scale from 1 = *not at all well* to 5 = *extremely well*. All versions of the BESSI are freely available for research use at https://www.sebskills.com/.

Outcome variables. We selected 11 outcome variables from life domains that we hypothesized could relate to (mis) matches between skills and traits including academic functioning, social relationships, civic skills/values, and subjective well-being (Soto et al., 2022b). Additional details about the instruments are provided on the OSF (https://osf.io/bcgq7/). *Academic engagement* was self-reported and measured by averaging 8 items selected from the Engagement versus Disaffection with Learning instrument (Skinner et al., 2008). *School grades* for the Fall 2021 academic quarter were reported by participant's high school, transformed onto a 0–100 scale, and aggregated into an overall grade point average (GPA) for the term. *Peer acceptance* was measured by averaging two items adapted from the self-report Behavior Report Form (Paunonen, 2003) and a previous study of social status (Anderson et al., 2001). *Friendship quality* was measured by averaging 8 items selected from the self-report Friendship Qualities Scale (Bukowski et al., 1994). *Parental relationship quality* was measured using self-report items adapted from the Dunedin Study of Lifespan Development (see Belsky et al., 2001). Separate scales for mother and father relationship quality were calculated by averaging 3 items each. *Civic skills and social responsibility values* were self-reported using the Youth Civic and Character Measures Toolkit (Syvertsen et al., 2015). The social responsibility values scale was calculated by averaging four items rating the importance of specific values, and the civic skills scale was calculated by averaging six items describing specific skills. *Anxiety and depression* were measured using ten items adapted from the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983). *Life satisfaction* was measured using the five-item Satisfaction with Life Scale (Diener et al., 1985).

Analytic plan

All data cleaning and analyses were conducted in R Version 4 (R core Team, 2023). We applied response surface analysis (RSA) using the RSA package in R (Schönbrodt & Humberg, 2023) to evaluate how (mis)matches in corresponding traits and skills related to various outcome variables. RSA overcomes statistical problems with traditional difference score methods and provides detailed information about the nature of (mis)matches between constructs (Edwards, 2002, 2007). With RSA, a polynomial regression model (equation (1)) is estimated that tests all possible combinations of two predictors associated with an outcome variable in a three-dimensional space.

$$y_i = b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{1i}^2 + b_4x_{1i}x_{2i} + b_5x_{2i}^2 + e_i \quad (1)$$

RSA provides two outputs for interpreting the effects of matching: 1) parameters summarizing features of the response surface and 2) a three-dimensional plot of the response surface depicting relations between the two predictors and outcome. The response surface is characterized by the first principal axis (FPA), line of congruence (LOC), and line of incongruence (LOIC). Six key parameters are extracted to summarize these features (p_{10}, p_{11}, a_1, a_2, a_3, and a_4). Figure 1 provides a generic example of an RSA plot with labels. In our models, the FPA (i.e., the surface "ridge") represents the linear relationship between traits and skills estimated from the regression model, with p_{10} and p_{11} being the intercept and slope, respectively. The LOC reflects the level of an outcome when traits and skills are identical in magnitude and is described by a_1 and a_2. a1 is the slope of the LOC ($a_1 = b_1 + b_2$), and a_2 indicates whether it is linear or curvilinear ($a_2 = b_3 + b_4 + b_5$). The LOIC is orthogonal to the LOC and represents the level of an outcome when traits and skills are identical in magnitude but opposite in sign. a_3 is the LOIC slope above the origin ($a_3 = b_1 - b_2$), and a_4 indicates whether it is linear or curvilinear ($a_4 = b_3 - b_4 + b_5$).

To maximize the information available from RSA, our hypothesis tests were based on interpretation of parameters and visual inspection of the plots. The plots complement the statistical testing of parameters by allowing for a more nuanced understanding of trait/skill combinations that matter for outcomes. Table 1 shows each hypothesis with the corresponding response surface, statistical parameters, and interpretation. Hypothesis 1 (*matching levels of traits and skills will predict better outcomes*) was tested by a combination of several parameters. This hypothesis would be supported if the FPA is not significantly different from the LOC ($p_{10} \approx 0$ and $p_{11} \approx 1$) and the LOC is linear ($a_2 \approx 0$) with no slope ($a_1 \approx 0$), meaning the outcome is highest when the trait and skill levels are exactly the same, regardless of whether they're matching at high or low levels (Humberg et al., 2019). Additionally, the LOIC must be

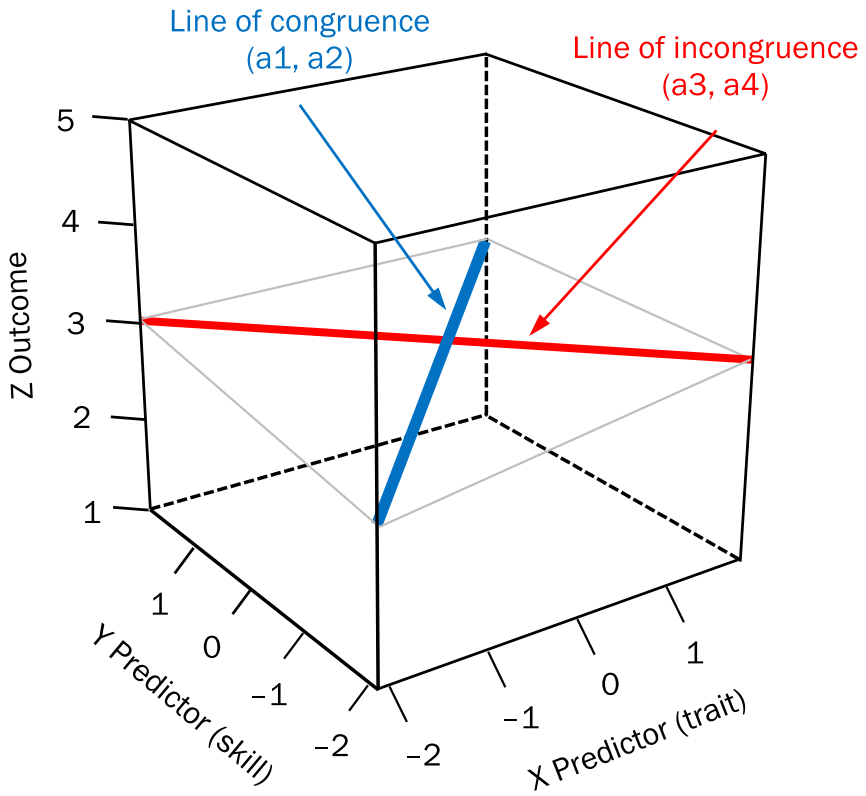


Figure 1. Generic graphic of response surfaces with labels.

curvilinear ($a_4 < 0$) with the highest point at the origin ($a_3 \approx 0$), meaning that the outcome is always predicted to be higher when traits and skills match than when they mismatch. Hypothesis 2 (*matching at only high levels of traits and skills will predict better outcomes*) would be supported if $p_{10} \approx 0$, $p_{11} \approx 1$, $a_2 \approx 0$, $a_3 \approx 0$, $a_4 < 0$, and $a_1 > 0$; this pattern is similar to Hypothesis 1, but with a linear ($a_2 \approx 0$) and positive (a1 > 0) LOC indicating main effects of traits and skills (Humberg et al., 2019). Hypothesis 3 (*higher skills than traits will predict better outcomes*) would be supported by a negative LOIC ($a_3 < 0$) and Hypothesis 4 (*higher traits than skills will predict better outcomes*) by a positive LOIC ($a_3 > 0$) (see Figure 1(D) in Nestler et al., 2019). Because a_3 is derived from the difference in slopes for traits and skills, it is possible for it to be significant due to main effects of one predictor rather than mismatching per se. For this reason, we confirmed an interpretation of mismatching by visually inspecting the response surface plot (Humberg et al., 2019).

