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Ten dos and don'ts of Character Strengths Research

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Abstract

While both practitioners and the public regard character strengths positively, some psychologists and philosophers harbor skepticism. In this analytical commentary on current research and literature, we trace such skepticism to a premature focus on positive outcomes, which eclipsed the theoretical groundwork outlined in the 2004 handbook. We propose solutions to ten key issues which, in our estimation, not only sustain this skepticism but also hinder meaningful advancement in the field of character strengths research: (1) Criteria evaluation, (2) Virtue functions, (3) Situational affordances, (4) Content validity, (5) Criterion validity, (6) Fulfillment conceptualization, (7) Adverse outcome modeling (8) Moral excellency, (9) Strengths conservatism, and (10) Methodological mainstream thinking. We contend that resolving these issues is necessary to uphold the standing of character strengths and positive psychology among its counterparts, and to establish a potent foundation for effective character development.

Keywords Positive psychology · VIA · Virtues · Commentary · Review

Willibald Ruch and Alexander G. Stahlmann share first authorship due to equal contributions.

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1 Introduction

Two decades have elapsed since Peterson and Seligman's (2004) foundational handbook on character strengths and virtues reintroduced positive individual differences such as bravery, humility, and humor into the canon of psychological research and discourse (see Table 1 for an overview). Today, an expansive body of research attests to their universal importance, essentially from the cradle to the grave. Rooted in folktales from around the world, character strengths not only predict success and well-being in education, work, and love, but also correlate with the resilience needed to overcome life's adversities, illnesses, and losses (for overviews, see Harzer, 2016; Niemiec, 2013; Ruch & Stahlmann, 2019; Weber, 2021). Indeed, as life's chapters come to a close, these strengths often persist to the very end, representing the treasured ideals that individuals reminisce about with profound pride when reflecting on their lives (Baumann & Eiroa-Orosa, 2016; Baumann & Ruch, 2022; Baumann et al., 2020).

The compelling evidence supporting the utility of character strengths has led to their integration into educational and organizational frameworks globally. Leading the way are institutions such as the KIPP Public Schools in the USA, Geelong Grammar School in Australia, and the Swiss Armed Forces, which is developing a virtue catalog for its officers (Copley & Niemiec, 2021; Eggimann & Annen, 2020; Norrish, 2015). Modern academic literature is brimming with case studies, intervention manuals, and guides on character strengths, many of which have undergone rigorous scrutiny, including their own, and at times multiple, systematic reviews and meta-analyses (e.g., Boe, 2016; Lavy, 2020; Miglianico et al., 2020). In this evolving academic landscape, character strengths have become a paramount focus, holding a central role in the tapestry of positive psychology (see Wang et al., 2023). While many facets of the discipline aim to outline the elements of human flourishing, it is the research into character strengths that offers actionable pathways and methods for achieving it (see Carr, 2011; Niemiec, 2018).

1.1 The Unfinished Business of Character Strengths Research

Yet, for all the depth of practical research, a disconcerting gap exists in its theoretical grounding. While numerous studies highlight positive impacts, the core hypotheses of the handbook largely remain untested, leaving the research on potentially uncertain footing (Ruch & Stahlmann, 2019; Stahlmann & Ruch, 2020). The handbook's creation was the culmination of a protracted and occasionally intricate development process, with numerous contributors and a myriad of ideas that were juggled until an initial consensus was reached (see Blyth et al., 2000; Clifton et al., 1999). Despite its rapid ascent to fame and its role as a cornerstone of the positive psychology movement, the authors maintained a cautious stance, emphasizing that the handbook should not be considered a finished product. Instead, they anticipated that "our classification of strengths will similarly evolve, by adding or deleting specific strengths of character, by combining those that prove redundant, by reformulating their organization under core virtues, and by more systematically evaluating them vis-à-vis our 10 criteria" (Peterson & Seligman, 2004, p. 31). However, perhaps disoriented

Table 1 Peterson and Seligman's (2004) VIA classification

1. **Wisdom and knowledge**—Cognitive strengths that entail the acquisition and use of knowledge

- **Creativity** [originality, ingenuity]: Thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it
- **Curiosity** [interest, novelty-seeking, openness to experience]: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering
- **Open-mindedness** [judgment, critical thinking]: Thinking things through and examining them from all sides; not jumping to conclusions; being able to change one's mind in light of evidence; weighing all evidence fairly
- **Love of learning**: Mastering new skills, topics, and bodies of knowledge, whether on one's own or formally; obviously related to the strength of curiosity but goes beyond it to describe the tendency to add systematically to what one knows
- **Perspective** [wisdom]: Being able to provide wise counsel to others; having ways of looking at the world that make sense to oneself and to other people

2. **Courage**—Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal

- **Bravery** [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it
- **Persistence** [perseverance, industriousness]: Finishing what one starts; persisting in a course of action in spite of obstacles; "getting it out the door"; taking pleasure in completing tasks
- **Integrity** [authenticity, honesty]: Speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one's feelings and actions
- **Vitality** [zest, enthusiasm, vigor, energy]: Approaching life with excitement and energy; not doing things halfway or halfheartedly; living life as an adventure; feeling alive and activated

3. **Humanity**—Interpersonal strengths that involve tending and befriending others

- **Love**: Valuing close relations with others, in particular those in which sharing and caring are reciprocated; being close to people
- **Kindness** [generosity, nurturance, care, compassion, altruistic love, "niceness"]: Doing favors and good deeds for others; helping them; taking care of them
- **Social intelligence** [emotional intelligence, personal intelligence]: Being aware of the motives and feelings of other people and oneself; knowing what to do to fit into different social situations; knowing what makes other people tick

4. **Justice**—Civic strengths that underlie healthy community life

- **Citizenship** [social responsibility, loyalty, teamwork]: Working well as a member of a group or team; being loyal to the group; doing one's share
- **Fairness**: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance
- **Leadership**: Encouraging a group of which one is a member to get things done and at the time maintain time good relations within the group; organizing group activities and seeing that they happen

5. **Temperance**—Strengths that protect against excess

- **Forgiveness and mercy**: Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance; not being vengeful
- **Humility / Modesty**: Letting one's accomplishments speak for themselves; not regarding oneself as more special than one is
- **Prudence**: Being careful about one's choices; not taking undue risks; not saying or doing things that might later be regretted
- **Self-regulation** [self-control]: regulating what one feels and does; being disciplined; controlling one's appetites and emotions

6. **Transcendence**—Strengths that forge connections to the larger universe and provide meaning

Table 1 (continued)

- **Appreciation of beauty and excellence** [awe, wonder, elevation]: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life, from nature to art to mathematics to science to everyday experience
- **Gratitude**: Being aware of and thankful for the good things that happen; taking time to express thanks
- **Hope** [optimism, future-mindedness, future orientation]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about
- **Humor** [playfulness]: Liking to laugh and tease; bringing smiles to other people; seeing the light side; making (not necessarily telling) jokes; liking to laugh and joke; bringing smiles to other people
- **Spirituality** [religiousness, faith, purpose]: Having coherent beliefs about the higher purpose and meaning of the universe; knowing where one fits within the larger scheme; having beliefs about the meaning of life that shape conduct and provide comfort

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by the void left by Christopher Peterson's untimely passing in 2012 or enticed by the promise of positive outcomes, these cautionary warnings have been—and continue to be—largely disregarded to the present day.

Few systematic efforts have been made to add or remove specific character strengths, resulting in practically no changes to the list of 24 character strengths since the handbook's publication (for rare examples of revision attempts, see McGrath, 2014; Ng et al., 2018). The classification of strengths under core virtues has received similarly little attention, and only recently have serious attempts at reformulation been initiated (Ruch et al., 2020a, 2021; Ruch & Proyer, 2015). Most importantly, there have been almost no dedicated attempts to systematically evaluate character strengths against the 10 criteria (Ruch & Stahlmann, 2019; Stahlmann & Ruch, 2020). In essence, it remains unclear whether the 24 character strengths themselves meet the criteria set out to define them. These shortcomings illustrate the degree to which theoretical progress is lagging behind practical evidence, fueling critical perspectives on character strengths research in psychology and philosophy.

1.2 Valid and Invalid Criticisms

While practitioners and the public appreciate character strengths for their observable positive outcomes, this enthusiasm is not necessarily mirrored within broader research communities, particularly in personality psychology and philosophy. Instead, the persistent neglect of theoretical foundations seems to be a major factor fueling the perception that character strengths research is, at best, incomplete and, at worst, unscientific (see, e.g., Bleidorn et al., 2020; Fleeson et al., 2014; Fowers et al., 2021; van Zyl et al., 2024). Indeed, in their recent review of critiques targeting positive psychology, van Zyl et al. (2024) pinpointed improper theorizing and poor measurement/methods as the primary roots of criticism, encompassing not only character strengths but the entirety of positive psychology. And while there have been strides in the wider positive psychology literature to address some critiques—such as clarifying the concept of “positive” or devising a meta-theory to streamline theory-building and methodologies—research on character strengths largely remains behind the curve (e.g., Lomas et al., 2021; Pawelski, 2016a, b; Wissing, 2021).

