

LETTER TO THE EDITOR

Response to Impact of Students' Strengths, Critical Thinking Skills and Disposition on Academic Success in the First Year of a PharmD Program

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The recent article by Comer and colleagues¹ portrayed a performance-based model in an effort to address the challenge of pharmacy schools in identifying students capable of successfully completing the rigor of a PharmD program. The model explores the affective domain for broadening candidate diversity to identify candidates who will have "success in a PharmD program and as a future health care professional." Their model involves three assessments for finding such candidates: critical thinking skills, critical thinking disposition and personal strengths. Critical thinking skills were assessed with the Health Sciences Reasoning Test (HSRT); critical thinking disposition was assessed using the California Critical Thinking Disposition Inventory (CCTDI); and personal strengths were assessed using Clifton StrengthsFinder 2.0² (CSF 2.0) Signature Themes. As much as we are in alignment with Comer and colleagues to develop a model for identifying strong candidates and to enhance diversity and broaden inclusion for college of pharmacy admissions, we see the application of strengths Signature Themes vastly different. This difference along with a great sense of general curiosity compelled us to write this letter.

Having a model to facilitate candidate selection could make the admissions process more effective and potentially reduce inherent and unconscious bias. When selecting candidates, it is only natural to create categories and distinctions while laboring through the objective and subjective application data; a model to facilitate this process would serve college admissions well. However, which type of data to include in such a model used to include or exclude pharmacy school admissions candidates must ensure equity with no bias. This is the crux of our concern over including personal strengths in the model designed by Comer and colleagues. Just because data is objective and measurable does not make it valid for use in a high-stakes selection model. Comer and colleagues created a system to associate some strengths with success and others with lack of success in the first year of pharmacy school. This is

concerning and not all personal objective data should be used to discriminate for likelihood of success. For example, natural eye and hair pigmentation, personal objective data, would never be used to project for likelihood of success. Among the numerous reasons why this is the case is the inherently fixed nature of those personal qualities. Personal strengths identified by CSF 2.0 is one such objective data unit. Personal strengths do not tend to change over time²; there is a fixed nature about strengths attributes.

The authors concluded the strengths *consistency*, *achiever*, and *learner* are associated with the highest level of performance in the first professional year of a PharmD program. Conversely, they identified *ideation*, *command*, *woo* or *self-assurance* to be associated with a lack of success in the P1 year. CSF 2.0 objectively facilitates finding students' naturally occurring talents and top strengths. Personal strengths are trait-like "raw materials" that are the products of normal healthy development and successful experiences over childhood and adolescence,² just as age, ethnicity, eye or hair color, are among individual fixed qualities. Comer and colleagues discuss this fixed nature in their limitations and emphasize the limitation due to "movement of strengths in and out of the top 5 over time." Strengths may change in rank, but the strength remains, regardless of ranking, as part of the individual's strength fingerprint. When we attempt to categorize human strengths as a predictor for success or high performance, we risk inaccurate distinctions between people. We academicians must be thoughtful about which attributes we use to inform our selection process as we intentionally select on the basis of who is likely to succeed and to enhance diversity in the pharmacy. The Clifton StrengthsFinder (CSF) 2.0 Technical Report states "CSF is not designed or validated for use in employee selection."² Academic admissions selection or selection for any inclusion- or exclusion-based decision should be no exception.

Comer and colleagues later inform their readers that the StrengthsFinder 2.0 assessment should not be used as a primary admission criteria until there is more data available. We declare that using CSF 2.0 in primary admissions should be strongly discouraged. Using personal strengths as a singular element or within a group of

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elements regardless of validation data quantity or quality in order to include or exclude based on likelihood of performance or to distinguish an individual's potential for developing strengths should be strongly discouraged. This is because *every* strength is vital to the pharmacy profession and has equal potential for the highest possible success, particularly when developed and nurtured.² Clifton "believed that talents could be operationalized, studied, and capitalized on in work and academic settings. The strength construct combines talents with associated knowledge and skills, which becomes the ability to consistently provide near-perfect performance in a specific task."² We suggest use of strengths for nurturing and further developing pharmacy students' strengths to increase first time board pass rates and professional success. We do not align with application for strengths in pharmacy admissions selection process. StrengthsFinder should not be used as admissions criteria.