All together, we estimated 55 RSA models (5 skill/trait pairs × 11 outcome variables). To adjust for multiple testing, we considered *p*-values <.001 to be statistically significant and focused primarily on interpreting overall patterns of results rather than specific effects. As required for valid inferences in RSA, the traits and skills were rated on the same scale (i.e., 1–5). Traits and skills were also centered at the sample means prior to analysis to give the midpoints (i.e., zero) a meaningful value (Barranti et al., 2017; Humberg et al., 2019). The RSA models used robust maximum likelihood estimation (MLR).

All outcomes had some missing data. On average, 14% of the sample was missing data for any given outcome (range = 8%–29%). Questionnaires administered at the end of the battery had the most missing data (i.e., depression, anxiety, and life satisfaction), likely due to participants running out of time or otherwise stopping prematurely. Rates of missingness for all variables are reported in Supplementary Table S1. Data was assumed to be missing at random and was handled by full information maximum likelihood techniques (FIML).

Statistical power was determined following guidelines provided by Barranti and colleagues (2017). The rationale for their approach is that a sufficiently powered RSA model will be able to detect ΔR^2 going from a model with two main effects to the full polynomial model with five predictors. Our sample size was sufficient to achieve >80% power with alpha = .001 to detect small effect sizes ($f^2 = .02$).

Results

Preliminary findings

Descriptive statistics for study variables and scale internal consistencies are reported in Table 2. Correlations between skills and traits are reported in Supplementary Table S2. Table 3 shows the frequencies of numerical discrepancies between traits and skills. To ensure adequate power to detect mismatches, it is necessary to first establish sufficient representation of skill/trait matches and mismatches for each trait (Schönbrodt et al., 2018). A cut-point of $|\Delta z| > 0.5$ was used to quantify the number of participants with numerical matches, mismatches, and the direction of mismatches (Fleenor et al., 1996; Shanock et al., 2010). As shown in the table, more participants had mismatching (vs. matching) skill/trait levels for every trait/skill pair

Table 1. Summary of hypotheses relating trait/skill (mis)matches to outcomes and associated analytic tests.

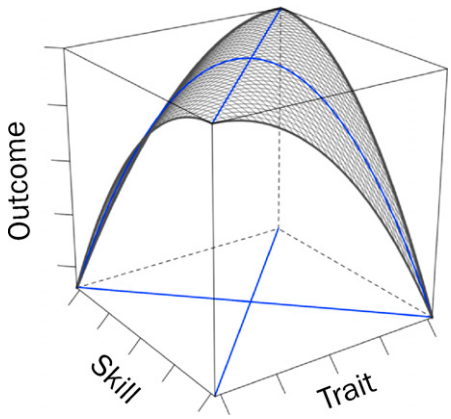
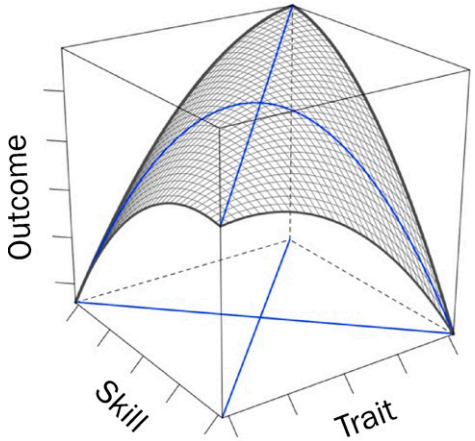
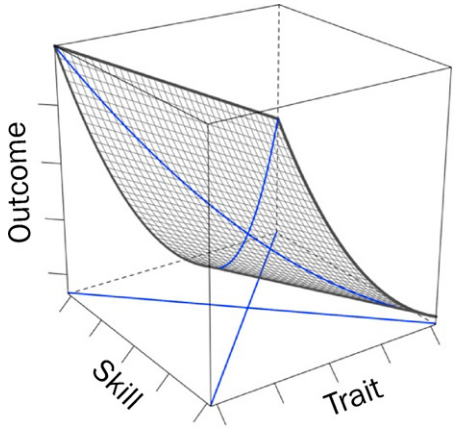
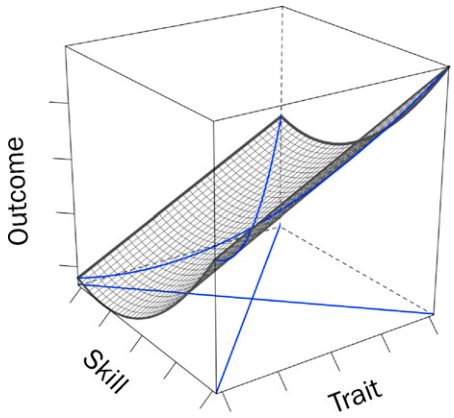
Hypothesis	Response Surface Plot	Response Surface Parameters	Interpretation
1. Matching levels of traits and skills will predict better outcomes		$b_{10} \approx 0$ $b_{11} \approx 1$ $a_4 < 0$ $a_3 \approx 0$ $a_2 \approx 0$ $a_1 \approx 0$	Consistency in how people act across roles and in how they view different parts of themselves reflects healthy functioning
2. Matching at only high (vs. low) levels of traits and skills will predict better outcomes		$b_{10} \approx 0$ $b_{11} \approx 1$ $a_4 < 0$ $a_3 \approx 0$ $a_2 \approx 0$ $a_1 > 0$	Consistency in how people act across roles and in how they view different parts of themselves reflects healthy functioning only if those self-perceptions are positive
3. Higher skills than traits will predict better outcomes		$a_3 < 0$	Being able to flexibly adjust behavior to a situation when needed is adaptive
4. Higher traits than skills will predict better outcomes		$a_3 > 0$	Cumulative behavior affects outcomes more in the long run than peak performance

Table 2. Descriptive statistics and internal consistency/reliability for study variables.