An important distinction is required here because, while broader discussions on “character” and “virtue” have seen researchers addressing some of the theoretical critique, these discussions have often contrasted, if not conflicted, with the specific concept of “character strengths.” In contemporary personality psychology, “character” and “virtue” typically serve as umbrella terms that encompass various frameworks and paradigms focused on describing “positive individual traits” believed to foster happiness and fulfillment (see Seligman & Csikszentmihalyi, 2000; Sheldon, 2000). In contrast, “character strengths” refers specifically to the VIA classification conceptualized and popularized by Peterson and Seligman (2004). While researchers have ventured into formulating hypotheses concerning the intrinsic nature of virtues, their developmental trajectories, and broader societal implications, they typically do that by saying how character strengths cannot satisfy these hypotheses (Fleeson et al., 2014; Fowers et al., 2021). There seems to be a hesitance or, at times, an outright reluctance to engage deeply with the comprehensive body of literature and the tradition surrounding character strengths that has been cultivated over the past two decades.

A discernible critique pattern emerges from these discussions. At the outset, there is an acknowledgment of the significance of character strengths research, particularly its role in foregrounding the importance of virtue science. However, this initial commendation is swiftly overshadowed by critiques, which often tend to decontextualize and oversimplify the intricate nuances of the research. A recurrent point of contention is the assertion that factor-analytic studies have unearthed structures that diverge from Peterson and Seligman’s (2004) foundational six-virtue framework (Fleeson et al., 2014; Fowers et al., 2021, 2023; Miller, 2019; Snow, 2019). This critique overlooks Peterson and Seligman’s (2004) nuanced stance, which did not prescribe a rigid evaluation of character strengths and virtues through factor analysis alone (see subsection on “Issue #2: Virtue Functions” for a detailed discussion). Therefore, evaluating character strengths solely by their factorial alignment with the six virtues is both unjust and likely to be unfruitful. This straw man argumentation not only diminishes the inherent value of character strengths research but also marginalizes its pivotal contributions to the multifaceted domain of virtue science.

In conclusion, it is clear that while theoretical critiques have a significant influence on how character strengths research is viewed in personality psychology and philosophy, it is vital to discern between valid and invalid criticisms. In the debate around the strengths-virtue link, many criticisms seem misdirected, focusing on misunderstood elements of the research. These often divert attention from the real issues, which require a deeper analytical approach and refined methodologies. In our estimation, many such misdirected criticisms stymie a genuine exploration and resolution of the actual concerns. To address this, revisiting foundational sources—such as the 2004 handbook—is a must. This enables a clearer identification of valid criticisms, especially when looking for gaps in reasoning or contrasts with fields like philosophy.

1.3 Aims of this Commentary

In the following analytical commentary, we identify and elaborate upon ten key issues that, in our estimation, both sustain existing skepticism and obstruct potential

advancements in the field of character strengths research. For each issue, we examine the prevalent paradigms and methodologies as they stand (“don’ts”), and propose constructive alternatives for further study and practice (“dos”), striving to remain as faithful as possible to the foundational sources. Table 2 gives an overview on these ten issues, complete with a summary of their corresponding do’s and don’ts.

Our viewpoint is informed by a longstanding and active participation in the field, including a history of contribution to foundational sources such as Peterson and Seligman’s (2004) handbook. After years of closely following the literature and undertaking preliminary work on some of these issues, we made the deliberate choice to bring them together in this singular work. This decision is motivated not only by escalating critiques from adjacent disciplines but also by a troubling observation: attempts to refine theoretical frameworks are frequently eclipsed by a surge in empirical studies prioritizing practical outcomes. This trend, possibly rooted in reverence for Christopher Peterson’s foundational contributions or hesitancy in theoretical exploration, often sidelines theoretical progress and novel viewpoints, such as regarding the relationship between character strengths and virtues. Therefore, we hope that this focused effort serves not just as an academic resource but also as a spark for reigniting discussions on these critical questions. Even if some readers disagree with our identified issues or suggest alternative approaches, such discord would be welcome, as it would signify a rekindling of the much-needed discourse that has been dormant for too long.

Table 2 Ten dos and don’ts of character strengths research

Issue	Don’t...	Do...
Criteria evaluation	take character strengths’ fundamental criteria for granted	discuss them critically and evaluate them empirically
Virtue functions	use factor analysis to infer the structure of virtues (reflective model)	conceptualize virtues as functions of character strengths (formative model)
Situational affordances	neglect situational impacts on character strengths expression	identify specific situations that allow for the expression of specific strengths
Content validity	prioritize reliability, economy, or other validity types over content validity.	adequately represent the conceptual breadth of character strengths
Criterion validity	evaluate the importance of character strengths based on structural model fit	prioritize important outcomes in deciding character strength importance
Fulfillment conceptualization	predict subjective fulfillment only (e.g., self-reported life satisfaction)	predict different types of fulfillment (e.g., societal/civic recognition)
Adverse outcome modeling	place character strengths on an opposite-to-excess continuum	identify distinct strengths profiles associated with adverse outcomes
Moral excellency	view character strengths as temperaments/personality only	view some as enabling exceptional behavior in critical situations
Strengths conservatism	assume all key character strengths are known	explore more strengths in varying contexts and cultures
Methodological mainstream thinking	use standard methods to test the character strengths model	use sophisticated methods tailored to the unique properties of the model

2 Ten dos and don'ts of Character Strengths Research

2.1 Issue #1: Criteria Evaluation

Our first issue centers on the paucity of empirical investigations addressing the criteria set forth to define character strengths. Consequently, there remains substantial ambiguity regarding which of these criteria are applicable and, in turn, the true nature of character strengths and their differentiation from other constructs. The initial articulation of these criteria occurred during the pivotal Glasbern/VIA Taxonomy Meeting held at the historic Glasbern Hotel near Philadelphia from October 16 to October 17, 2000 (Blyth et al., 2000). During this gathering, Christopher Peterson introduced an initial list of seven criteria to establish an objective framework for character strengths enumeration. This step was taken in response to the identification of numerous potential strengths, necessitating a means of consolidation (Peterson & Seligman, 2004). Over subsequent years, these seven criteria were expanded into 10 and ultimately 12 criteria for character strengths (Ruch & Stahlmann, 2019; Stahlmann & Ruch, 2020).

Intriguingly, there is a consensus in the literature on the importance of these criteria, as echoed in several pivotal handbooks on character strengths and positive psychology (e.g., Peterson & Park, 2009; Park, 2018; Wagner & Ruch, 2022). Nevertheless, critical evaluations of these criteria are notably scarce, with comprehensive assessments primarily featured in Peterson and Seligman's handbook (2004) and, to a lesser extent, in a book contribution by Park and Peterson (2007). In both of these sources, each character strength was theoretically assessed for its alignment with these criteria, drawing on prior literature and individual reasoning, but lacking empirical assessments.

Table 3 summarizes empirical studies that assess character strength criteria, including both direct evidence (studies explicitly evaluating criteria) and circumstantial evidence (studies implicitly supporting criteria). Explicit investigations are infrequent, with most studies focusing on criteria that are comparatively straightforward to evaluate, relevant to all forms of individual differences, and supported by established evaluation methodologies. These include criteria such as character strengths being *traitlike* ("demonstrating generality and stability as an individual difference"), being *measurable* ("successfully measured as an individual difference by researchers"), and exhibiting *distinctiveness* ("lacking conceptual or empirical redundancy with other character strengths"). Conversely, other criteria were novel and character-specific, such as them being *morally valued* ("valued for its intrinsic worth, not merely as a means to an end"), not *diminishing others* ("inspiring admiration in observers, rather than jealousy"), and representing *paragons* ("remarkably embodied in certain individuals"). These criteria are arguably fundamental to the uniqueness of character strengths. However, presumably due to the necessity for innovative evaluation methods, they have received even less attention than criteria related to all forms of individual differences (Ruch & Stahlmann, 2019; Stahlmann & Ruch, 2020).

