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Differences in change goals between personality traits and social, emotional, and behavioral skills

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ABSTRACT

Although research suggests that most people want to change their personality traits, previous studies have neither explored whether individuals also desire to change the social, emotional, and behavioral (SEB) skills linked to those traits, nor whether people have different beliefs about the malleability of skills vs. traits. In the present within-person experiment, 264 young adults from the US and Italy rated their desire to change each of the Big Five personality traits and the corresponding domains of SEB skills. They also rated their beliefs about the feasibility, motivation, and impact of making these changes. Results showed that participants reported similar or higher scores for skills, compared to traits, across all measured outcomes. Specifically, scores for social engagement and self-management skills were consistently higher than those for extraversion and conscientiousness. These findings indicate that people believe it to be more desirable—and more feasible—to change some SEB skills than the corresponding personality traits.

1. Introduction

Research on volitional personality change has consistently found that most people would like to change their personality traits (Hudson & Fraley, 2016; Thielmann & de Vries, 2021). Specifically, many people would like to become more extraverted, conscientious, emotionally stable, agreeable, and open-minded (Hudson, 2021; Hudson & Fraley, 2016; Miller et al., 2019). These change goals may be at least partly instrumental in nature, because these same Big Five traits are linked with a broad range of consequential outcomes (Ozer & Benet-Martinez, 2006; Soto, 2019). Thus, people may want to change their personality traits in order to attain positive life outcomes. If so, then they might believe it is even more desirable and feasible to learn the capabilities or skills needed to attain these outcomes than to change their enduring traits. Indeed, policymakers have speculated that it may be easier and more beneficial to improve social, emotional, and behavioral (SEB) skills than to change personality traits (OECD, 2015, OECD, 2021).

To date, however, most volitional change research has investigated people's change goals about personality traits, without asking about corresponding skills (Gander & Wagner, 2024; Miller et al., 2019; Sun et al., 2024). Therefore, the present research aimed to go beyond previous studies by using a within-person experiment to directly compare

people's beliefs about the desirability and feasibility of changing SEB skills vs. personality traits. We investigated this issue within the context of emerging adulthood, because this developmental period is characterized by frequent changes in educational, occupational, and relationship roles as people pursue their life goals (Arnett, 2007).

1.1. The five domains of social, emotional, and behavioral skills

SEB skills are functional capacities that represent what a person *can* do when the situation calls for it (Napolitano et al., 2021; Soto et al., 2021). In other words, whereas traits describe what people *tend to* do, skills refer to people's ability to utilize specific behaviors when they want or need to do so (irrespective of their typical, trait-like behavior). Consequently, higher skill levels predict success in performing tasks deemed important by the individual, rather than habitually influencing behaviors across tasks and situations. For instance, an extremely introverted person would tend to be quiet and avoid crowded situations; however, they could still excel in public speaking if they possess high communication skills and want to use them in that specific situation. Conversely, an extraverted person could be quite talkative and gregarious, but without demonstrating much social skill or tact.

Based on the similarities and distinctions between skills and traits,

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Soto et al. (2021, 2022) organized SEB skills in terms of five domains that parallel the typical tendencies of the Big Five traits (see Table 1 for a direct comparison of skills domains and Big Five traits):

- Social-engagement skills: Abilities used to actively interact and connect with others.
- Cooperation skills: Abilities used to form and maintain positive social relationships.
- Self-management skills: Abilities used to effectively pursue goals and accomplish tasks.
- Emotional-resilience skills: Abilities used to regulate emotions and moods.
- Innovation skills: Abilities used to engage with new ideas and experiences.