	M(SD)	Range	McDonald's omega	3-Month test–retest *r*
Personality traits (BFI-2-XS)				
Agreeableness	3.57 (0.80)	1.00–5.00	.52	.69
Conscientiousness	3.22 (0.90)	1.33–5.00	.54	.70
Emotional Stability	2.84 (1.01)	1.00–5.00	.70	.73
Extraversion	2.99 (0.90)	1.00–5.00	.58	.80
Openness	3.74 (0.70)	1.00–5.00	.43	.66
SEB skills (BESSI)				
Cooperation	3.57 (0.70)	1.44–5.00	.84	.79
Self-Management	3.33 (0.70)	1.44–5.00	.85	.79
Emotional Resilience	3.10 (0.80)	1.00–5.00	.87	.82
Social Engagement	2.98 (0.80)	1.11–5.00	.86	.86
Innovation	3.28 (0.70)	1.11–5.00	.82	.78
Outcome variables				
Academic engagement	2.78 (0.50)	1.25–4.00	.77	–
School grades	87.28 (8.70)	50.86–100	–	–
Civic skills	3.88 (0.70)	1.00–5.00	.85	–
Social responsibility values	3.96 (0.80)	1.00–5.00	.88	–
Father relationship quality	3.68 (1.00)	1.00–5.00	.82	–
Mother relationship quality	3.91 (0.90)	1.00–5.00	.85	–
Friend relationship quality	3.91 (0.70)	1.25–5.00	.83	–
Peer acceptance	5.39 (1.60)	1.00–9.00	.69	–
Anxiety	2.34 (0.70)	1.00–4.00	.83	–
Depression	2.14 (0.60)	1.00–4.00	.71	–
Life satisfaction	4.28 (1.50)	1.00–7.00	.88	–

Note. BFI-2-XS = extra short form of the Big Five Inventory-2; BESSI = short form of the Behavioral, Emotional, and Social Skills Inventory. Test–retest correlations were obtained from a subset of the sample ($N = 262$) who completed follow-up surveys. McDonald's omega was not calculated for school grades because it is not a scale score.

Table 3. Frequencies of numerical trait/skill discrepancies

	% Sample trait higher than skill	% Sample skill higher than trait	% Sample same trait and skill level
Agreeableness/Cooperation	28	27	38
Conscientiousness/Self-Management	20	31	42
Emotional Stability/Emotional Resilience	17	36	39
Extraversion/Social Engagement	24	24	45
Openness /Innovation	53	8	32

Note. A cut-point of $|\Delta z| > 0.5$ was used to quantify the number of participants in each group. Percentages do not add up to 100 because discrepancies below the cut-point are not included.

(54% vs. 39%). The proportion of participants with higher skills than traits versus higher traits than skills varied by trait/skill pair, but on average ~27% of the sample had each type of mismatch. Scatterplots showing coverage of trait/skill levels are in Supplemental Table S3. Overall, these results suggest there are enough participants with all trait/skill combinations to justify examining whether individual differences in (mis)matching predict outcomes.

As a basis of comparison for results from the polynomial regression model, bivariate correlations between traits, skills, and outcomes are provided in Supplemental Table S4. Polynomial regression model and RSA model parameters are presented in Table 4. Our analyses generally follow recommendations to only interpret RSA with significant R^2 (Shanock et al., 2010), as the R^2 values for all but one of the polynomial models were significant at $p < .05$, and most (85%) were significant at $p < .001$. The complete R^2 results are provided in Supplemental Table S5, and response surface plots are shown in Figure 2.

In general, the variation in response surfaces shows that different outcomes were predicted by unique combinations of trait and skill levels. This variability underscores the value of RSA to capture the complex joint effects of traits and skills that would be missed by linear models. A few other specific results from the RSA model parameters and plots are worth noting. First, none of the quadratic or interactive effects of skills and traits reached our threshold for significance. This reinforces the unipolarity of traits/skills in that higher levels are generally better for the outcomes we looked at. Second, none of the interaction terms were significant, indicating that there were no simple, linear moderation effects. Third, the a1 parameter was significant and positive for most (86%) of the outcomes. This parameter reflects the additive, unique effects of traits and skills, and the positive sign indicates that adolescents higher on a given trait and skill generally have better outcomes relative to those with average levels of each. In the plots, this joint effect is evident by the highest point of the response surface being located in the far corner along the vertical plane. Finally, as has been reported previously in this sample (Soto et al., 2022b), the betas from the regression models show that skills generally have more and

Table 4. Unstandardized parameter coefficients from the RSA models.

	Polynomial regression parameters					Response surface parameters					
	b_1 (unique effects of trait)	b_2 (unique effects of skill)	b_3 (quadratic effects of trait)	b_4 (interaction effects)	b_5 (quadratic effects of skills)	p_{10} (FPA intercept)	p_{11} (FPA slope)	a_1 (additive effects)	a_2 (linearity of LOC)	a_3 (difference in effects)	a_4 (linearity of LOIC)
Academic engagement											
A/Cooperation	**.12***	**.17***	−.01	.05	−.04	.99	.55	**.30***	.00	−.05	−.10
C/Self-Management	**.15***	**.31***	.01	−.07	.01	9.81	−.96	**.45***	−.05	−.16†	.09
ES/Emotional Resilience	.08†	**.21***	−.05	.04	−.01	.07	2.64	**.29***	−.03	−.13	−.10
E/Social Engagement	.03	**.20***	−.05	−.06	.05	2.55	−3.5	**.22***	−.06	−.17	.07
O/Innovation	−.09	**.31***	.05	−.16†	.11†	9.62	−1.48†	**.22***	−.01	**−.39***	.32†
School grades											
A/Cooperation	.74	−.31	−.73	2.06	−1.32	−.21	.75	.43	.00	1.05	−4.11
C/Self-Management	1.19†	1.52†	−.46	1.16	−1.08	.28	.60	**2.71***	−.38	−.33	−2.71
ES/Emotional Resilience	−.80	1.39	−.58	1.46	−1.59	.46	.52	.59	−.71	−2.19	−3.64
E/Social Engagement	−.21	.81	−1.71	3.86	−2.16	.13	**.89***	.6	−.01	−1.03	−7.74†
O/Innovation	−.91	.60	1.10	.31	−.75	.44	.08	−.31	.66	−1.51	.04
Civic skills											
A/Cooperation	−.02	**.57***	−.04	.16	−.09	1.98	.71	**.55***	.03	**−.59***	−.29
C/Self-Management	−.03	**.54***	−.03	.14	−.14	1.58	.49	**.51***	−.04	**−.56***	−.31
ES/Emotional Resilience	−.06	**.48***	−.01	.05	−.04	4.46	.50	**.42***	.00	**−.55***	−.10
E/Social Engagement	−.05	**.56***	−.05	.06	−.08	2.92	.60	**.52***	−.08	**−.61***	−.19
O/Innovation	.02	**.44***	−.06	.05	−.04	2.5	1.61	**.46***	−.06	−.42	−.15
Social responsibility values											
A/Cooperation	**.25***	**.52***	−.08	−.03	.09	2.48	−11.9	**.77***	−.03	**−.26***	.03
C/Self-Management	−.10	**.55***	.02	.02	−.03	9.15	.18	**.45***	.02	**−.65***	−.03
ES/Emotional Resilience	−.27†	**.52***	−.05	.12	.00	5.12	1.55	**.25***	.06	**−.80***	−.17
E/Social Engagement	−.11	**.37***	−.03	−.06	.12	−3.52	−5.18	**.25***	.04	**−.48***	.15
O/Innovation	.04	**.44***	.00	−.08	−.01	5.22	−.94	**.48***	−.09	**−.40***	.06

