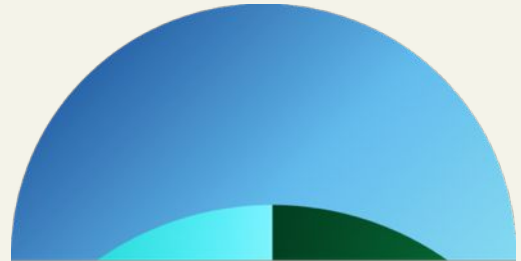


Validation of a Competency Model with an Associated Behavior Measure

Ammons, Black, DiGirolamo, Haidar, & LaHuis | SIOP 2026

Presented by Dr. Hunter Black
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Agenda

- The gap: client voice in coaching research | **Background**
 - Methods & sample | **337 clients, 78 items**
 - Three-factor solution | **Reflection, Trust, & Action**
 - Prelim. criterion validity | **Outcomes, alliance, well-being**
 - Discussion | **What this contributes**
- Limitations & next steps | **Where the work goes**



BACKGROUND

Coaching works

Meta-analytic evidence shows benefits from coaching across a wide variety of outcomes (see Jones et al., 2015; Sonesh et al., 2015; Theeboom et al., 2013).

Including:

- Well-Being
- Skill Development
- Goal Attainment
- Work Attitudes
- Task Performance



...but we still know little about how and why.

- Coaches draw on a wide variety of theoretical frameworks (Grant, 2017).
- There has been little to no research on what coaching competencies or behaviors are most effective (Boyatzis et al., 2022).
- Only about 50% of competencies identified through surveys of current role occupants in management and leadership were validated in further research (Boyatzis, 1982), raising concerns the same could be true in coaching (Boyatzis et al., 2022).



The Gap: Client Perspective

Coaching competencies are developed mostly by coaching SMEs. Without the client perspective we likely have an incomplete or inaccurate picture of coaching practice.

We wanted to bring the client perspective into coach competency research.

We ask - of the observable behaviors represented in the ICF competency framework:

- 1) How might we measure them from a client perspective?**
- 2) How do they organize?**
- 3) How do they relate to coaching outcomes?**



METHOD

ICF Competency-Based Item Pool Generation

Generated **initial pool of 99 items** representing observable coaching behaviors reflecting ICF competencies reviewed by **seven PhD SMEs** resulting in a **final pool of 78 items**.

Example:

Listens Actively:

“My coach brings to my attention themes across our conversations”

Response set:

6-pt frequency scale from “Never” to “Always”

01

Demonstrates Ethical Practice

• Acts with integrity and honesty • Uses respectful, inclusive language • Honors confidentiality and privacy • Distinguishes coaching from therapy, consulting, mentoring, etc. • Refers clients to other professionals when appropriate • Adheres to ICF Code of Ethics

02

Embodies a Coaching Mindset

• Maintains openness, curiosity, flexibility • Believes client is resourceful and responsible • Engages in ongoing learning and self-development • Reflects on own coaching practice • Regulates emotions and remains grounded • Uses intuition/self-awareness appropriately • Prepares mentally and emotionally for sessions

03

Establishes and Maintains Agreements

• Clarifies what client wants from coaching • Defines session goals/outcomes • Establishes partnership roles and responsibilities • Aligns on measures of success • Re-contracts as needs evolve • Maintains focus on what matters most to client

04

Cultivates Trust and Safety

• Creates psychologically safe environment • Shows empathy, care, and genuine concern • Honors client identity, context, values • Demonstrates consistency and reliability • Supports client expression without judgment • Encourages honesty and vulnerability

05

Maintains Presence

• Is fully attentive and present • Comfortable with silence and pauses • Adapts fluidly in the moment • Manages uncertainty/confusion calmly • Uses spontaneity appropriately • Balances confidence with humility

06

Listens Actively

• Hears beyond words (tone, emotion, energy) • Notices patterns and themes • Reflects/paraphrases accurately • Allows client space to think • Tracks shifts in meaning or motivation • Integrates verbal and nonverbal cues

07

Evokes Awareness

• Uses powerful questions • Invites new perspectives • Challenges assumptions respectfully • Helps identify beliefs/patterns • Uses metaphor, reframing, insight generation • Encourages deeper learning and meaning-making

08

Facilitates Client Growth

• Converts insight into action • Co-designs experiments/next steps • Supports accountability owned by client • Celebrates progress and learning • Encourages autonomy and sustainability • Helps integrate learning into broader life/work context

Sample and Analyses

01	Sample: 337 coaching clients	337 coaching clients (73% female; M age = 44.57). Primary recruitment through BetterUp engagements, supplemented by ICF-credentialed coaches' client networks. Clients were not constrained to one provider.
02	Items: 78 -> 46	Refined based on item-level properties, factor loadings, item discrimination, and item difficulty to arrive at 46 final good-fitting items.
03	Structure: Expl. Factor Analysis	Structure analyzed through exploratory factor analysis, specifically principal axis factor (PAF) analysis with Oblimin oblique rotation. Factors retained based on scree plot and eigenvalues.
04	Validity: Prelim. Criterion Validity	Criterion evidence from ICF outcomes, BetterUp outcomes, WAI, WHO-5, engagement, and intent to quit.