1.2. SEB skills change goals

Although many national and international entities advocate for the development of SEB skills (European Commission, 2016; OECD, 2021; WHO, 2003) and companies and employers look for SEB skills in their employees (World Economic Forum, 2020), they often confuse traits and skills and assess traits instead of skills (Soto et al., 2021). Moreover, there is still little research on skills' malleability (Feraco & Meneghetti, 2023; Kautz et al., 2014; Taylor et al., 2017), and no research, to our knowledge, about people's goals to change SEB skills. It is therefore crucial to understand whether people want to increase their SEB skills and whether they prefer to increase skills more or less than traits, especially in emerging adult populations that experience frequent educational, occupational, and social changes. For example, people might believe that SEB skills are easier to change compared to personality traits (Jackson & Wright, 2024; Roemer et al., 2024). Laypersons may also be more enthusiastic about potential interventions targeting SEB skills, as they may have misgivings about the notion of changing their "core personality" (Riis et al., 2008; Sun & Goodwin, 2020). SEB skills are also intrinsically related to performance in specific life domains and this could make change desirable given the tendency of people to select change goals at least partially based on extrinsic motivations (Gander & Wagner, 2024; Hudson & Roberts, 2014; Sun et al., 2024; Sun & Berman, 2023). Thus, a better understanding of people's goals to change their skills and traits could help inform focused interventions that align with people's goals and beliefs. However, as of yet no research has directly tested what laypeople think about changing their SEB skills nor compared goals for changing skills vs. traits.

1.3. Overview and aims of the study

In light of ongoing questions about personality change goals, the institutional focus toward skills development (e.g., OECD, 2021), and the emergence of an integrative framework for SEB skills, the present research uses a within-person experiment to provide initial evidence

regarding (i) people's goals and beliefs about SEB skills change in terms of feasibility, motivation, and impact, and (ii) how these differ from people's goals and beliefs about changing personality traits. Moreover, we will examine a cross-cultural sample, exploring these questions in Italian and US participants alike. Understanding such differences may be important for determining why people seek to change, and whether it may be more desirable—from laypersons' perspectives—to receive skills interventions and training instead of focusing on personality traits.

Because this is the first study to directly compare people's goals and beliefs about changing SEB skills and personality traits, our analyses and results should be considered largely exploratory. Nonetheless, based on previously expressed intuitions that skills may be more malleable than traits (e.g., OECD, 2021), we preregistered the general hypothesis that respondents would report higher scores about the feasibility of changing skills compared to traits.

2. Method

2.1. Transparency and openness

All data, analysis code, and research materials are available at <https://doi.org/10.17605/OSF.IO/SWDC2>. Data were analyzed using R (R Core Team, 2022). The study's design and its analysis were preregistered at <https://doi.org/10.17605/OSF.IO/BGKEA>.

2.2. Participants

A total of 265 participants were recruited from the US (126) and Italy (139). One Italian participant was excluded because they took <1/3 of the median time to complete the survey. All participants were college and university students with a mean age of 20.83 ($SD = 2.68$) years old. The sample predominantly identified as female (184; 69 %), with 79 (30 %) identifying as male, and 2 (1 %) identifying as non-binary.

The sample size was determined following an a priori simulation power analysis. The simulation was conducted with different sample sizes (e.g., 150, 200, 250). A total of 250 participants sufficed to detect the hypothesized standardized difference of 0.20 with a power of 0.90.

2.3. Materials

2.3.1. Change goals and beliefs for SEB skills and Big Five traits

An online survey was developed for this study to measure participants' change goals and beliefs. The survey used a within-person experiment to define and assess skills and traits as similarly as possible, while also noting the key difference between skills as behavioral capacities vs. traits as behavioral tendencies. The survey therefore included 40 items divided into two conditions presented in random order. One condition referred to Big Five personality traits, while the other referred to SEB skills. For each domain of SEB skills and each corresponding trait of the Big Five, the survey provided a brief definition

Table 1
Definitions of the five SEB skills domains and their associated Big Five traits.

SEB skills domain	Definition*	Big Five trait	Definition*
Social engagement	Whether someone is capable of behaving in a social, assertive, and energetic way, when they want or need to do so	Extraversion	How much someone tends to behave in a social, assertive, and energetic way
Cooperation	Whether someone is capable of behaving in a compassionate, respectful, and trusting way, when they want or need to do so	Agreeableness	How much someone tends to behave in a compassionate, respectful, and trusting way
Self-management	Whether someone is capable of behaving in an organized, productive, and responsible way, when they want or need to do so	Conscientiousness	How much someone tends to behave in an organized, productive, and responsible way
Emotional resilience	Whether someone is capable of behaving in a calm, relaxed, and optimistic way, when they want or need to do so	Emotional stability	How much someone tends to behave in a calm, relaxed, and optimistic way
Innovation	Whether someone is capable of behaving in an intellectually curious, artistic, and creative way, when they want or need to do so	Openness	How much someone tends to behave in an intellectually curious, artistic, and creative way