(continued)

Table 4. (continued)

	Polynomial regression parameters					Response surface parameters					
	b_1 (unique effects of trait)	b_2 (unique effects of skill)	b_3 (quadratic effects of trait)	b_4 (interaction effects)	b_5 (quadratic effects of skills)	p_{10} (FPA intercept)	p_{11} (FPA slope)	a_1 (additive effects)	a_2 (linearity of LOC)	a_3 (difference in effects)	a_4 (linearity of LOIC)
Father relationship quality											
A/Cooperation	.04	.21†	−.03	.15	−.14	.52	.48	**.25***	−.03	−.17	−.32
C/Self-Management	.02	**.30***	−.10	.23	−.06	.73	1.17	**.31***	.07	−.28	−.38
ES/Emotional Resilience	.13†	**.32***	.00	.01	−.04	3.89	.06	**.45***	−.03	−.19	−.04
E/Social Engagement	.01	**.25***	−.12	.16	−.08	.63	1.32	**.26***	−.04	−.24	−.36
O/Innovation	−.14†	.20†	−.08	−.04	.08	−6.14	−9.22	.07	−.04	−.34†	.03
Mother relationship quality											
A/Cooperation	.10	.14	−.09	.16	−.10	.12	.95	**.24***	−.04	−.04	−.35
C/Self-Management	.06	**.24***	−.05	.03	−.01	.36	3.12	**.31***	−.04	−.18	−.09
ES/Emotional Resilience	.11†	**.33***	−.06	.08	−.12	1.00	.47	**.44***	−.10	−.21	−.25
E/Social Engagement	−.04	**.21***	−.15	.17	−.02	.75	2.12	**.17***	.00	−.25	−.33
O/Innovation	−.07	.10	−.15	.01	.10	15.29	7.49	.04	−.04	−.17	−.06
Friendship quality											
A/Cooperation	.05	**.33***	.01	.12	−.11	1.17	.42	**.38***	.03	**−.28***	−.21
C/Self-Management	.05	**.21***	−.01	−.01	.01	31.5	−7.29	**.26***	.00	−.16	.01
ES/Emotional Resilience	−.09	**.22***	−.02	.03	.07	16.86	6.25	.13†	.08	**−.31***	.02
E/Social Engagement	.07	**.24***	−.02	.00	.01	42.69	−2.31	**.30***	−.01	−.17	.00
O/Innovation	.06	**.25***	−.04	.09	−.04	1.14	1.07	**.31***	.01	−.19	−.16
Peer acceptance											
A/Cooperation	−.18	**1.15***	.03	.16	−.07	5.43	.55	**.97***	.12	**−1.33***	−.20
C/Self-Management	.27†	**.36***	−.28†	−.02	.34	29.76	−59.03	**.63***	.04	−.08	.09
ES/Emotional Resilience	−.04	**.70***	.13	−.03	.05	−7.4	−.21	**.66***	.15	**−.74***	.22
E/Social Engagement	**.39***	**.74***	−.12	.14	−.16	1.08	.74	**1.13***	−.14	−.35	−.41
O/Innovation	−.21	**.75***	.09	−.16	.01	8.19	−.62	**.55***	−.06	**−.96***	.26

(continued)

Table 4. (continued)

	Polynomial regression parameters					Response surface parameters					
	b_1 (unique effects of trait)	b_2 (unique effects of skill)	b_3 (quadratic effects of trait)	b_4 (interaction effects)	b_5 (quadratic effects of skills)	p_{10} (FPA intercept)	p_{11} (FPA slope)	a_1 (additive effects)	a_2 (linearity of LOC)	a_3 (difference in effects)	a_4 (linearity of LOIC)
(Low) Anxiety											
A Cooperation	.02	.12	−.05	−.01	−03	1.96	−.09	.14†	−.03	−.09	−.01
C/Self-Management	.14†	.13	−.03	.14	−.06	5.24	1.23	**.27***	.05	.01	−.23
ES/Emotional Resilience	**−39***	**.22***	−.05	.03	−.10†	−2.89	−.04	**.61***	**−.12***	.17	−.17
E/Social Engagement	−.03	**.27***	.02	−.11	.04	1.74	−.84	**.24***	−.05	−.30†	−17
O/Innovation	−.15	.14	.04	−.07	.12	.76	−.39	−.02	.08	−.29	.23
(low) Depression											
A/Cooperation	.03	**.35***	−.01	−02	−.03	−87.92	3.28	**.38***	−.02	**−.32***	−.05
C/Self-Management	.08	**.26***	−.04	.06	.03	3.46	.36	**.33***	.05	−.18	−.08
ES/Emotional Resilience	**.18***	**.32***	.03	−.06	.00	.59	−1.50	**.50***	−.02	−.14	.09
E/Social Engagement	.10†	**.31***	.05	−.17	.10	.70	**−.77***	**.41***	−.02	−.21	.32
O/Innovation	−.05	**−27***	.00	−.06	.08	1.59	−.33	**.22***	.03	**−.32***	.14
Life satisfaction											
A/Cooperation	.10	**.55***	−.06	.22	−.01	1.42	1.25	**.65***	.15	−.44	−.29
C/Self-Management	.12	**.70***	−.12	.19	.08	1.3	2.51	**.82***	.15	−.58†	−.22
ES/Emotional Resilience	**.44***	**.64***	−.05	−.01	.01	42.77	−8.34	**1.08***	−.06	−.20	−.03
E/Social Engagement	.13	**.54***	−.12	.06	.10	−2.15	8.12	**.67***	.04	−.41	−.07
O/Innovation	−.11	**.47***	−.07	−.01	.18	−37.66	−51.79	.35*	.10	−.58	.12

Note. RSA = response surface analysis; LOC = line of congruence; LOIC = line of incongruence; FPA = first principal axis; A = Agreeableness; C = Conscientiousness; ES = Emotional Stability; E = Extraversion; O = Openness. † = $p < .01$; * = $p < .001$.