The two references used by Comer and colleagues to support use of strengths *within* pharmacy curriculum for strength building, not for determining who will be likely to succeed any level of their education. StrengthsFinder data in these references never proposed application for including or excluding candidates from the profession of pharmacy. Comer and colleagues state, "At one pharmacy school. . . results are incorporated into the curriculum to help students build upon strengths and identify career options best suited to these strengths." The second reference by Janke and colleagues used CSF 2.0 to help student pharmacists consider specific career opportunities and professional responsibilities that possibly align well with their individual Signature Theme strengths.³ We commend and align with Comer and colleagues in their assertion that "success in a PharmD program and as a future health care professional cannot be determined by just examining PCAT scores and GPAs."¹ We would like to see a process that triangulates critical thinking, and critical disposition along with other criteria that that can be brought into being or brought to states that are more satisfactory. We would like to preserve the use of StrengthsFinder signature strengths for building on the natural potential that is existent in all strengths.

As reported by Comer and colleagues, the HSRT and CCTDI both have been used to predict performance in didactic and experiential learning. CCTDI is highly correlated with PCAT and GPA and critical thinking skills are moderately correlated with PCAT scores. Additional quality existent in HSRT and CCTDI is they both measure skills that are not fixed; the skills they measure are malleable, if a skill is lacking, and modifiable with relevant reinforcement. What are the possibilities for using the model presented by Comer and colleagues in the quest

to identify diamonds in the rough; students who lack luster in PCAT scores and GPAs, but shine with personal and interpersonal qualities? We would like to recommend the authors consider using Emotional Intelligence (EI) along with critical thinking and critical disposition. EI assessment outcomes offer specific feedback about the other kind of smart and supports prediction of success professionally and personally based on competency of interpersonal skills, ability to adapt and self-awareness.^{4,5}

The appeal of EI within the admissions process lies in the evidence that supports it as a personal characteristic capable of being developed.⁴ Like critical thinking skills and critical thinking disposition, EI can be developed after relevant training.⁴ EI involves seven elements: self-awareness, emotional resilience, self-motivation, inter-personal sensitivity, influence, intuitiveness and conscientiousness. Identifying candidates who are compelled to engage in work as a pharmacist out of their compassion and developed skills and stamina for patient-centered care would be of excellent service to them, patients, communities and the pharmacy profession. Identifying candidates with robust life experiences whose motivation for self-awareness compels them to be supple toward opportunities that are designed to develop skills and abilities they think are "good enough" to further develop what is "good enough" into something of excellence. What could selecting candidates with higher baseline critical thinking skills, critical thinking disposition, and EI contribute to the pharmacy profession?

EI is a moldable personal characteristic, increasingly referred to as having a potential role in pharmacy and other health care professions as it relates to patient-centered care, teamwork, and leadership.⁵ The Consortium for Research on Emotional Intelligence on Organizations (CREIO) has developed best practice evidence-based guidelines that include 22 practices for promoting the four phases of EI development. The phases of EI development have the capacity to involve learning opportunities that exist in pharmacy didactic and experiential learning.⁵ An admissions process for identifying pharmacy students with strong critical thinking skills, critical thinking disposition and EI to support the abundance of starting points could enhance processes and outcomes of the exploration, education and planning⁵ within the pharmacy curriculum.

Perhaps we can begin thinking about preferring students with advanced baseline EI, critical thinking skills and critical thinking disposition. Candidates with relatively higher EI may be better equipped to identifying learning gaps and seeking individualized help necessary for timely advancement within the curriculum.

Candidates with higher EI may be more likely to adopt skills, abilities and attitudes that will enhance navigating pharmacy school with success that lead to paving paths that may otherwise go unrecognized in their professional lives. Nelson and colleagues in their statement *Including Emotional Intelligence in Pharmacy Curricula to Help Achieve CAPE Outcomes* propose consideration of EI is an effective strategy for the purpose of guiding a personal development plan that will lead to reaching professional objectives through developing self-awareness.⁵ This practical approach is a powerful notion in the life of a student who is apt to honing personal strengths.

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