A notable exception is a recent exploratory study by Stahlmann et al. (2024), who sought ratings from a group of laypersons regarding all criteria discussed in the literature in terms of their applicability to character strengths. They found that one or two criteria suffice to define character strengths with approximately 74% accuracy. The

Table 3 Summary of empirical studies in our knowledge that evaluate criteria for character strengths

Criterion	A character strength...	Evidence
Ubiquity	is widely recognized and celebrated across cultures.	No explicit research; circumstantial evidence, e.g., by Biswas-Diener (2006); Millar, 2008; Selvam and Collicutt, (2013)
Fulfilling	contributes to individual fulfillment, satisfaction, and happiness broadly construed.	Abundance of explicit research; for overviews, see Harzer, 2016; Niemiec, 2013; Weber, 2021
Morally valued	is valued in its own right and not as a means to an end.	Explicit research by Freidlin et al. (2023); Stahlmann & Ruch (2020); no circumstantial evidence
Does not diminish	elevates others who witness it, producing admiration, not jealousy.	Neither explicit nor circumstantial evidence
Nonfelicitous opposite	has obvious antonyms that are “negative”.	Neither explicit nor circumstantial evidence
Traitlike	is an individual difference with demonstrable generality and stability.	Explicit research by Gander et al. (2020); circumstantial evidence, e.g., by Chopik et al. (2021); Ferragut et al. (2014); Loke (2012)
Measurable	needs to be manifest in the range of an individual’s behavior—thoughts, feelings, and/or actions—in such a way that it can be assessed.	Abundance of explicit research; for overviews, see Rashid et al. (2013); Stahlmann & Ruch (2019); Wagner & Ruch (2022)
Distinctive	is not redundant (conceptually or empirically) with other character strengths.	Abundance of explicit research, e.g., by Blümke et al. (2023); McGrath (2014); Ruch et al. (2023)
Paragons	is strikingly embodied in some individuals.	Explicit research by Gander et al. (2023); circumstantial evidence by Walker et al. (2007, 2010); Walker and Hennig (2004)
Prodigies	is precociously shown by some children or youth.	Neither explicit nor circumstantial evidence
Selective absence	is missing altogether in some individuals.	Neither explicit nor circumstantial evidence
Institutions	is the deliberate target of societal practices and rituals that try to cultivate it.	No explicit research; circumstantial evidence, e.g., by Boe et al. (2015); Matthews et al. (2006); Ngai (2015)

top five criteria include *does not diminish*, *fulfilling*, *measurable*, *traitlike*, and *institutions*. Interestingly, these criteria exhibit compensatory relationships, as their combination rarely enhances accuracy. However, no combination of criteria effectively distinguishes character strengths from the Big Five, which account for most of the errors. While this study suggests that some concerns may be unfounded since these criteria appear to perform well, it is disconcerting to observe their inability to differentiate character strengths from other prominent individual differences, and their substantial redundancy. Moreover, the emergence of *does not diminish* as a prominent criterion—previously receiving minimal attention in the literature—remains unclear.

Some may argue that the criteria for character strengths can be overlooked, given Peterson and Seligman’s (2004, p. 17) assertion that the “criteria are neither necessary nor sufficient conditions for character strengths but rather pertinent features that, taken together, capture a ‘family resemblance.’” We dissent from this view. In fact, a significant portion of the critique from various disciplines may be attributed to the

perception of character strengths as less tangible traits, compounded by a lack of consensus among scholars in the field about the precise nature of character strengths. Stahlmann's (2023) bibliographic review of key publications from 2011 to 2022 underscores this issue, revealing that among the 60 most cited papers, no two definitions of character strengths were identical. This lack of a clear, universally accepted definition leads to an implicit fallback to Boring's (1923) definition of intelligence—that character strengths are what the various VIA inventories measure—a poor man's definition. In such a case, the question arises whether the abundant evidence of positive outcomes associated with character strengths can truly be integrated into a unified body of knowledge. The lack of a shared conceptual foundation renders discussions of character strengths as a unified entity potentially misleading. It may be more prudent to examine specific attributes and their outcomes in isolation, rather than attempting to fit them into an all-encompassing theoretical framework. Alternatively, character strengths could be considered components of a larger construct, with the caveat that the literature has yet to converge on a universally accepted definition.

Taken together, although we know a lot about character strengths' predictive capabilities—such as their correlations with life satisfaction, academic achievement, and resilience—we know little about their fundamental nature and what distinguishes them from other concepts. This underscores the urgency for further research to determine the applicability of these criteria and explore potentially novel criteria that can more effectively differentiate character strengths from other important individual differences. Such research will also be necessary to determine whether our list of 24 character strengths is exhaustive or whether we are missing important strengths (see subsection on “Issue #9: Strengths conservatism” for a detailed discussion). In our estimation, the objective should encompass conducting a handful of studies per criterion, encompassing diverse cultural contexts and employing varied research methodologies. Subsequently, the data from these studies should undergo meta-analysis to establish which set of criteria best encapsulate the essence of character strengths. To achieve this, it is necessary that researchers stop taking character strengths' fundamental criteria for granted and, instead, start discussing them critically and evaluating them empirically.

2.2 Issue #2: Virtue Functions

Our second issue pertains to misunderstandings concerning the conceptualization of virtues and their relationship to character strengths. In the handbook, Peterson and Seligman (2004) conceptualized virtues as “the core characteristics valued by moral philosophers and religious thinkers: wisdom, courage, humanity, justice, temperance, and transcendence.” Character strengths, on the other hand, are “the psychological ingredients—processes or mechanisms—that define the virtues.” Virtues and character strengths are presented within a hierarchical framework, inspired by the Linnaean taxonomy of species. In this hierarchy, virtues occupy the most abstract and generalized tier, character strengths function at a middle conceptual level, and situational themes embody the concrete manifestations of character strengths under specific circumstances.

It is important to note, however, that Peterson and Seligman (2004) did not envision this hierarchy as akin to the “trait hierarchy” paradigm in contemporary personality psychology. This term refers to a categorization of individual differences that, based on their intercorrelations, can be grouped into broad domains (small correlations), aspects and facets (medium to strong correlations), or nuances (single markers; see Costa & McCrae, 1995; Mõttus et al., 2017). Contrarily, Peterson and Seligman (2004) introduced a compensatory structure, where character strengths “are distinguishable routes to displaying one or another of the virtues” and “a given individual will rarely, if ever, display all of them” (Peterson & Seligman, 2004, p. 13). In other words, virtues are not defined through the intercorrelations of character strengths; instead, they are conceptualized based on the premise that such interconnections are frequently absent. Consequently, factor analysis, a method reliant on intercorrelations, is ill-suited to create a model that faithfully represents the conceptualization of virtues as proposed by Peterson and Seligman (2004).

Unfortunately, factor analysis remains the primary method used by researchers examining the relationship between character strengths and virtues. This methodological close-mindedness inevitably leads to studies falling short of replicating Peterson and Seligman’s (2004) original classification of six virtues. However, rather than reevaluating their comprehension of the handbook, many scholars erroneously interpret the “poor fit” of their factor models as evidence against the validity of the six virtues (e.g., Feraco et al., 2022; McGrath et al., 2018; Noflet et al., 2011). They then proceed to promote their emergent factor structures as a more accurate representation of virtues and continue to collect contextual data to substantiate this claim. This line of inquiry overlooks the limitations of factor analysis and diverts attention from the need for a more nuanced methodological approach.

The current methodological constraints overshadow emerging research that offers promising avenues for understanding the relationship between character strengths and virtues (see Giuliani et al., 2020; Ruch et al., 2020a, 2021; Ruch & Proyer, 2015). For example, a preliminary study by Ruch and Proyer (2015) invited a diverse panel, including laypersons and experts such as professors of theology and philosophy, to evaluate the compatibility between character strengths and the virtues they purportedly represent. More recent work by Giuliani et al. (2020); Ruch et al. (2020b) involved laypersons articulating their most exemplary enactment of a given character strength and assessing how closely these behaviors align with virtues. Furthermore, Ruch et al. (2021) devised an empirical measure for the six virtues, and evaluated its correlations with corresponding character strengths. Collectively, these studies offer compelling evidence for the congruence between character strengths and virtues, despite some exceptions where strengths could fulfill multiple virtues or were inaccurately mapped. Such work represents a far more effective approach to probing the link between character strengths and virtues than does the overreliance on factor analysis.

Figure 1 presents a conceptual model that outlines how we propose the future integration of factor analysis with such emerging research paradigms. In this model, strengths factors function as the *reflective* components of character strengths, whereas virtues serve as their *formative* counterparts. Although factor analysis offers merits, such as investigating empirical overlaps among character strengths or mapping them

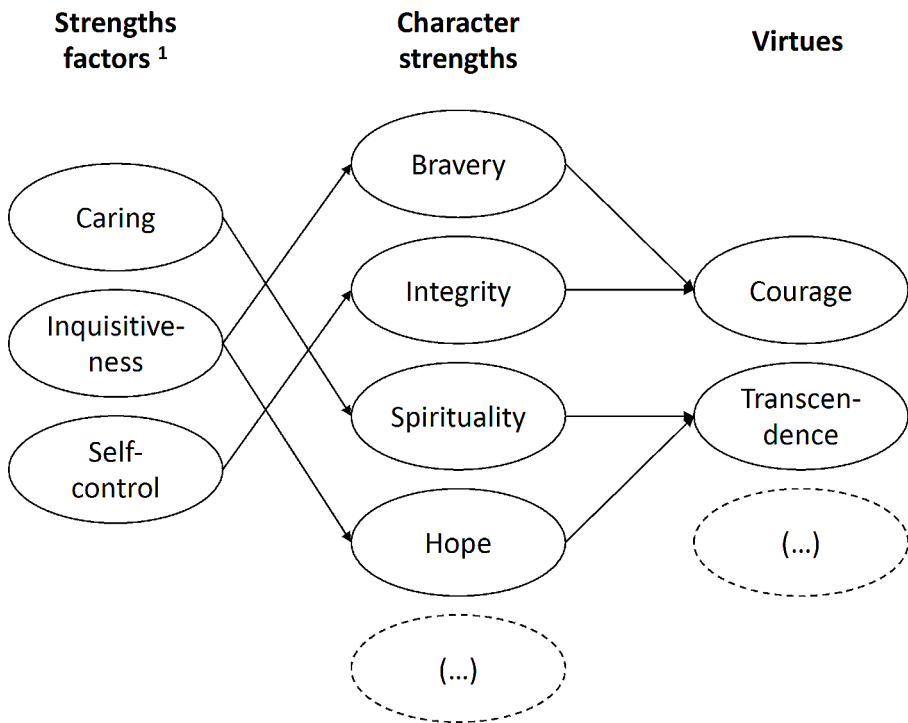


Fig. 1 Conceptual model that distinguishes links between character strengths, their reflective components (strengths factors), and their formative counterparts (virtues)

