



Adding Equity Considerations to Construct, Scale, and Model Development in the Field of Financial Education

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On behalf of the National Endowment for Financial Education (NEFE), we are honored to support several papers in this special issue of the Journal of Family and Economic Issues dedicated to advancing the conversation on measurement in research. This topic is not merely technical; it is foundational to the integrity of our science and its capacity to inform policy, practice, and systems that shape financial well-being for individuals and families. At NEFE, we believe that rigorous, equitable, and transparent measurement is essential for building a research base that can drive meaningful change.

While this special issue focuses on the aspects of scale measurement and its validation efforts, we want to acknowledge that these research activities do not exist on an island. Instead, we feel it is important to also recognize the underlying constructs and associated models that are used to understand and interpret financial behaviors across diverse populations of interest, and the diverse approaches that exist across disciplines. For instance, some positivist researchers will rightfully focus on traditional survey methods while others may argue for a more post-structural, participatory approach (Tolman & Brydon-Miller, 2001). We believe there is room for both approaches, especially when it is in service of improving the financial lives of those who access these tools. While the following equity-centered lens is not the only element of successful scale development and model deployment, we feel it is the most crucial element of our time.

Why Measurement Matters and Why Equity Must Be Central

Measurement, as a broad umbrella term, is often treated as a methodological detail, but in reality, it is a matter of accuracy, precision, and the epistemological outcomes that address equity and justice through the associated models intended to improve peoples' lives. The instruments we use to capture constructs such as financial capability, financial well-being, and financial behaviors influence the conclusions we draw, the interventions we design, and the policies for which we advocate. When measures fail to reflect the construct as currently understood by the populations being studied, they may produce erroneous interpretations and conclusions that perpetuate inequities rather than dismantle them. Conversely, when measures are thoughtfully developed, validated, and applied across cultural and socioeconomic contexts, they can become powerful tools to promote greater objectivity in research. Given the role of research in policy and program development, more objective research provides a foundation for research implications and recommendations leading to equity. This is accomplished, in large part, by relying on the robust research procedures to help minimize bias and subjectivity in measure development, and by incorporating validation and norming methods for surveys that go beyond the convenience sampling strategies typically employed.

The discipline of consumer and household finance has long recognized the importance of understanding financial behaviors and attitudes. Yet, as NEFE's funded research and the broader literature reveal, the development and application of measures in this domain have not kept pace with the complexity of the populations we serve. Too often, measures, and their associated models and frameworks, are selected for expediency rather than validity and applied without necessary attention to measurement invariance. When these measures are included in conceptual models that do not consider systemic barriers that shape financial

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outcomes, they can lead to erroneous results that reinforce existing stereotypes rather than reveal true patterns and associations. Because we do not examine the measures themselves, we are willing to believe the findings. These practices risk reinforcing stereotypes, misinforming policy, and overlooking variables that might be omitted from our model (e.g., structural determinants of financial well-being). To combat this, psychometricians, survey researchers, and research-practitioners should collaborate on best practice in developing measures that reflect context, nuance, and understanding for widely measured constructs in our field.

An equity lens compels us to ask hard questions:

- Do our measures reflect constructs in ways that are valid, reliable, and practically meaningful across racial, ethnic, gender, and socioeconomic groups?
- Are we testing for measurement invariance, when appropriate, to ensure that comparisons across populations are valid?
- Are we considering cultural responsiveness in item development and interpretation, so that the consequential interpretations and analyses help honor and reflect diverse cultures, linguistics, and socioeconomic backgrounds (e.g., contextualizing prompts, using diverse narratives and symbols, employing multiple modalities, addressing power dynamics, and inviting community input)?
- How do our measurement and conceptual model choices influence the narratives that emerge about latent constructs, such as financial capability, financial decision-making, and structural determinants?