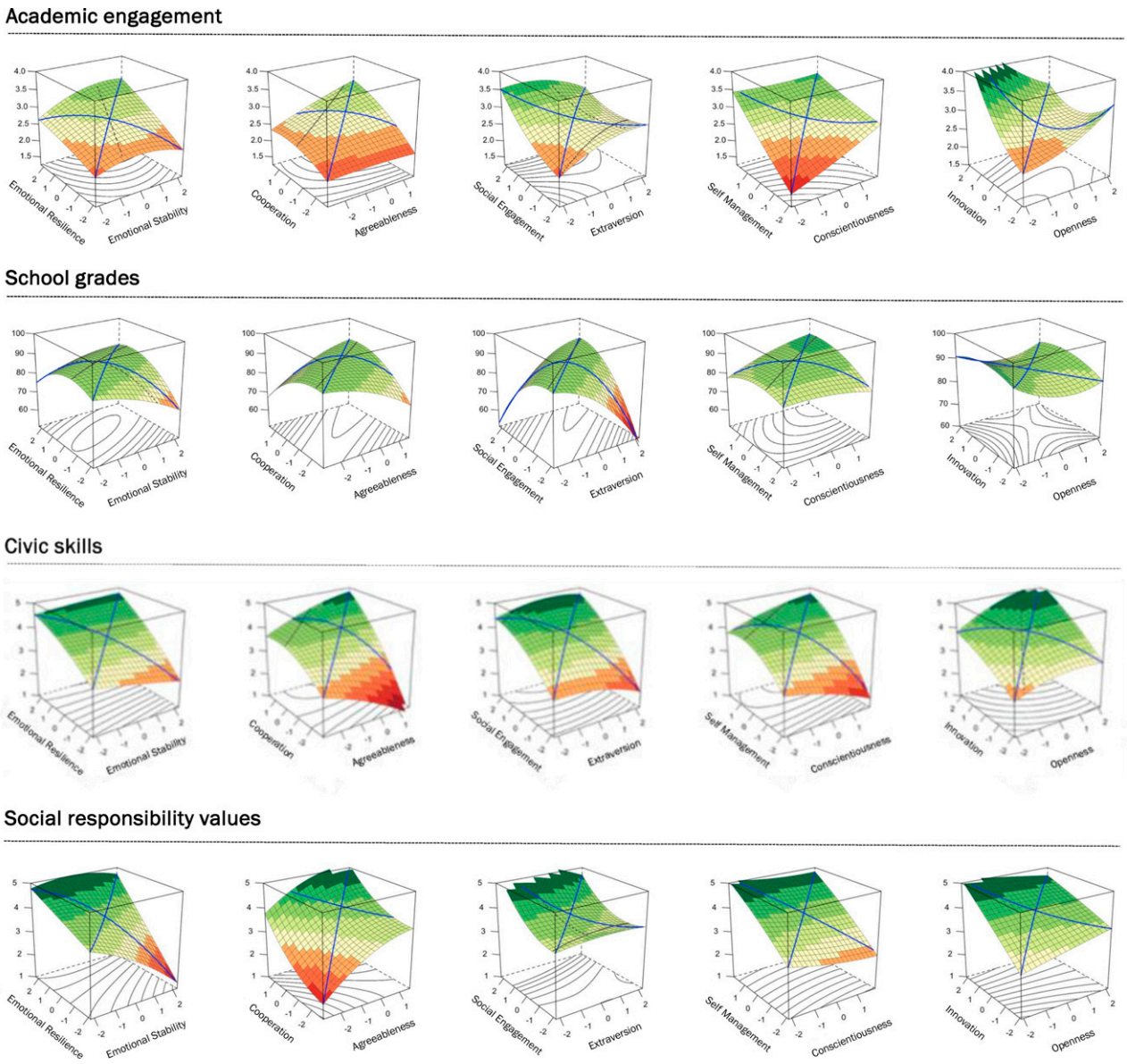


Figure 2. Response surface plots.

stronger incremental associations with the outcome than do traits. However, the response surface plots put these results into a broader context of possible trait/skill combinations. The dominant effect of skills is shown visually in the plots by the far left side of the surface being generally higher than the near right side of the surface.

Primary analyses testing trait/skill (mis)matches

None of the models supported the matching hypotheses (hypotheses 1 and 2) according to the RSA parameter conditions. Qualitatively, the response surface plots for a few trait/skill pairs predicting school grades were consistent with matching effects. Specifically, there was some evidence that adolescents with matching high levels of Agreeableness and Cooperation, Extraversion and Social Engagement, and Emotional Stability and Emotional Resilience had better grades. However, given that these models did not satisfy the statistical criteria for the RSA parameters, we warn against overinterpreting these results.

By contrast, 17 models (31%) were consistent with mismatching effects as indicated by the a_3 parameter. In every case, the a_3 parameter was negative—consistent with higher skills than traits predicting higher outcomes (Hypothesis 3). Other parameters can further enhance interpretation of the mismatching effects. For every predictive mismatch, there was a positive additive effect of skills on the outcome ($a_1 > 0$). Furthermore, with one exception (noted later), none of the models had a curvilinear LOIC ($a_4 < 0$) indicating the benefits of having higher skills than traits did not "plateau" at any point.

The most widespread mismatching effects were for civic skills and social responsibility values. Civic skills were predicted by mismatches in all trait/skill pairs except for Openness/Innovation skills. In fact, adolescents with the *lowest* civic skills had higher traits than skills (i.e., the