*Note:*¹ The strengths factors presented are chosen as illustrative examples and are based on McGrath's well-known three-factor model (e.g., McGrath, 2015; McGrath et al., 2018). However, these factors can be replaced with other factor models for the purpose of this discussion

onto the Big Five personality dimensions, it remains inadequate for capturing the hypotheses Peterson and Seligman (2004) posited on the character strengths-virtue link. This limitation is not unique to the study of virtues; factor models similarly struggle to describe other formative constructs like socioeconomic status, which may be influenced by a variety of sometimes compensatory and often unrelated indicators. Considering these points, we recommend moving away from relying solely on factor analytic research to deduce the structure of virtues, as per the reflective model. Instead, future research should pivot towards novel methodologies that treat virtues as outcomes or functions of character strengths, aligning with the formative model approach (see subsection on "Issue #10: Methodological mainstream thinking" for a detailed discussion).

2.3 Issue #3: Situational Affordances

Our third issue centers on the notable lack of thought and empirical investigation into how character strengths manifest and are constrained within specific situational contexts. Previously, we outlined Peterson and Seligman's (2004) hierarchical model that categorizes virtues at the most abstract level, character strengths at a middle

level, and situational themes at the most specific level. While at least some research has been conducted on the link between character strengths and virtues—albeit with questionable methods and conclusions—the literature is largely silent on the relationship between character strengths and situational themes (Arbenz et al., 2022). This oversight is particularly troubling given that the understanding of such links could have significant implications for both the conceptualization and measurement of character strengths.

Two key pieces of evidence from the handbook by Peterson and Seligman (2004) point to the salience of situational factors in understanding and quantifying character strengths. The first piece of evidence comes from their discussion of the criterion that character strengths contribute to various forms of fulfillment: “It seems that fulfillments must reflect effort, the willful choice and pursuit over time of morally praiseworthy activities. This is why we chose our language carefully to say that character strengths ‘contribute’ to fulfillments rather than ‘cause’ them in the automatic way that Jägermeister causes intoxication. There are no shortcuts to fulfillment.” (Peterson & Seligman, 2004, p. 17). Thus, character strengths do not automatically engender fulfillment but do so only when coupled with other facilitating factors such as conviction or appropriate settings. They elaborate that “some settings and situations lend themselves to the development and/or display of strengths, whereas other settings and situations preclude them. Settings cannot be allowed to recede into the distant background when we focus on strengths” (Peterson & Seligman, 2004, p. 10).

The second piece of evidence relates to the ‘traitlike’ quality of character strengths, which refers to their consistency across various situations and stability over time. Here, Peterson and Seligman (2004) differentiate between *tonic* strengths, which are consistently displayed across various situations, and *phasic* strengths, whose manifestation is contingent upon specific contextual requirements. For instance, kindness is described as a tonic strength that is manifest across various situations, whereas bravery becomes apparent only under particular circumstances that necessitate such behavior. They exemplify this by noting that bravery “does not—indeed, cannot—show itself as one is standing in the checkout line of a grocery store. But if the store is being robbed, then a person can manifest varying degrees of valor” (Peterson & Seligman, 2004, p. 23).

The implications of distinguishing between tonic and phasic strengths for the accurate measurement of character strengths remain largely unexplored. Emerging preliminary research does suggest that certain strengths are situation-dependent while others are consistently expressed across various life contexts (Arbenz et al., 2022; Harzer & Ruch, 2013; Stuntz, 2019; Wagner & Gander, 2022). For example, Harzer and Ruch (2013) observed that some strengths, such as love, spirituality, or gratitude, are infrequently expressed in the workplace, whereas others like curiosity, integrity, and fairness are widely manifested in both professional and private settings. This nuanced differentiation between phasic and tonic strengths is conspicuously absent in most existing questionnaires, which often operate on the implicit assumption that all strengths are tonic in nature. This assumption, however, may be wrong, since for more phasic strengths like bravery, self-regulation, and citizenship, correlations between trait scores as measured by typical instruments and aggregated state measures seem to be substantially smaller than those in tonic strengths (Wagner

& Gander, 2022). In sum, while the effectiveness of our questionnaires may imply that a tonic component exists for all character strengths, the relationship between these tonic aspects and phasic counterparts largely remains an open question. And as such, it is unclear whether our measurement tools adequately measure what we conceptualized as character strengths—at least in the case of more phasic strengths.

What we believe is required is an expansion of research that explicitly considers the distinction between phasic and tonic strengths, emphasizing how the neglect of these differences can introduce errors in both measurement and predictive validity. Existing frameworks, such as the influential DIAMONDS taxonomy, offer a way to categorize situational affordances based on demands and characteristics, including factors like Adversity, Mating, and Sociality (Rauthmann et al., 2014). Table 4 provides a simple ad-hoc list illustrating which character strengths, previously identified as phasic, are likely to manifest in these specific situations. Subjecting these or similar hypotheses to empirical testing will ascertain the extent to which situational factors influence the expression of character strengths. Such research could guide future studies to cease neglecting situational impacts on character strengths expression and instead identify specific situations that allow for the expression of specific strengths.

2.4 Issue #4: Content Validity

Our fourth issue pertains to the increasing tendency to sacrifice content validity in scale construction, prioritizing metrics such as internal consistency and economy instead. An increasing number of researchers have noted the heterogeneity of some character strengths when encountering low Cronbach's alpha scores or failing to replicate the number and contents of strengths factors (Blümke et al., 2023; McGrath & Wallace, 2021; Ng et al., 2018). Additional evidence comes from Arbenz et al. (2022), who surveyed a sample of researchers to rate the conceptual breadth of each character strength as outlined in Peterson and Seligman's (2004) handbook.

Table 4 Simple ad-hoc list illustrating which character strengths, identified as phasic, are likely to manifest in specific situations, according to the Situational Eight DIAMONDS (Rauthmann et al., 2014)

Character strength	DIAMONDS
Creativity	Intellect
Love of learning	Intellect
Bravery	Adversity, Negativity
Love	Mating, Sociality
Citizenship	Duty, (Adversity, Sociality)
Fairness	Adversity, Deception, (Sociality)
Leadership	Duty, (Deception, Sociality)
Forgiveness and mercy	Negativity, Sociality
Self-regulation	Negativity
Appreciation of beauty and excellence	pOsitivity, (Intellect)
Gratitude	pOsitivity, (Sociality)

Note. The selection of phasic strengths in this table is informed by the analysis conducted by Arbenz et al. (2022), and includes only those strengths rated ≤ 6 on the emergence scale. Situational affordances enclosed in parentheses may be relevant to the expression of the character strength under certain conditions or at certain times

They found significant differences among character strengths, such as social intelligence, judgment, and love (broader), compared to vitality, forgiveness, and gratitude (narrower). Stahlmann and Arbenz (2023) corroborated these findings through psycho-lexical analysis, revealing that narrower strengths often have comprehensive lexical representation—words that encapsulate the entire concept—whereas broader strengths lack this comprehensiveness. For instance, the adjectives ‘vital,’ ‘zestful,’ and ‘vigorous’ comprehensively capture the consensual definition of the character strength vitality. Conversely, adjectives such as ‘empathetic,’ ‘sensitive,’ and ‘perceptive’ cover only the “emotion recognition” aspect of social intelligence, omitting its other components like “emotion understanding” and “emotion regulation” (see Table 1).

Although a growing consensus acknowledges these differences in breadth, how to handle them has been a subject of considerable debate. Some scholars have opted to narrow the definitions of broader character strengths (Blümke et al., 2023; McGrath & Wallace, 2021), whereas others advocate dividing them into multiple facets (Arbenz et al., 2022; Ng et al., 2018). Regrettably, neither approach has yielded an instrument capable of measuring character strengths as originally conceptualized by Peterson and Seligman (2004). Instruments like the VIA-IS-R and IPIP-VIA-R appear to have compromised content validity for the sake of internal consistency, a phenomenon known as the attenuation paradox (Blümke et al., 2023; McGrath & Wallace, 2021; see Arbenz et al., 2022). Similarly, although the CIVIC differentiates several facets, it falls short of capturing the more complex character strengths from which these facets were derived, arriving at a revised list of 29 character strengths (Ng et al., 2018).