RESULTS

Results support a three factor, 46-item instrument with strong psychometric properties

01	Loadings: three factors, .32 to .94	Screenplot supports a three factor solution with adequate factor loadings across dimensions.
02	Discrimination: 1.77 to 3.86	Retained items show acceptable infit and outfit. Items differentiate clients across the effectiveness continuum.
03	Difficulty: -3.89 to 0.50 <i>across all response categories</i>	Provides most information at the low and middle range of coach effectiveness; less sensitive at the top (distinguishing excellent from exceptional coaches).

Reflection, Trust, & Action

EFA on the 46 items yielded three factors.

F1: Stimulating Reflection

26 items: Challenging assumptions, offering alternative perspectives, surfacing gaps, naming patterns across sessions.

Example: *"My coach offers alternative perspectives that challenge my assumptions."*

F2: Building Trust

11 items: Ethical conduct, empathy, non-judgment, appropriate, calm under emotional weight.

Example: *"My coach supports me without judgment."*

F3: Advancing Action

9 items: Co-designing plans, summarizing insights, breaking goals into action steps.

Example: *"My coach helps me break down my goals into clear steps"*

Preliminary Criterion Validity

.81

WORKING ALLIANCE

.65-.64

SELF-REPORTED GROWTH FROM COACHING
(BetterUp & ICF measures)

.25

WORK ENGAGEMENT

.22

WELL_BEING (WHO-5)

-.18

INTENTION TO QUIT

DISCUSSION

Contributions & Implications

CLIENT-PERSPECTIVE

Novel measure of client-rated coaching behaviors that can be utilized in future studies exploring coaching behaviors and competencies from the client perspective, and their relationship to coaching outcomes.

THREE-FACTOR

The three factor structure (Reflection, Trust, & Action) suggests a) coaches who utilize one type of coaching behavior also likely utilize related behaviors, and b) client perceptions of coaching behaviors may not be as nuanced as expert coach perceptions.

PRACTITIONER

First client-perspective validation of the ICF Core Competencies - all eight competencies show strong item-total relationships, and the model holds up when tested from the perspective the profession has historically been missing.

Limitations & Future Directions

LIMITATIONS

1) Cross-sectional design; no causal inference about behavior-outcome links

2) Self-report from a single perspective; no observational or dyadic data

3) Scale less sensitive at the upper end of coach effectiveness

4) Preliminary validation, no confirmatory or secondary sample

NEXT STEPS

Study 2 data collection has begun: explore item properties in a secondary/confirmatory sample, confirm factor structure, explore relationship with outcomes such as client engagement intentions, session completion, coaching satisfaction, self-reported pre-post outcomes such as well-being, leadership behaviors, work attitudes, productivity, and job performance.

References

- Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. Wiley.
- Boyatzis, R. E., Hullinger, A., Ehasz, S. F., Harvey, J., Tassarotti, S., Gallotti, A., & Penafort, F. (2022). The grand challenge for research on the future of coaching. *The Journal of Applied Behavioral Science*, 58, 202-222.
- Grant, A. M. (2017). Coaching as evidence-based practice: The view through a multiple-perspective model of coaching research. In T. Bachkirova, G. Spence, & D. Drake (Eds.), *The SAGE handbook of coaching* (pp. 62-84). Sage Publications.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology*, 36(2), 223.
- Jones, R. J., Woods, S. A., & Guillaume, Y. R. (2015). The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, 89(2), 249-277.
- Sonesh, S. C., Coultas, C. W., Lacerenza, C. N., Marlow, S. L., Benishek, L. E., & Salas, E. (2015). The power of coaching: a meta-analytic investigation. *Coaching: An International Journal of Theory, Research and Practice*, 8(2), 73-95.
- Theeboom, T., Beersma, B., & Van Vianen, A. E. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9(1), 1-18.
- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A systematic review of the literature. *Psychotherapy and Psychosomatics*, 84(3), 167-176.

Thank you

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APPENDIX

Factor by Criterion Correlation Matrix

	WAI	WHO-5	Engagement	ITQ	Coaching Impact (ICF)	Coaching Impact (BetterUp)
Reflection	0.74	0.17	0.20	-0.17	0.59	0.62
Trust	0.60	0.13	0.11	-0.06	0.44	0.50
Action	0.75	0.26	0.29	-0.21	0.58	0.59

Correlations with outcome and well-being measures hold across competency mappings

Our 46-item client-oriented measure correlates very strongly with working alliance and strongly with both ICF and BetterUp coaching outcome sets.

.81

WORKING ALLIANCE

Correlations with broader workplace measures such as engagement, well-being, and intent to quit are smaller but directionally consistent across all eight competencies.

.65 | .64

BETTERUP
OUTCOMES

ICF
OUTCOMES

These patterns are what we'd expect if the instrument is capturing genuine coaching effectiveness: strongest where coaching should matter most and smaller but consistent where the connection is more distal.

.25 | .22 | -.18

WORKPLACE MEASURES
ENGAGEMENT, WELL-BEING, INTENTION TO QUIT

Clients reliably distinguish effective from less-effective coaching through observable behaviors that map cleanly to the ICF Core Competencies.

.70 - .94 (.87)

ITEM-TOTAL Range (AVG)