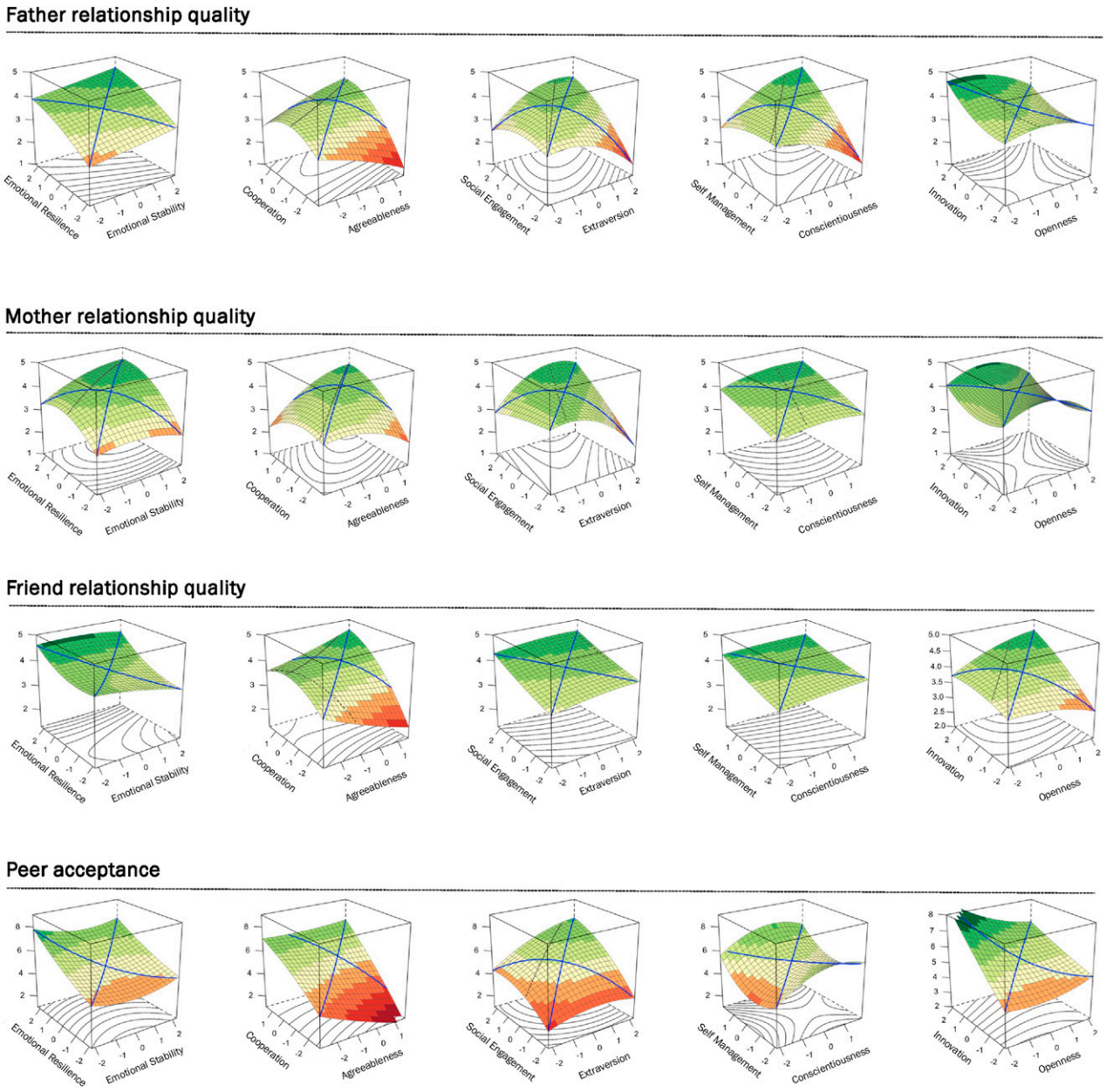


Figure 2. Continued.

lowest point of the response surface was the right corner along the horizontal plane). Similarly, social responsibility values were also predicted by mismatches in all trait/skill pairs except for Openness/Innovation skills. Adolescents with the *lowest* social responsibility values had higher Emotional Stability than Emotional Resilience and/or higher Conscientiousness than Self-Management skills.

Friendship quality was predicted by higher Cooperation than Agreeableness and higher Emotional Resilience than Emotional Stability according to the a_3 parameter. The plots showed that adolescents with the *lowest* friendship quality were those who had higher Agreeableness than Cooperation skills. Peer acceptance was predicted by higher Cooperation than Agreeableness, higher Emotional Resilience than Emotional Stability, and higher Innovation than Openness. Adolescents with the *lowest* peer acceptance had higher Agreeableness than Cooperation skills, and those with the *highest* peer acceptance had higher Emotional Resilience than Emotional Stability and/or higher Innovation skills than Openness.

Depression was predicted by two mismatches according to the a_3 parameter. Specifically, low depression was predicted by higher Agreeableness than Cooperation and the plots showed that adolescents who were the *least* depressed had higher Innovation skills than Openness.

Finally, academic engagement was predicted by mismatching Innovation and Openness, but this effect was somewhat different than the others. Although the a_3 parameter was negative, the a_4 parameter was also negative and reached conventional standards for significance (p = .004)—unlike in the other models—indicating a curvilinear LOIC. This difference is evident by the pronounced U-shaped LOIC in the plot. The plot shows that adolescents who are *most* academically engaged have higher Innovation than Openness, but adolescents with higher Openness than Innovation also tend to be more academically engaged. This

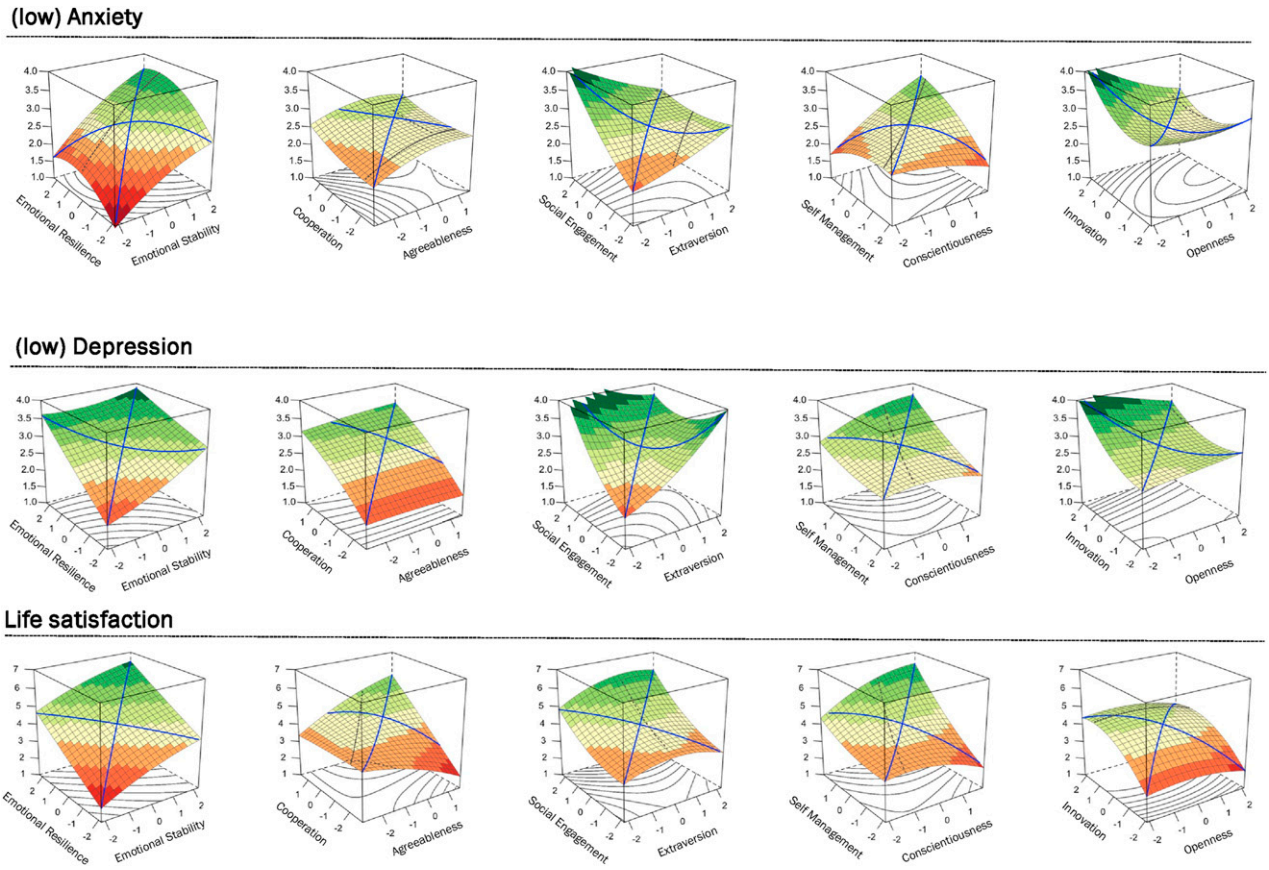


Figure 2. Continued.

finding adds partial support for Hypothesis 4, but we caution against overinterpreting one discrepant result from 55 models.