Achieving a consensus on character strengths is challenging when different scale development practices result in varied interpretations. This variation raises concerns about the consistency of research findings, especially when constructs such as social intelligence might be defined differently across scales (see Leising et al., 2022). We believe that a strong theoretical basis is essential, rather than focusing solely on refining scales for statistical purposes. If there are valid grounds for breaking down broader character strengths into more specific elements, perhaps due to more distinct lexical meanings or findings from an act frequency methodology, such steps should be considered (see Ng et al., 2018; Stahlmann & Arbenz, 2023). However, these decisions should be guided by the need for theoretical clarity, not just the desire to improve statistical fit or reliability measures. Therefore, we suggest that future scale development efforts should ensure that they do not compromise content validity for the sake of reliability, brevity, or other forms of validity. It is important that these initiatives comprehensively represent the full conceptual scope of character strengths as outlined by Peterson and Seligman (2004). Alternatively, if there is a move to subdivide these strengths into more specific components, it should be backed by solid empirical evidence and a well-articulated rationale.

2.5 Issue #5: Criterion Validity

Our fifth concern addresses the related trend of relying solely on internal criteria, such as high main loadings and minimal cross-loadings, to validate structural models of character strengths, rather than incorporating external criteria. At its core, the

study of character strengths always aimed to identify individual differences that forecast positive outcomes, such as well-being, work achievement, and resilience (see Blyth et al., 2000; Clifton et al., 1999). Although we now have evidence that character strengths can indeed predict these outcomes, their predictive capacity is not flawless. The 24 character strengths outlined in the VIA classification represent just one lens through which to examine the intricate landscape of human strengths, and combining or reconfiguring these components could potentially lead to more accurate outcome predictions.

There seems to exist a misplaced emphasis on achieving “factor-pure” traits, often justified by the notion that such purity simplifies interpretation and enhances specific fit indices, like Cronbach’s alpha (see Blümke et al., 2023; McGrath & Wallace, 2021). This focus overlooks the utility of amalgamating multiple strengths to create more nuanced profiles. For instance, the combined effect of curiosity and hope—two of the five “happiness strengths” most closely linked with life satisfaction—might be a better predictor of life satisfaction than either strength in isolation (cf. Harzer, 2016; Niemiec, 2013; Ruch & Stahlmann, 2019; Weber, 2021). If that is the case, why should we not recognize the synergistic union of curiosity and hope as a “compound strength,” even if it defies factor purity (see Hopwood & Donnellan, 2010; Sellbom & Tellegen, 2019)?

Ultimately, no single character strengths model will serve as a panacea for predicting all positive outcomes. Comparable to the diversity found in five-factor personality models, character strengths models introduce specific, albeit arbitrary, axes in a common factor space, with varying predictive capacities for different outcomes (Revelle, 1983; Stahlmann & Ruch, 2023; Steiger, 1994). Some researchers, adopting a radical stance, have therefore opted to eschew latent variables entirely, choosing instead to tailor item combinations to the specific outcome being studied (Möttus et al., 2020; Revelle et al., 2021). This may involve selecting items that pertain exclusively to a single character strength, such as curiosity or hope, or amalgamating items from various character strengths to optimize prediction of a specific outcome. It is not our position to discard the use of latent variables altogether. However, we want to reemphasize that character strengths research initially aimed to identify predictors of positive life outcomes, so this goal should remain the foremost criterion for assessing their utility. As such, future research should reconsider the heavy focus on structural model fit and instead emphasize the importance of outcomes in assessing the relevance of character strengths, potentially leading to innovative structuring of strengths based on their correlation with significant life outcomes, like the components of PERMA or other fulfillment measures (see Wagner et al., 2020).

2.6 Issue #6: Fulfillment Conceptualizations

Our sixth issue centers on the narrow conceptualization of the “good life” and its associated positive outcomes, especially when these are employed as criteria for evaluating the importance of character strengths or their potential amalgamations. In the foundational Grand Cayman meeting, the principal focus was on identifying the diverse facets of what constitutes this good life, with character strengths taking on a secondary role as descriptors for individuals who have achieved such a life

(see Clifton et al., 1999). These facets included *subjective fulfillment* (e.g., subjective well-being; an individual's assessment of whether one's life is a good life), *objective fulfillment* (e.g., measures such as income, number of children), and *societal/civic fulfillment/recognition* (e.g., a positive assessment by one's friends and the general public; living a good life according to some theory, such as Aristotle's virtue ethics). Only after delineating these "fulfillments" did the attendees articulate 17 "characteristics" that are emblematic of individuals who attain them, which later evolved into the 24 character strengths of the VIA classification (see Blyth et al., 2000; Ruch & Stahlmann, 2019).

Unfortunately, the initial expansive understanding of the good life has been narrowed down to focus mainly on what would have been categorized as subjective fulfillments. This asymmetry—between a comprehensive set of character strengths and a limited array of validation measures—poses challenges for certain strengths to demonstrate their utility. For instance, humility/modesty and prudence frequently show weak or even zero correlations with life satisfaction, which has led some researchers to question their conceptual fit within the VIA framework (see Harzer, 2016; Niemiec, 2013; Park et al., 2004; Ruch & Stahlmann, 2019). These findings eclipse other evidence, at times external to the VIA classification, suggesting that these character strengths do predict a range of meaningful outcomes beyond mere life satisfaction. For instance, humility/modesty and prudence rank highly among strengths associated with environmental self-efficacy—people's confidence in their ability to contribute to climate change mitigation (Moeller & Stahlmann, 2019). Additionally, leaders and team members who demonstrate humility create more positive and effective work environments, and prudence in young people is linked to more responsible sexual behavior and drug abstinence (Ma et al., 2008; Nielsen & Marrone, 2018). The potential impact of humility within groups, and how it might contrast with arrogance, its presumed opposite, remains an area ripe for exploration (Peterson, 2006).

A renewed endeavor is needed to comprehensively map the constituents of a fulfilling life. This requires not only incorporating existing research but also commissioning new studies to further substantiate the positive impact of under-studied character strengths, such as humility/modesty and prudence. Some strides have been made in connecting character strengths to more comprehensive frameworks like the PERMA model, psychological well-being, and a recently coined concept known as "fulfillment," defined as "a cognitive-affective experience denoting a sense of wholeness, fit, and value towards the self, one's life, and one's impact" (see Baumann & Ruch, 2022, p. 2; Hausler et al., 2017; Wagner et al., 2020). However, the original vision at the Grand Cayman meeting extended well beyond these primarily self-reported metrics, also including indicators of the abovementioned objective or societal/civic fulfillment, such as familial relationships, political engagement, or societal recognition based on widely accepted norms of a good life. Gander et al. (2023) provide a compelling example of research extending beyond subjective well-being by examining individuals recognized with public awards for their notable actions, like the Carnegie Rescuers Award. This study found that these moral exemplars displayed higher levels of character strengths like perseverance, honesty, and bravery compared to peers, linking recognized actions directly to associated character strengths. The scope of this commentary does not permit a comprehensive development and validation of a

catalog detailing multiple types of fulfillments. Nonetheless, and until disproven, we maintain that all character strengths hold inherent value, even those lacking extensive empirical support. We therefore call on future researchers to expand their focus beyond predicting subjective fulfillment only (e.g., self-reported life satisfaction), but instead predict different types of fulfillment (e.g., societal/civic recognition).

2.7 Issue #7: Adverse Outcome Modeling

Our seventh issue confronts the growing body of research suggesting that “too much of a good thing” can lead to adverse outcomes when character strengths are overly expressed. As mentioned in the introduction, Christopher Peterson did not view the VIA classification as a final product but envisioned it maturing into a true taxonomy of character strengths. He believed that this taxonomy—potentially couched in evolutionary terms—would not only explain why certain strengths, rather than others, have emerged as attributes of individuals leading fulfilling lives, but also double as a comprehensive theory of mental health and disorder (Peterson, 2006; Seligman, 2015). Christopher Peterson’s proposed taxonomy, dubbed “The Real DSM,” postulates that disorders might best be understood as distorted or exaggerated forms of character strengths. For example, he outlined disorders related to such forms of the character strength curiosity in the following manner:

- Boredom is described as the opposite of curiosity, which has later been explicitly linked to anxiety and depression in research (see Eastwood et al., 2012; Goldberg et al., 2011). Bored individuals are supposedly more susceptible to mental health issues specifically because they lack the cognitive engagement and emotional stimulation that curiosity affords.
- Disinterest is described as the absence of curiosity as it restricts one’s understanding of the world and personal growth within it. As such disinterest has later been proven to lead to stagnation in educational or professional settings, it should also be associated with limitations in cognitive and emotional development, which may contribute to disorders like depression (see Kashdan, 2009; Silvia, 2006).
- Nosiness is described as an exaggerated form of curiosity which interferes with the privacy and well-being of others, such as through voyeuristic behavior. Such an obsessive focus was later hypothesized to also contribute to disorders as it monopolizes time and mental resources, leading to neglect of other essential life activities (see Kafka, 2010; Rinehart & McCabe, 1998).