* These definitions were presented to participants in the present research (see Materials section).

of the skill/trait (see Table 1) followed by four items that participants rated on a 5-point Likert scale (see <https://doi.org/10.17605/OSF.IO/SWDC2>). These four items were always presented with the same structure and order, but with a different object depending on the skill/trait at hand:

- One item for the *amount* of desired change: “How much would you like to increase your level of [skill/trait name]?”
- One item for the perceived *feasibility* of change: “How much do you think you could increase your level of [skill/trait name] during the next year, if you tried to do so?”
- One item for the *motivation* toward change: “How motivated are you to increase your level of [skill/trait name]?”
- One item for the expected *impact* of change: “If you increased your level of [skill/trait name], how much do you think that would improve your life?”

In line with previous studies (e.g., Sleep et al., 2022), for each SEB skill and personality trait, we obtained a single-item score for amount, feasibility, motivation, and impact of change, with a minimum of 1 (“not at all”) and a maximum of 5 (“a great deal”).

2.4. Data analysis

Generalized multilevel regression models were used to test differences between SEB skills and Big Five traits in change goals and associated beliefs. Given that the outcome variables were each on a 5-point Likert scale, we treated the responses as ordinal using the probit link to obtain estimates that are directly interpretable as latent standardized differences (Gambiarota & Altoè, 2024). The R package ‘ordinal’ (Christensen, 2023) was used through all the analyses.

For each outcome variable (i.e., amount, feasibility, motivation, and perceived impact of change), we ran two generalized multilevel models.

Model 1 included two fixed-effect predictors: (a) the categorical variable *category* (distinguishing between skill-related and trait-related items) and (b) the categorical variable *domain* (distinguishing between the five broad domains).

Model 2 included the same two predictors plus their interaction term, to test whether differences between skills and traits in the outcome

ratings varied across the five domains (e.g., whether the difference between traits and skills was larger for the self-management/conscientiousness domain than for the innovation/openness domain).

We compared the two models using the Akaike Information Criterion (AIC) and a likelihood ratio test to determine the best-fitting model. If Model 2 provided a significantly better fit (i.e., a significant likelihood ratio test and lower AIC), we computed planned contrasts within each domain (i.e., comparing each trait with its corresponding skill).

In all models, we included country and gender as control variables. Additionally, participant intercepts were modeled as random effects to account for within-person variability in response style.

3. Results

The full set of results, with all model estimates and code is available on OSF (<https://doi.org/10.17605/OSF.IO/SWDC2>).

3.1. Descriptive statistics and correlations

The mean, standard deviation, skewness, and kurtosis of every outcome for every skill and trait are reported in Table 2 (see also Fig. 1). In general, cooperation skills and their associated agreeableness trait appear to receive lower scores across all items. On the contrary, emotional stability and emotional resilience are highly endorsed change goals, with a high perceived impact compared to other traits and skills, although their associated feasibility beliefs appear limited. These domains, together with innovation and openness, also yield quite similar results between traits and skills. By contrast, self-management and social engagement skills descriptively received higher scores across the four outcomes, with changes in self-management being perceived as highly impactful.

In general, regarding the amount of desired change, only 5 % ($n = 70$) of all responses were “not at all” for personality and only 3 % ($n = 43$) were “not at all” for skills. Moreover, all participants reported at least some degree of desired change in one or more skills and traits. Indeed, 204 participants (77 %) reported at least some degree of desired change in all five traits, and 230 participants (87 %) reported at least some degree of desired change in all five SEB domains.

Correlations between amount, feasibility, motivation, and impact of

Table 2
Mean, standard deviation, skew, and kurtosis of every variable of interest.