Discussion

Prior work has established that personality traits and SEB skills matter for life outcomes. In this study, we extend that work by showing that how someone is capable of acting *relative* to how they tend to act also matters. We found that adolescents with high levels of some skills relative to traits reported stronger civic skills and social responsibility values, better peer relationships, less depression, and more academic engagement. Our findings provide initial evidence on how the functional relationship between traits and skills may shape life outcomes.

Personality trait and skill matches matter less than absolute levels

We generally found that higher trait and skill levels predicted better outcomes and did not find evidence that adolescents with matching trait and skill levels experience better outcomes than would be predicted by these main effects. This pattern of results undermines the hypothesized advantages of having aligned self-views of ability and typical behavior (e.g., due to authenticity or identity coherence). This finding held for trait/skill alignment regardless of whether those self-perceptions were positive or negative (Hypothesis 1) or only for positive self-perceptions (Hypothesis 2). Instead, our results reinforce and enrich prior findings that traits and skills jointly predict outcomes. Complementing the incremental effects established in previous research, we show there is an *additive* benefit of having high traits and skills. Taken together, we find that adolescents with high levels of both traits and skills tend to experience the best outcomes, and do not find any unique benefits to having congruent trait and skill levels.

Due to transactions between a person's traits, skills, and environment, having high traits and skills in a given domain may facilitate person–environment fit that leads to the additive benefits we observed. For example, when someone is skilled in a domain (e.g., Self-Management), they may take on roles and responsibilities that fit those skills (e.g., advanced placement classes) and therefore receive more positive reinforcement for their performance (e.g., good grades, praise from teachers/parents, and friendships with high-achieving peers). And if someone is also predisposed towards behavior in that domain (e.g., highly Conscientious), they may find those roles intrinsically rewarding. As a result, someone with strong tendencies and skills in the same domain may seek more opportunities to excel and receive more external and internal reinforcement for their behavior, in cycles that produce positive outcomes.

Interestingly, we did not find any evidence for "pigeonholing"—that is, there was no evidence that the

positive effects of trait/skill extremity in one domain (e.g., being devoted to school and doing well academically) come at the expense of functioning in other domains (e.g., not having time to make friends and being stressed). Instead, most high trait/skill pairs predicted better functioning in all domains. For example, we found that adolescents with both high Self-Management skills and Conscientiousness were especially engaged in school and performed better (i.e., higher GPA), but they also reported better social and emotional outcomes. Such domain-general effects of high trait/skill matching could reflect the influence of compound skills (e.g., adaptability; Napolitano et al., 2021) and higher-order, adaptive personality features (e.g., self-regulation; Atherton, 2020).

Although our overall results support additive rather than matching effects of traits and skills, there was some evidence that matching might relate to school grades (i.e., parameter conditions for strict congruence were nearly met, and plots were qualitatively consistent with a congruence effect). It is noteworthy that school grades were the only outcome that was not self-reported. A speculative explanation for these results is that perhaps simply having higher self-esteem and self-efficacy matters for *subjective* positive outcomes (i.e., additive effects on self-reported outcomes), but alignment in perceptions of behavior and ability matters for *objective* performance. If this were the case, it could be seen as a methodological artifact wherein additive effects reflect a positive response bias across traits, skills, and outcomes. However, a more substantive interpretation is possible as well. Perhaps people who judge their skills and traits to be matching are especially accurate in their self-appraisals (i.e., not rating their skills as disproportionately higher than traits). Such accurate self-appraisals could also reduce any positive rating bias of subjective outcomes, leading to null associations with skill-trait alignment even though matching actually contributes to objectively better outcomes. Future research could test these hypotheses by investigating whether additive and matching effects of traits and skills differentially predict other subjective and objective outcomes.

Personality trait and skill mismatches matter

Our results show that trait/skills mismatches predict outcomes. Even though both types of mismatches were well-represented for each trait/skill pair, all predictive mismatches were such that higher skills than traits related to better outcomes (Hypothesis 3). We showed further that there isn't a point at which having higher skills than traits becomes a liability (due to, e.g., perceived discrepancy between how one typically acts and how one is capable of acting). There was only one instance of higher traits than skills predicting better outcomes (Hypothesis 4), and the supporting evidence was weak. At a general level, these findings support the idea that being able to flexibly adjust behavior and rise to the occasion when needed may be more important than what adolescents typically do. Given that lower personality trait levels predicted worse outcomes in bivariate models (reported in Supplemental Table S4), these results also imply that youth can often compensate for personality shortcomings with skills. For example, a generally shy student who wants to succeed in school may be able to take the lead on a group project to ensure the tasks are completed well.

Not only do trait/skill mismatches matter, but some mismatches also predicted the best and worst outcomes. That is, for some outcomes, adolescents with higher skills than traits were predicted to fare better than those with high levels of traits and skills. In particular, the combination of high Innovation skills but low Openness seemed to be especially potent. We found that adolescents who *can* contribute intellectually and be inventive despite not being particularly interested in art and ideas report being the most well-liked, least depressed, and most academically engaged among their peers. This optimal combination of high Innovation and low Openness parallels research showing that the intellectual aspect of Openness—but not the artistic/perceptive/fantasy-prone aspects—tend to relate to positive outcomes (DeYoung, 2015; DeYoung et al., 2012). Our results potentially add to an understanding of the functional relationship between intellect and openness by suggesting that cognitive exploration and creative pursuit are most adaptive when enacted selectively and strategically.

In contrast, having higher traits than skills predicted some of the worst outcomes. This pattern of findings suggests youth who try to consistently enact mature behavioral repertoires, but do not yet feel skillful at doing so, are worse off. Importantly, in cases that mismatches predicted worse outcomes than low levels of both traits and skills, this shows that the gap between personality-related motives, interests, and abilities is especially detrimental. For example, we found adolescents who are highly agreeable but lack the skills to get along with others reported being the least well-liked and having the poorest friendship quality—even more so than their peers who are *dis*agreeable and socially unskilled.