This conceptual foundation has led scholars to develop the “Overuse/Underuse/Optimal Use inventory of strengths (OUOU),” expressly to measure and validate such hypothesized associations between the absence and excess of character strengths and adverse outcomes (Freidlin et al., 2017; Littman-Ovadia & Freidlin, 2020, 2023; Niemiec, 2019). And while the inventory does not encompass a measure for the opposite of strengths, it has revealed significant correlations between the “overuse” (excess) and “underuse” (absence) of certain strengths and psychopathological symptoms. Specifically, the inventory demonstrated that the “overuse” of strengths such as social intelligence, open-mindedness, and appreciation of beauty and excellence correlated

with the severity of obsessive-compulsive disorder symptoms (Littman-Ovadia & Freidlin, 2020). Conversely, the “underuse” of strengths like vitality, humor, and self-regulation was associated with heightened levels of social anxiety (Freidlin et al., 2017).

Yet, at least two fundamental issues emerge from both this conceptualization and the resulting OUOU inventory of strengths. First, the OUOU model situates “underuse,” optimal use, and “overuse” on a single continuum, an approach rooted in Aristotelian philosophy which posits the golden mean between two extremes as the ideal (see Niemiec, 2014; Niemiec, 2019). This is termed a *prothetic* continuum (Stevens, 1957; Stevens & Galanter, 1957), likened to adding spices to a dish: the right amount enhances, while excess spoils. However, modern research in personality psychology challenges this simplistic model. For instance, contemporary studies reveal that seriousness and cheerfulness, which would correspond to supposed “underuse” and “optimal use” in the OUOU model, are largely independent constructs (Lau et al., 2022; Ruch & Köhler, 1998). This suggests that cheerfulness can co-exist with seriousness in varying degrees, and a person could also be neither cheerful nor serious, but rather melancholic. Additionally, a highly humorous disposition, or “overuse” in the OUOU model, does not automatically equate to foolishness. Humor manifests in numerous forms, ranging from wit and corrective satire to cynicism and sarcasm (e.g., Beermann & Ruch, 2009; Craik et al., 1996; Ruch et al., 2018). Some individuals might indeed display a form of humor that aligns with light-hearted nonsense, fitting the image of the rambling buffoon, but most do not. Thus, the various forms of humor, and likely other character strengths, cannot be adequately represented on a single continuum.

The second issue is that capturing the absence of a psychological construct in an item poses a significant issue, as doing so typically involves the implicit or explicit invocation of alternative constructs. In simpler terms, one cannot indicate that an individual lacks a specific trait without also highlighting what traits the individual does exhibit. This complexity is evident, for example, in research on the prototypicality of adjectives related to the Big Five personality traits (Angleitner et al., 1990; Goldberg, 1982; Norman, 1967). Such studies reveal that adjectives scoring low on one trait, such as agreeableness, invariably score higher on another trait, such as conscientiousness. Adjectives not significantly associated with any of the five traits are either irrelevant or entirely absent from the taxonomy of personality descriptors. In relation to Christopher Peterson’s model, this suggests that the absence of a character strength inherently signals the presence of a different trait, aligning it more closely with a so-called *methathetic* continuum, in which variations are “too different,” rather than simply “too much” or “too little,” to be categorized along a single continuum (Stevens, 1957; Stevens & Galanter, 1957).

These two issues become clear upon examining the items within the OUOU inventory of strengths. Consider the “underuse” item for open-mindedness, which states, “I make decisions quickly; the first thought that comes to mind is the correct path to take.” Although this item is intended to capture a deficit in the relevant character strength, its phrasing noticeably resembles items used to measure deliberation—a facet representing the negative pole of conscientiousness—such as those found in John Johnson’s (2014) IPIP-NEO. This conflation blurs the distinction between the

inherently positive character strength and less desirable traits. Even without semantic overlap, respondents may employ alternative traits as an implicit frame of reference to contextualize their responses (see Hofstee & ten Berge, 2004; Saucier & Goldberg, 1996). A related issue can be observed in items that purport to measure the “overuse” of character strengths. Take, for example, the item for open-mindedness: “I critically examine the finest details in making a decision and appear judgmental or indecisive.” Such items erroneously expand the boundaries of the character strength in question, in conflict with its theoretical underpinnings, which emphasize non-judgmental and unbiased reasoning. Indeed, and contrary to the implications of such items, the foundational handbook does not entertain the likelihood of analytical immersion leading to decisional stasis, but rather precludes it (Peterson & Seligman, 2004). Similar to the “underuse” items, these “overuse” items seem to integrate maladaptive traits into the foundational character strengths, thereby transforming them into caricatures of their original selves (see Ng & Tay, 2020; Wiese et al., 2018). It is presumably this amalgam or profile of traits that likely accounts for the negative outcomes and psychopathological symptoms observed in empirical studies, rather than the character strength per se.

An illustrative example for such a profile comes from the literature on “class clowns,” in which approximately 75% of students labeled as such—either by themselves or their peers—score highly in the character strength of humor (Ruch et al., 2014; Platt et al., 2016). This demographic, however, is nuanced, and can be further subdivided into “comic talents,” “disruptive rule-breakers,” and “subversive jokers” (Ruch et al., 2014). Comic talents uniquely possess additional character strengths such as perspective, social intelligence, and leadership—attributes notably lacking in subversive jokers and especially disruptive rule-breakers. Furthermore, the character strength of humor is more salient in comic talents relative to the other categories. Though bound by a common label fraught with negative connotations, adverse outcomes like subpar grades or tarnished reputation manifest predominantly when the character strength of humor is unaccompanied by other balancing strengths (Platt et al., 2016). Consequently, it would be misleading to assert that class clowns have “too much humor.” Instead, those who encounter negative consequences often lack complementary character strengths and, intriguingly, even register lower scores in humor compared to their counterparts who do not experience such outcomes.

Finally, issues arise from the design of the OUOU inventory of strengths itself. The inventory employs merely one item for each variant of a character strength, totaling three items per individual strength. However, given that deviations from the proper character strength could be numerous, if not infinite, a more robust range of profiles is needed. Moreover, the inventory prompts respondents to allocate, out of 100%, the extent to which they “underuse,” “optimally use,” or “overuse” each character strength. This allocation format inherently restricts each character strength to only two degrees of freedom, as the third option is automatically determined by the remaining percentage summing to 100 (see Wagner & Ruch, 2022). If the three response options were truly independent, one might expect “optimal use” to correlate positively with corresponding strengths measured by the VIA Inventory of Strengths (VIA-IS), and “underuse” to show a negative correlation. However, the inclusion of an “overuse” category—and to some extent “underuse”—that taps into different

qualities diminishes the extent to which these measures can be empirically expected to align. While the impact of this constraint on correlations and statistical testing remains indeterminate, it suggests that the effect sizes derived are not directly comparable to those from traditional self-report surveys or psychological assessments. This idiosyncrasy complicates the interpretation of findings based on the OUOU inventory of strengths and obstructs a precise evaluation of their true relevance.

In light of these considerations, we recommend a shift in perspective. Although Christopher Peterson initially proposed organizing character strengths along a unidimensional, prothetic continuum, subsequent reflections and scholarly discussions suggest that this approach may not be suitable (Ng & Tay, 2020; Wiese et al., 2018). Instead, it appears more appropriate to employ what has been called a *metathetic* continuum, in which specific problems, including psychopathological symptoms, may be attributed to imbalanced or maladaptive character strengths profiles. (see Stevens, 1957; Stevens & Galanter, 1957). While we acknowledge the seminal contributions made by scholars in advancing this new area of research, the OUOU inventory of strengths may require substantial revisions, if it is to be retained in scholarly discourse at all. In most instances, a conventional VIA assessment instrument should be more than adequate for examining the adverse outcomes associated with character strengths. However, the methodological approach should extend beyond simple bivariate relationships. We advocate for more nuanced statistical techniques, such as multiple regression or cluster analysis, exemplified in the research on class clowns, to identify which specific combinations of character strengths contribute to adverse outcomes. Through such refined methodologies, we hope that future research will abandon the overly simplistic “opposite-to-excess” continuum in favor of a more nuanced understanding of distinct character strengths profiles and their associations with adverse outcomes.

2.8 Issue #8: Moral Excellency

Our eighth issue questions the reductionist trait perspective on character strengths, proposing instead that they may be more appropriately conceptualized as abilities. Character strengths are conceived as moral qualities, and there is often societal consensus on what constitutes morally correct behavior in specific contexts (see Baumeister, 2005; Greene, 2014; Haidt, 2012). Therefore, individuals scoring high in a relevant character strength should be more likely to act morally in a given situation, while those scoring low should be less likely. This conceptualization aligns closely with the logic of intelligence testing, where the goal is to solve items correctly. The final intelligence score is subsequently computed based on the number (and sometimes the speed) of items answered correctly. By the same token, should not character strengths also be assessed based on the likelihood of performing actions that align with moral consensus, instead of using self-report measures?