	Skills				Traits			
	M	SD	Skew	Kurtosis	M	SD	Skew	Kurtosis
Amount								
Self-management / conscientiousness	3.50	1.08	−0.26	−0.73	3.14	1.08	−0.11	−0.80
Social engagement / extraversion	3.38	1.02	−0.17	−0.65	3.09	1.09	−0.07	−0.72
Cooperation / agreeableness	2.91	0.97	0.21	−0.46	2.89	1.03	0.16	−0.52
Emotional resilience / emotional stability	3.52	1.05	−0.48	−0.35	3.56	1.09	−0.42	−0.56
Innovation / openness	3.44	0.94	−0.23	−0.63	3.36	0.91	−0.13	−0.31
Feasibility								
Self-management / conscientiousness	3.25	0.91	−0.16	−0.29	3.13	0.92	0.07	−0.22
Social engagement / extraversion	3.13	0.83	0.06	−0.40	2.80	0.85	0.16	−0.32
Cooperation / agreeableness	3.06	0.92	0.08	−0.54	2.93	0.92	0.34	−0.08
Emotional resilience / emotional stability	3.12	0.91	0.18	−0.24	3.04	0.88	0.06	−0.17
Innovation / openness	3.16	0.82	−0.06	−0.27	3.28	0.82	0.01	−0.50
Motivation								
Self-management / conscientiousness	3.22	1.03	0.01	−0.67	2.95	1.06	0.11	−0.62
Social engagement / extraversion	3.03	0.99	−0.01	−0.54	2.67	0.98	0.11	−0.43
Cooperation / agreeableness	2.83	1.00	0.24	−0.50	2.77	1.03	0.05	−0.59
Emotional resilience / emotional stability	3.21	1.03	−0.13	−0.51	3.30	1.04	−0.18	−0.53
Innovation / openness	3.02	1.08	0.08	−0.71	3.14	1.02	−0.02	−0.69
Impact								
Self-management / conscientiousness	3.84	1.04	−0.70	−0.13	3.41	1.12	−0.28	−0.74
Social engagement / extraversion	3.53	0.96	−0.29	−0.49	3.15	1.05	−0.07	−0.69
Cooperation / agreeableness	3.16	0.97	−0.18	−0.33	3.08	1.00	0.06	−0.45
Emotional resilience / emotional stability	3.86	1.05	−0.80	0.05	3.86	1.02	−0.73	−0.07
Innovation / openness	3.37	1.00	−0.07	−0.60	3.44	0.91	−0.04	−0.72