Although our findings are highly consistent with theories of adolescent development, this cross-sectional study only provides a snapshot of these likely processes. Longitudinal work tracking traits and skills over the course of years would allow us to address open questions such as do any gaps between traits and skills narrow, on average, as youth mature? What predicts individual differences in the trajectories of trait/skills matching (e.g., family/school environment and executive functioning)? Are the benefits of higher skills relative to traits sustained into adulthood or does is this individual difference most impactful in adolescence when trait/skill disparities may be greatest? These and many other lines of inquiry can build on findings from the current study to progress the science of personality and SEB skills development.

Implications for theory, application, and research

Our study drives the point home that personality and SEB skills are functionally intertwined and that understanding relationships between traits and skills can advance theory, improve intervention efforts, and inform ongoing research. One key implication from our results is that theories about how personality shapes life outcomes ought to account for what a person is capable of doing relative to what they tend to do. We found evidence that one's relative skill levels play a decisive role in explaining the influence of personality, and that this influence is not fully captured by independent,

direct effects of traits and skills. Although some early work focused on the distinction between personality traits and skills (Klesges et al., 1979; Klesges & McGinley, 1983; Paulhus & Martin, 1987; Turner, 1978; Willerman et al., 1976), our results shed new light on the topic that we hope encourages renewed consideration in personality theory. Relatedly, our work illustrates the potential utility of RSA for this type of inquiry.

Our study also lays the foundation for hypotheses to test in future research. The predictive power of trait/skill joint effects and mismatches reveal potential mechanisms that could not be gleaned from the direct effects of traits and skills alone, but our study is missing two critical parts of the story: context and dynamics. The adaptiveness of any behavior depends on the context in which it is performed, and a key assumption about why skills have positive effects is that people are applying them *when the situation calls for it* (Paulhus & Martin, 1987; Soto et al., 2021; Wallace, 1966). Appropriately testing this presumed mechanism then requires temporally and contextually sensitive study designs. For example, using ambulatory assessment to sample people's SEB skill use across naturalistic situations would not only enable specifying in which contexts using certain skills promote positive outcomes but also when, why, and for whom skills fail to do so. Some people may not know when to use their skills (e.g., due to lack of knowledge), they may not be sufficiently motivated (e.g., due to personality-related preferences), they may be too anxious to perform (e.g., due to stereotype threat), or they may lack opportunities to apply themselves (e.g., due to a lack of relevant situations). Each of these reasons, in turn, implies a different path forward for improving skill use, and they all require knowing the dynamic relations between personality traits, skills, and context, A unique benefit of RSA is that it allowed us to home in on specific zones of risk and strength among all possible trait/skill combinations that have potential implications for applied settings. For example, the additive effects of traits and skills, and the particularly strong role of skills, suggest that improving adolescent's SEB skills would have widespread benefits. However, the effects of trait/skill mismatches we found suggest further that some youth will benefit more than others from skills interventions. To build on an example from the previous section, because youth who are high on Agreeableness but low on Cooperation skills have especially poor interpersonal outcomes, they may experience the greatest improvements from learning how to better get along with others. Taking another example, the association between low civic skills and social responsibility values with high trait/low skill mismatches suggests that adolescents with these particular combinations of trait and skill levels struggle to become involved with their communities. Going beyond assessing traits and skills as separate constructs to instead also accounting for adolescents' relative trait and skill levels could help to develop targeted interventions with maximal impact and efficiency.

Methodological limitations and considerations

Several methodological issues bear on our results. First, the trait scales had low internal consistency relative to the skill scales, which could partially account for their differences in predictive power. The primary reason for the trait scales' lower internal consistency was their brevity (i.e., 3 items for the BFI-2-XS scales vs. 9 items in the BESSI scales). Moreover, items for the BFI-2-XS were selected to maximize content breadth and minimize redundancy (as is recommended for short scale construction; Smith et al., 2000; Stanton et al., 2000), meaning that internal consistency indices likely underestimate the true scale reliabilities. Consistent with this possibility, the trait scales showed strong test–retest reliabilities (mean r = .80) that were comparable to those of the skill scales (mean r = .85). This finding suggests that the present findings cannot be fully explained by differences in scale reliabilities. However, it will still be important to replicate our findings with trait/skill scales that have more similar internal consistencies to fully rule out this possibility.

Second, content overlap between the trait and skill items could have influenced the results. This overlap is largely intentional because corresponding traits and skills definitionally refer to the same thoughts, feelings, and behaviors (Napolitano et al., 2021; Soto et al., 2021). Despite their shared behavioral referents, skills and traits differ in that traits are conceptualized and measured in terms of how someone *tends to act* while skills are conceptualized and measured in terms of *how well they can do something*. Empirically, the fact that skill and trait measures incrementally predict outcomes suggests that they are indeed capturing distinct constructs despite overlapping content. Furthermore, the multicollinearity between traits and skills as measured here was well below the recommended cutoff for conducting RSA of a variance inflation factor (VIF) < 5 (Humberg et al., 2019); by contrast, all VIFs <2.5 in our models. Despite these reasons to expect some overlapping content, and evidence that the scales are capturing distinct constructs, a challenge for future research will be balancing the need for trait and SEB skill scales that tap the same domains of thinking, feeling, and behaving with limited item overlap.

Another source of shared method variance is the use of self-report measures for both the predictors and most outcomes. In particular, there is a possibility of evaluative consistency or "halo bias" in which people tend to rate themselves generally more positively or negatively across multiple indicators (Feeley, 2002). Such method variance may have amplified the additive effects of socially desirable traits and skills on socially desirable outcomes. However, even if evaluative consistency is at play, the predictive power of trait/skill *mismatches* reflects evaluative *inconsistency* and therefore provides evidence that our results are not entirely driven by evaluative bias. That said, it would still be useful for future research to disentangle method effects by using multi-method designs (e.g., observer reports and behavioral tasks).

Finally, given the novelty of our analytic approach, we cast a wide net by exploring many outcomes which has the downside of increasing risk for finding false positives. We limited this risk by raising the threshold for significance and focusing on broad patterns of results rather than individual significant effects, but there is still a need to replicate these findings.

Conclusion

In sum, the present findings underscore that what someone is *capable* of doing, what they *tend* to do, and the degree of *mismatch* between these skill and trait levels are all important for predicting adolescents' life outcomes. Our findings show that having high levels of traits and skills can enhance someone's outcomes by allowing them to fully capitalize on their personality strengths. Moreover, high skill levels can help someone compensate for low trait levels by strategically enacting their skills when needed. These findings help clarify the relationships between personality traits and SEB skills, and provide new insights into whether, how, and why individual differences matter for success and well-being.

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Open science statement

Study materials, data, and code needed to reproduce our analyses and supplementary materials are available on the Open Science Framework (https://osf.io/gaj3f/).

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Supplemental material

Supplemental material for this article is available online.

Note

1. The total percentages exceed 100 because participants could endorse multiple racial/ethnic identities.

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