In the literature, there is a compelling debate relevant to this question regarding the nature of emotional intelligence, a construct that is related to the VIA classification through its dimension of social intelligence (see Table 1). The question centers on whether emotional intelligence should be considered a trait or an ability (for overviews, see Mayer et al., 2016; Petrides et al., 2016). Although both perspec-

tives remain robustly defended, several important insights are gradually emerging from this discourse. First, trait-based and ability-based emotional intelligence exhibit low correlations, suggesting they tap into distinct facets of personality (Brackett & Mayer, 2003; O'Connor et al., 2019). Trait emotional intelligence aligns more closely with general behavioral tendencies and overlaps significantly with other self-reported personality constructs, such as the Big Five and measures of self-efficacy and well-being (Furnham & Petrides, 2003; Petrides et al., 2007). In contrast, ability emotional intelligence is more strongly correlated with concrete emotional and social competencies, like those required in managerial or negotiation settings (Caruso & Salovey, 2004; Lopes et al., 2003). Notably, only ability emotional intelligence demonstrates a significant correlation with general intelligence (MacCann et al., 2014; Webb et al., 2013).

Due to the current focus on self-report measures for assessing character strengths, the nuanced correlations associated with ability-based emotional intelligence may go unexamined. This absence of data suggests that equally significant correlations could be missed for other character strengths as well. While we do not advocate for the wholesale abandonment of self-report measures, we contend that there is value in exploring ability-based assessments for character strengths. This argument finds support in the comprehensive body of literature on emotional intelligence. In addition to revealing previously overlooked but important outcomes, ability-based assessments offer several other advantages. Specifically, these assessments could provide more accurate insights into individuals who manifest character strengths to an exceptional degree—referred to in the literature as paragons. Current broad-spectrum measures may not capture the subtle differences that separate those who perceive themselves as moral paragons from those who genuinely embody these qualities. Furthermore, ability-based tests could prove invaluable in high-stakes scenarios where respondents might be incentivized to bias their answers (Tett et al., 2012; Ziegler et al., 2011). Therefore, we propose that efforts invested in the development of ability-based assessments for emotional intelligence should be replicated for at least one character strength, to evaluate the potential benefits of such an approach. Given the arguments presented, we posit that this endeavor is meritorious. Consequently, we recommend shifting the paradigm from viewing character strengths solely as personality traits or temperaments to considering them as capabilities that enable exceptional behavior in critical situations.

2.9 Issue #9: Strengths Conservatism

Our ninth issue challenges the prevailing assumption that the list of 24 character strengths is both comprehensive and universally applicable across cultures. As highlighted in the introduction, the VIA classification was never conceived as a static or finished product. Originating as 17 “characteristics,” it underwent a series of refinements, first evolving into 21 “strengths and virtues” before being presented as the current 24 character strengths in the 2004 handbook (Blyth et al., 2000; Clifton et al., 1999). Given the list’s past evolution, why should we not continue to inquire whether it could develop further?

While the efforts to discover new character strengths are limited, some studies have made promising strides in this domain. For instance, Ng et al. (2018) utilized an act-frequency approach to revise items for the 24 existing character strengths within the VIA classification. Their work suggested that several strengths could be decomposed into multiple lower-order constructs. Specifically, social intelligence was broken down into ‘social perceptiveness,’ ‘propriety,’ and ‘emotional self-awareness,’ resulting in an instrument that eventually measured 29 distinguishable traits. Apart from the VIA framework, psycho-lexical investigations into character and virtues have produced lists of attributes that are not clearly represented in the current VIA classification (see, for example, Cawley et al., 2000; de Raad & van Oudenhoven, 2011; Morales-Vives et al., 2014). Semantic analyses reveal, for instance, that the word list by Cawley et al. (2000) includes terms like ‘magnificent,’ ‘ascetic,’ and ‘idealistic,’ whereas the list by de Raad and van Oudenhoven (2011) incorporates words such as ‘civilized,’ ‘decisive,’ and ‘punctual,’ none of which fall completely within the content domains of the current 24 character strengths (Stahlmann & Arbenz, 2023). Thus, it remains an open question—but a plausible one—whether these terms signal valid character strengths that have yet to be incorporated into the VIA classification.

While these studies offer valuable insights, they are somewhat circumscribed in their scope, often limiting their analyses to character strengths in one or two languages and predominantly within a Western cultural context (Henrich et al., 2010; Thalmayer et al., 2021). The 24 character strengths in the VIA classification have gained empirical support across diverse cultural contexts, including indigenous communities in Northern Greenland, the Maasai in Western Kenya, African traditional religions, and oral traditions in the South Pacific (Biswas-Diener, 2006; Millar, 2008; Selvam & Collicutt, 2013). Despite this wide-ranging validation, it is important to consider that individual communities may have unique or highly contextualized character strengths not yet accounted for in the VIA classification. Philipp Stone’s metaphor of character strengths as a ‘deck of cards,’ introduced at the foundational Glasbern meeting, offers a nuanced way to understand their cultural variability (see Blyth et al., 2000). In his analogy, different subsets of ‘cards,’ representing various character strengths, are allocated to distinct cultural groups, from which individuals then ‘draw their hands.’ This perspective implies that although some character strengths may be universally recognized—akin to frequently occurring cards in a deck—others could be unique to specific cultural contexts. To achieve a full ‘deck,’ one must consider this rich tapestry of culturally specific ‘cards,’ thereby enabling the identification of combinations that contribute to a fulfilling life. Each such ‘winning hand’ could be seen as a theoretical framework for well-being, shaped by both cultural and individual factors. Therefore, a comprehensive understanding of character strengths requires a global and culturally sensitive approach (Lomas, 2015; Lomas et al., 2021).

Determining the true number of character strengths hinges critically on the evaluation of criteria discussed in Issue #1. These criteria are not mere guidelines; they are the backbone of understanding what character strengths are. They have played a pivotal role in the initial identification and assessment of character strengths, embodying a range of assumptions and goals that require more in-depth exploration and debate. Addressing and refining these criteria is thus a foundational step. It is only with a

robust and empirically validated set of criteria that we can determine whether our list of character strengths is comprehensive. Without this critical framework, any assumption that we have identified all key character strengths remains speculative. Therefore, we believe that a priority should be placed on establishing a clear and validated criteria set, which will then pave the way for a more thorough and culturally diverse exploration of potential character strengths.

2.10 Issue #10: Methodological Mainstream Thinking

Our final issue emphasizes the lack of methodologies specifically designed for testing the distinct models and hypotheses presented in the study of character strengths, rather than the common approach of adopting or importing ill-fitting methods from other disciplines. A century ago, personality and character research was marked by diversity in its methodological approaches (e.g., McAdams, 1997; Revelle et al., 2011). During this era, there were no pre-established methods to define the trait landscape, prompting researchers to innovate and develop their own approaches. This period was a golden age for pioneers like Charles Spearman, who introduced the use of correlation and factor analysis in psychology, or Gordon Allport, who institutionalized the lexical approach to personality. These methodologies were particularly impactful as they were born directly out of specific research inquiries; they were, in essence, bespoke solutions meticulously crafted to address the questions they intended to solve.

Over time, however, a standardized toolbox for creating personality models, designing instruments, and validating them has emerged. Contemporary practice often involves borrowing or importing methods from other disciplines, which may not always be ideally suited to our specific needs. A pertinent example is the lack of methods to effectively explore formative models, such as those involving character strengths and virtues (see subsection on “Issue #2: Virtue functions” for a detailed discussion). This shortfall in suitable methodologies and an overarching innovation deficit may indeed be central to the critiques faced by positive psychology, particularly in the realm of character strengths research. The existing toolbox used by psychologists, with its limitations, fails to operationalize the wealth of ideas and creative potential in this field. Given this mismatch between theoretical models and the tools available for empirical investigation, it is not surprising that these models often do not find adequate representation in empirical data, leading to questions about their overall validity.

Similar to the straw man critique of positive psychology, a recognizable sequence of developments is evident upon reviewing contemporary literature (for a description of such and related trends, see Nosek et al., 2012; Wagenmakers et al., 2012). Initially, an innovative method from a different discipline, like network analysis in recent years, gains popularity (for an introduction to network analysis, see Borsboom & Cramer, 2013; Hevey, 2018). Ambitious researchers then apply this new method to existing data, often with tenuous justification for new perspectives on old evidence or under the guise of replication efforts. Subsequently, massive participant cohorts are enlisted, and their data are processed using high-power computing to estimate model parameters. The outcomes of such efforts typically either reaffirm already estab-

lished findings or, less favorably, add to the confusion due to unclear implications of divergent results (Asendorpf, 2012; Neal et al., 2022). This cycle has occurred twice already in character strengths research, ultimately revealing that network models predominantly replicate existing patterns between strengths and outcomes, such as with life satisfaction (see Blasco-Bellend, 2023; Diez et al., 2023). The regrettable upshot is a sense that substantial resources and effort have been expended on endeavors that were neither necessary nor grounded in prevailing theories, symptomatic of a broader trend in psychology where flashy methodologies are favored over solid, theoretical reasoning.