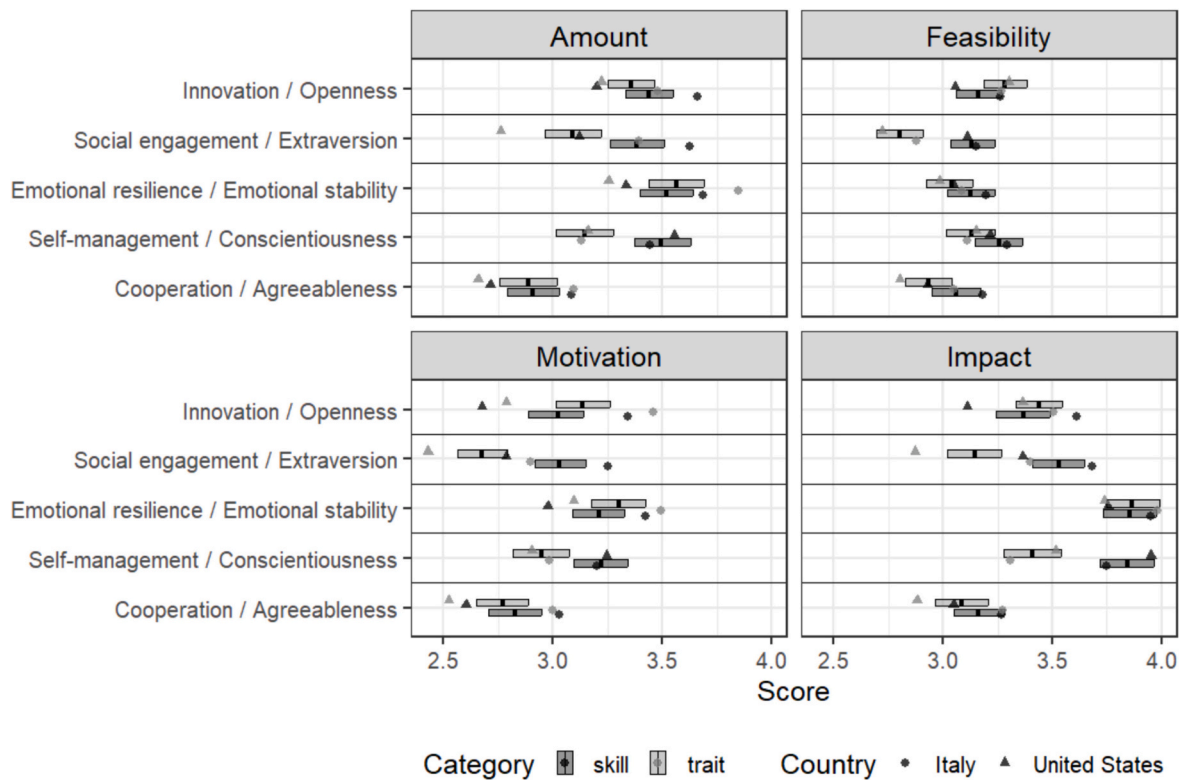


Fig. 1. Mean values for skills and traits responses in the five domains for the full sample and for US and Italian participants. The bars represent 95 % confidence intervals.

change for the total of the five traits and the five SEB domains are reported in Table 3. Descriptively, this pattern of correlations shows that people's goals and beliefs about change are positively correlated, but beliefs about feasibility are the most independent [$0.18 \leq r \leq 0.45$] from the other aspects. Scores reported for traits are associated with the corresponding ratings for skills, however, these associations are only moderate in strength [$0.43 \leq r \leq 0.51$], suggesting that many participants differentiated their ratings of skills and traits change.

Bivariate correlations between all outcomes are reported in the Supplementary Materials (see Fig. S1).

3.2. Model comparisons and differences between traits and skills

Model comparisons show that the second model (with the interaction term between category and domain) was always preferable to the first model (with only main effects). Specifically, the likelihood ratio test was always significant ($p < .001$) and AIC was always lower in the second

model ($\Delta_{AIC} > 12$; see Table 4). A descriptive inspection of the overall difference between skills and traits (i.e., all skills collapsed together compared with all traits collapsed together) from the first models shows that participants reported significantly higher scores for skills compared to traits for all outcomes (see Supplementary results: <https://doi.org/10.17605/OSF.IO/SWDC2>). However, the fact that the second model was always preferable to the first indicates that the size of these differences varies across the five domains.

3.2.1. How much do people want to change?

Contrasts for each domain on amount of change are reported in Table 4 and illustrated in Fig. 1. Controlling for country ($b = -0.41$, 95% CI $[-0.57; -0.25]$) and gender ($b = 0.03$, 95%CI $[-0.05; 0.12]$), significant differences emerged in two domains: social engagement vs. extraversion ($b = 0.35$, 95%CI $[0.17; 0.53]$), and self-management vs. conscientiousness ($b = 0.43$, 95%CI $[0.24; 0.61]$), with participants desiring greater change for skills. These results indicate that most people would like to increase their social engagement and self-management skills more than the corresponding personality traits of extraversion and conscientiousness.

3.2.2. Do people believe it's possible to change?

Contrasts for each domain on feasibility of change are reported in Table 4 and illustrated in Fig. 1. Controlling for country ($b = -0.17$, 95% CI $[-0.36; 0.01]$) and gender ($b = 0.04$, 95%CI $[-0.06; 0.14]$), significant differences emerged between social engagement and extraversion ($b = 0.49$, 95%CI $[0.30; 0.67]$), and between cooperation and agreeableness ($b = 0.19$, 95%CI $[0.00; 0.38]$) with participants reporting greater feasibility for changing skills. The difference between self-management and conscientiousness was marginally significant ($b = 0.18$, 95%CI $[-0.003; 0.37]$, $p = .054$). These results suggest that people generally believe it would be easier to change their SEB skills than their personality traits, at least for social, cooperation, and self-management skills.