It is important to reemphasize that we do not advocate for the complete abandonment of classical methods, which have their merit. For example, factor analysis has been instrumental in revealing the structure of questionnaires and contributing to key psychological frameworks, such as the Big Five personality traits and the hierarchical model of intelligence (Goldberg, 1993; Mackintosh, 2011; Saucier & Goldberg, 1996). Yet, we advise against their indiscriminate use, reminiscent of the metaphorical person who views every problem as a nail due to holding a hammer. We encourage researchers to explore innovative methods that are more directly aligned with their specific research questions. Such innovative methods could include novel research designs, like engaging laypersons to describe their most exemplary displays of character strengths and evaluating how these align with broader virtues (Giuliani et al., 2020; Ruch et al., 2020b). Additionally, researchers might consider statistical techniques that better accommodate the reflective-formative nature of character strengths, such as Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM fits composite models to data by maximizing explained variance, rather than relying on covariance structures like traditional factor analysis (Hair Jr, et al., 2016). This characteristic makes PLS-SEM an interesting alternative to factor analysis, as it allows for a nuanced exploration of how individual strengths contribute to broader virtues, aligning with the formative nature of these constructs.

In an era abundant with exciting big data, the potential to capitalize on vast datasets for uncovering novel patterns is immense. However, we believe it is important not to forget the value of the hypothetico-deductive method, as highlighted by Hans Eysenck (Eysenck, 1950, 1967). This approach begins with the formulation of clear theoretical propositions. From these theories, specific hypotheses are derived and then rigorously tested using carefully chosen research designs and methods. This process ensures that the empirical investigation is directly driven by, and aligned with, the theoretical framework, facilitating evaluations that are both rigorous and objectively verifiable. In this framework, creativity in methodological applications should be viewed as an asset, one that should be encouraged and cultivated to potentially replicate the remarkable methodological innovations seen in the early 20th century. As such, we argue that future research in character strengths should move away from the reliance on standard methods or such that were borrowed from different disciplines. Instead, it should embrace sophisticated methods that are specifically tailored to the unique properties and nuances of character strengths theories and models.

3 Discussion

In this analytical commentary, we have identified and thoroughly examined ten issues that we believe perpetuate existing skepticism and hinder progress in character strengths research. For each issue, we critically assessed the current paradigms and methodologies (the ‘don’ts’) and offered constructive alternatives for future research and application (the ‘dos’), ensuring alignment with the foundational principles of the field. Each ‘do’ and ‘don’t’ presented here is rich enough to be the subject of its own in-depth article, replete with historical context and practical implications. Yet, recognizing the value of a more holistic approach, we chose to consolidate these discussions into one paper. This decision was made to offer a comprehensive, cohesive overview, with the hope that the content is accessible to a diverse readership, regardless of their specific academic or professional backgrounds.

3.1 Addressing Criticisms and Advancing the Field

We fully recognize the value of critique and understand that the VIA classification and character strengths research are not immune to scrutiny. However, we hold that such critiques ought to be leveled in a manner that fairly assesses the work based on its intrinsic merits, rather than by setting up a straw man destined for failure. We refute the claim that research in positive psychology and character strengths lacks scientific integrity. When it was first introduced, the handbook marked a breakthrough in terms of methodology and scientific thoroughness, mirroring the cutting-edge state of personality psychology at the time. Additionally, the VIA classification was always meant to be a fluid framework, amenable to growth and refinement, such as the addition or removal of character strengths, reorganizing them under core virtues, and a more systematic evaluation against established criteria (Peterson & Seligman, 2004). Unfortunately, Christopher Peterson’s untimely demise in 2012 curtailed these ambitions. Since then, the field has evolved swiftly, causing the VIA classification to become progressively more dated as its foundational issues went unaddressed. Hence, we do acknowledge that character strengths research, in its present form, lacks thorough theoretical grounding. It falls upon us to enrich this research with the required evidence, thereby making certain that Christopher Peterson’s legacy either catches up with the scholarly trends or, if such evidence proves unattainable, to respectfully conclude its pursuit.

In their comprehensive systematic review, van Zyl et al. (2024) synthesized the array of critiques aimed at positive psychology, identifying six key thematic concerns: (a) insufficient theorizing and conceptual development, (b) issues with measurement and methodologies, (c) perceptions of pseudoscience due to a lack of evidence and difficulties in replication, (d) a perceived lack of novelty and isolation from mainstream psychology, (e) criticism of being a decontextualized neoliberal ideology that potentially causes harm, and (f) accusations of being driven by capitalist motives. While the ten ‘dos and don’ts’ we propose primarily address the first two themes, their application has the potential to resonate across all six areas of concern. By strengthening the theoretical underpinnings and improving research methodologies, we can enhance the scientific legitimacy of positive psychology, countering claims of

pseudoscience and concerns about evidence and replication. This approach also fosters innovation and integration with mainstream psychology, dispelling the notion of the field as insular or lacking in novelty. Additionally, by adopting rigorous and culture-sensitive research practices, we can demonstrate that positive psychology is not merely a product of neoliberal or capitalist agendas but a field committed to nuanced and rigorous psychological inquiry. In essence, by methodically resolving the core issues outlined in our ‘dos and don’ts,’ we can address part of the broader spectrum of critiques, reinforcing the value and relevance of character strengths and positive psychology in contemporary scientific discourse. Although addressing these core issues might not completely resolve all critiques, it is an important step towards establishing a solid foundation for constructive discourse. This foundation will enable a more effective engagement with critiques, compared to the current state where theoretical weaknesses often blur the lines between valid and unwarranted criticisms.

3.2 Implications for Positive-Psychology Interventions

Finally, while we emphasize the need for rapid and comprehensive attention to the theoretical issues in character strengths research, it is important to clarify that we do not advocate halting all related programs, such as interventions based on character strengths. The effectiveness of these programs, as demonstrated by various systematic reviews and meta-analyses, is largely proven (e.g., Boe, 2016; Lavy, 2020; Miglianico et al., 2020). The critical unanswered question, however, is why these interventions are effective (see Quinlan et al., 2011; Ruch et al., 2020b). This is where our ‘dos and don’ts’ become relevant, such as “Issue #1: Criteria evaluation”.

At first glance, the criteria for character strengths might seem self-evident. For example, it is not difficult to identify notable individuals who have demonstrated these strengths to an exceptional degree, like Nelson Mandela (perseverance), Malala Yousafzai (courage), or Jane Goodall (love of learning). Yet, a more profound and nuanced comprehension arises when we delve into why certain individuals embody these character strengths so distinctly, or how their actions manage to motivate and influence people around the world—questions that have been, so far, unanswered. A thorough exploration of the criteria not only helps in delineating character but also in framing questions that facilitate our understanding of it. Grasping the factors that enable individuals to embody character strengths or to become paragons of such virtues allows us to potentially create guidelines for nurturing these qualities through targeted interventions or systematic methods. This understanding could prove exceedingly valuable for both individuals and broader societies, offering deep insights that transcend the basic interpretation of character strength criteria.

The criteria represent just one of many areas ripe for inspiring future intervention efforts. Equally valuable insights could emerge from exploring “Issue #3: Situational Affordances,” particularly in identifying factors that facilitate rising to challenges, or from “Issue #8: Moral Excellency,” which emphasizes evaluating interventions based on actual behavior rather than solely relying on questionnaire-based measures. We firmly believe that a solid theoretical foundation can be a source of innovative and effective intervention programs in the future, provided that we are willing to delve deep into this well of knowledge and harness its resources. The interplay between

theory and practice is intricate, and the full potential of character strengths may yet be untapped. Our aim is to encourage future researchers to not only pursue positive outcomes and interventions but to also engage deeply with these theoretical questions, since it is presumably within this theoretical exploration that true innovation and advancement lie.

4 Conclusion

A notable disconnect exists between practitioners and researchers in their perceptions of character strengths, a situation we attribute primarily to the tendency of character strengths research to overly focus on positive outcomes while neglecting its theoretical foundations. This approach effectively inverts the natural research progression, akin to “putting the cart before the horse.” Our compilation of ten ‘dos and don’ts’ outlines actionable steps for bridging this gap, aiming to restore and maintain the stature and relevance of character strengths research within the broader psychological field.

To achieve this, a dedicated and rigorous effort is necessary, one that moves character strengths research away from its—at times—sacred status and towards being a subject of tough but fair scrutiny. While this process may be demanding, if the concept of character strengths is as robust as it promises to be, the field stands to gain significantly in terms of reputation and new insights into character development. Our hope is that researchers globally will respond to our call to action and contribute to resolving these ten issues—or raising further ones—ultimately elevating the science of character strengths to a higher standard.

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Declarations

Competing Interests Willibald Ruch is a Senior Scientist at the VIA Institute on Character, which owns the copyright to the VIA Inventory of Strengths. However, he does not receive any compensation in his capacity as a member of the institute.

Ethics Approval Ethical approval was not required for this work, as it is a commentary on existing literature.

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