Table 3

Correlations between total scores of amount, feasibility, motivation, and impact of change for traits and skills.

	1.	2.	3.	4.	5.	6.	7.	8.
1.Traits amount	1.00							
2.Traits feasibility	0.34	1.00						
3.Traits motivation	0.62	0.45	1.00					
4.Traits impact	0.68	0.40	0.62	1.00				
5.Skills amount	0.51	0.18	0.39	0.42	1.00			
6.Skills feasibility	0.20	0.43	0.24	0.21	0.32	1.00		
7.Skills motivation	0.38	0.26	0.51	0.37	0.62	0.43	1.00	
8.Skills impact	0.39	0.22	0.35	0.48	0.64	0.38	0.57	1.00

Note. All correlations >0.20 are significant with $p < .001$.

Table 4

Results of the model comparisons (ΔAIC) and of contrasts between skills and traits for each domain and outcome.

	<i>b</i> [95 % CI]	<i>se</i>	<i>z</i>	<i>p</i>	ΔAIC
Amount					
Self-management / conscientiousness	0.43 [0.24; 0.61]	0.09	4.59	0.00*	12.57
Social engagement / extraversion	0.35 [0.17; 0.53]	0.09	3.77	0.00*	
Cooperation / agreeableness	0.03 [−0.15; 0.21]	0.09	0.28	0.78	
Emotional resilience / emotional stability	−0.06 [−0.25; 0.12]	0.09	−0.67	0.50	
Innovation / openness	0.10 [−0.09; 0.28]	0.09	1.09	0.28	
Feasibility					
Self-management / conscientiousness	0.18 [−0.00; 0.37]	0.09	1.93	0.05°	16.91
Social engagement / extraversion	0.49 [0.30; 0.67]	0.10	5.13	0.00*	
Cooperation / agreeableness	0.19 [0.00; 0.37]	0.09	2.00	0.05*	
Emotional resilience / emotional stability	0.13 [−0.05; 0.32]	0.09	1.38	0.17	
Innovation / openness	−0.18 [−0.36; 0.01]	0.09	−1.89	0.06°	
Motivation					
Self-management / conscientiousness	0.35 [0.17; 0.53]	0.09	3.74	0.00*	24.79
Social engagement / extraversion	0.45 [0.27; 0.63]	0.09	4.82	0.00*	
Cooperation / agreeableness	0.07 [−0.12; 0.25]	0.09	0.72	0.47	
Emotional resilience / emotional stability	−0.11 [−0.30; 0.07]	0.09	−1.23	0.22	
Innovation / openness	−0.14 [−0.32; 0.04]	0.09	−1.50	0.13	
Impact					
Self-management / conscientiousness	0.54 [0.36; 0.73]	0.09	5.73	0.00*	27.45
Social engagement / extraversion	0.45 [0.27; 0.64]	0.09	4.87	0.00*	
Cooperation / agreeableness	0.09 [−0.09; 0.27]	0.09	0.94	0.35	
Emotional resilience / emotional stability	−0.01 [−0.20; 0.17]	0.10	−0.13	0.90	
Innovation / openness	−0.07 [−0.25; 0.11]	0.09	−0.78	0.44	

* $p < .05$.

° $p < .06$.

3.2.3. Are people motivated to change?

Contrasts for each domain on motivation are reported in Table 4 and illustrated in Fig. 1. Controlling for country ($b = -0.51$, 95%CI [−0.69; −0.33]) and gender ($b = 0.06$, 95%CI [−0.04; 0.16]), significant differences emerged between social engagement and extraversion ($b = 0.45$, 95%CI [0.27; 0.63]), and between self-management and conscientiousness ($b = 0.35$, 95%CI [0.17; 0.53]), with participants reporting higher motivation to change skills. Thus, people appear more motivated to improve their social engagement and self-management skills than their corresponding personality traits.

3.2.4. Do people believe change would impact their lives?

Contrasts for each domain on impact are reported in Table 4 and illustrated in Fig. 1. Controlling for country ($b = -0.24$, 95%CI [−0.40; −0.07]) and gender ($b = 0.10$, 95%CI [0.01; 0.19]), significant differences emerged between social engagement and extraversion ($b = 0.45$, 95%CI [0.27; 0.64]), and between self-management and conscientiousness ($b = 0.54$, 95%CI [0.36; 0.73]), with participants reporting greater impact for changing skills. Similar to the other outcomes, these results indicate that most people believe that improving their social engagement and self-management skills would have a bigger impact on their life than would changing their personality traits.

4. Discussion

Policy makers have speculated that it may be easier and more desirable to improve skills than to change personality traits (OECD, 2015, OECD, 2021), but to our knowledge no previous studies have tested whether laypeople share this belief. Therefore, the present research used a within-person experiment to test differences in laypeople's goals and beliefs about changing SEB skills vs. personality traits. We hypothesized that improving SEB skills would be perceived as more feasible than changing one's traits.

At a descriptive level, our results show that most people desire at least some changes in both their SEB skills and personality traits, with change goals in corresponding skill domains and traits being inter-correlated. However, individuals clearly differentiate between skill and trait change goals and beliefs, as these correlations were always lower than 0.51. In general, cooperation skills and agreeableness were associated with the lowest levels of change goals, reported motivation, and perceived impact. Similarly, changes in trait extraversion were generally perceived as difficult to achieve and were accompanied by low motivation and one of the lowest perceived impacts of change. Regarding differences between skills and traits, and consistent with our hypotheses, participants reported higher change goals and associated beliefs for self-management and social engagement skills compared to trait conscientiousness and extraversion. An additional difference in feasibility beliefs also emerged for cooperation skills compared to agreeableness. These differences were small-to-medium in magnitude [0.18; 0.54]; however, they arose from a simple and relatively subtle manipulation of the definition of SEB skills and traits (see Table 1), and were consistent across US and Italian respondents (see Fig. 1). By contrast, people's goals and beliefs about changing their personality traits were never higher, on average, than for the corresponding skills.

In sum, our results suggest that while people want to change both traits and skills, they would generally prefer to change their skills—and believe it would be more feasible and impactful to do so. This was especially true for social and self-management skills, as compared to trait extraversion and conscientiousness.

4.1. Implications, limitations, and future directions

4.1.1. What and why do people want to change?

Previous research indicates that people seek to change their personality traits to enhance their well-being and success (Hudson & Fraley, 2016; Sun & Goodwin, 2020). We largely replicate these results, by also showing that the most frequently endorsed change goals concern emotional stability, while agreeableness and extraversion are less frequently targeted (Hudson & Fraley, 2016). Contrary to previous literature, openness was also endorsed quite often compared to other traits, but only in the Italian sample, suggesting a need for further cross-cultural comparisons.

Importantly, our results suggest that people also express a desire to develop their SEB skills—and in some domains, this desire may be even stronger for skills than for traits. Consistent with this reasoning, the present findings indicate that most people would like to increase their social engagement and self-management skills more than trait extraversion and conscientiousness. These two skills may emerge as especially desirable because they might be seen as particularly instrumental for success. For example, a person desiring to have more friends might more strongly desire to learn how to start and maintain a conversation with new people they find interesting (a skill), as opposed to becoming generally talkative (a trait). Contrarily, individuals with symptoms of depression and anxiety may similarly express a desire to learn how to strengthen their emotional resilience skills, as well as how to alter their general tendency toward more stable emotionality. Another plausible explanation for the specific difference observed in extraversion and conscientiousness is that laypeople interpret these traits as predominantly behavioral, rather than cognitive or affective (Wilt & Revelle,

2015). This interpretation may influence both the desire to change these traits and the perceived feasibility of doing so. Indeed, laypeople also associate the development of extraversion and conscientiousness—but not other traits—with behavioral rather than cognitive or affective change strategies (Baranski et al., 2017). This distinction may also help explain why the corresponding skills are perceived as particularly desirable to change, as skills are likely to be interpreted in even more concrete behavioral terms and thus regarded as more controllable. In turn, this has a significant impact on feasibility beliefs.

4.1.2. What do people believe about their change goals?

Beyond exploring the strength of change goals, we also aimed to test differences in people's beliefs about the feasibility, impact, and motivation of changing skills and traits. Our results showed that change was considered more feasible for most skills compared to their corresponding traits, possibly because of the above-mentioned behavioral perception of skills. This, along with a higher perceived impact of change, may have led to greater motivation for people to change their skills—especially for self-management and social engagement skills. This is again consistent with the hypothesis that people are more inclined to change their skills than traits because changing skills might suffice to achieve other life goals (e.g., impact), and might be easier (i.e., feasibility). However, future research is needed to more directly test the dynamic links between motivation, feasibility beliefs, and impact beliefs for change goals. For example, research indicates that whether people believe they can change their personality does not appear to influence observed changes in personality traits (Hudson et al., 2021). Future research can test whether this finding generalizes to SEB skills, or whether the role of mindsets differs for skill vs. trait change.

4.1.3. Feasibility and interventions

The higher feasibility beliefs about skills change compared to traits change align with our hypothesis that skills change is perceived as easier to achieve. This also aligns with theoretical conceptualizations of skills and traits (Napolitano et al., 2021; OECD, 2021). Indeed, SEB skills are hypothesized to be more malleable than traits, with changes being additive rather than bidirectional: skills tend to increase due to accumulated knowledge and practice, while traits can either increase or decrease from experience (Jackson & Wright, 2024). Future studies can directly test whether changes in skills naturally occur more frequently than changes in traits, as well as whether skills interventions provide stronger and more immediate changes in skills and their outcomes compared to traits. Such findings would support policy proposals that suggest skills as more malleable than traits (OECD, 2015; OECD, 2021). Additionally, future research can investigate participants', educators', employers', and policymakers' propensity or resistance to engaging in skills or traits interventions. Indeed, there are numerous national and international institutions promoting skills development (European Commission, 2016; OECD, 2021; WHO, 2003). Future studies should aim to clarify these distinctions and explore the most effective approaches for fostering personal development.

4.1.4. Methodological strengths and limitations

The present study had some notable strengths, including its international sample and within-person experimental design. However, it also had some limitations that can be addressed by future work. First, the present sample only included college and university students. This is a highly relevant population because emerging adults are actively pursuing goals for their future. However, change goals might vary depending on the needs and challenges of specific life stages (Hudson & Fraley, 2016). For instance, different results could emerge in adolescence when students report low emotional resilience skills and face many challenges related to emotion regulation (Feraco & Meneghetti, 2023; Napolitano et al., 2021).

Our study also used single-item measures of change goals and related beliefs about feasibility, motivation, and impact. We treated the items as

ordinal, thereby reducing type I errors and better estimating latent differences, and carefully manipulated the items' stems to maximize face validity and minimize differences between traits and skills. Even so, more extensive measures could be applied in future work to increase the depth of analysis (Hudson & Roberts, 2014). More extensive questionnaires could also allow for a comparison of specific, facet-level skills and traits, rather than only broad, domain-level comparisons.

Finally, our study did not explore why some individuals report higher change goals than others. It is therefore unknown why people prefer to change one skill over another or what drives the differences between change goals for traits and skills. Based on our findings, future studies could explore these questions by, for example, assessing people's current skill and trait levels, which could provide a deeper understanding of the motivations underlying change goals.

5. Conclusion

To our knowledge the present study is the first to directly compare people's goals and beliefs about changing their SEB skills vs. personality traits. It provides evidence that emerging adults want to change their skills as much—or even more for social engagement and self-management skills—than their traits. They also perceive change in these skills as more feasible and impactful, and express greater motivation to pursue these changes compared to traits. These results go beyond previous volitional change research by underscoring the importance of distinguishing between skills and traits.

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CRedit authorship contribution statement

Tommaso Feraco: Writing – review & editing, Writing – original draft, Visualization, Software, Methodology, Formal analysis, Data curation, Conceptualization. **Nathan W. Hudson:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Conceptualization. **Christopher J. Soto:** Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Data curation, Conceptualization.

Declaration of competing interest

None.

Data availability

Data, code, and materials are available on OSF at <https://doi.org/10.17605/OSF.IO/SWDC2>.

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