While these questions are important academic exercises; they are central to the credibility and impact of our work. When practitioners and policymakers rely on research to allocate resources or design interventions, they assume that the underlying measures are sound. If those measures and their development processes embed bias, whether through language, assumptions, or omission, the resulting policies and practices may exacerbate disparities rather than reduce them. Inaccurate survey results based on measurement error are then systematically perpetuated in our policies, procedures, algorithms, and leadership decisions that can affect critical areas of our financial lives, especially for those who have been historically marginalized. When researchers fail to carefully consider the measures they are selecting, they are perpetuating these issues in search of publications.

Building the Case for Change

NEFE's commitment to improving measurement is grounded in empirical work. Through our Scale Validation Project, we examined widely used personal finance scales for validity, reliability, and invariance across diverse populations. This effort revealed both strengths and gaps. Many scales demonstrated acceptable internal consistency and factorial validity, yet existing studies of these scales had insufficient diversity in their sampling composition, and few had been tested for invariance across demographic groups. Without such testing, we cannot be confident that observed differences between groups reflect true differences in constructs rather than artifacts of measurement bias. These nuances matter. Without sound measures, we cannot interpret findings of our analyses. We run the risk of accepting observed differences if they support existing stereotypes. Without a sound conceptual model supported by a sound measurement model, we run the risk of misinterpreting observed differences as the outcome of individual failure rather than of structural constraints.

Additionally, work comparing single-item measures to multi-item scales highlights practical challenges researchers face. Survey length constraints often lead to reliance on single items, raising questions about predictive validity and construct representation. As the findings of the paper *Measuring Financial Constructs: The Predictive Power of Single Items and Scales* suggest, while scales generally outperform single items, the predictive power of individual items varies in ways that merit empirical consideration. This insight is particularly relevant for large-scale surveys and program evaluations where space is limited. Researchers need evidence-based guidance, not assumptions, when making these trade-offs.

Beyond technical considerations, these studies illuminate a broader truth—measurement is not inherently neutral. It reflects choices about what to measure, how to measure it, and for whom. The choices made in the original work to develop a particular measure may not apply to the population we are studying. Therefore, we must strive towards greater neutrality by being intentional with every aspect of the measurement process and never allow a singular instrument to become a political tool to achieve a deleterious agenda. These choices carry ethical and practical implications that ripple through the financial ecosystem of research, policy, and practice.

From Research to Practice: Why Measurement Quality Shapes Outcomes

The stakes of measurement extend far beyond the pages of academic journals. For example, consider financial education programs designed to improve budgeting skills or savings behavior. If the measures used to evaluate these programs are not valid, reliable, and invariant for the program population, program effectiveness may be misjudged, leading to misguided funding decisions or premature program termination. If the constructs being measured in the evaluation fail to include systemic barriers, interventions may focus narrowly on individual behavior while ignoring structural inequities. For example, investigating the financial behaviors of Indigenous Americans with valid and reliable measures, but not incorporating measures of the historical context that may mediate or moderate these behaviors that stem from institutional practices.

Research influences public narratives. When a conceptual model only includes measures that emphasize individual responsibility, that model fails to account for contextual factors that can reinforce deficit-based frames, obscuring the role of policy in shaping financial opportunities. Conversely, investigations that incorporate measures of access, agency, and systemic constraint into the conceptual model can support more nuanced narratives that recognize the interplay between personal choices and structural conditions. For instance, not every community will want to become fully financially independent, may have a goal to become more financially interdependent, and may alter their goals depending on changing contexts or relationships.

For practitioners, high-quality measures provide a foundation for the discovery of actionable insights, assuming the proper construct was selected and empirically related to the outcomes in question. These measures then help to contextualize the models used to help identify which interventions work, for whom, and under what conditions. This can also enable tailoring programs to meet the needs of diverse populations, and to support accountability and continuous improvement. In short, validated measures become an indispensable foundation for translating research into practice that is both effective and equitable.

Improving measurement is not solely the responsibility of individual researchers; it is also a systemic challenge that requires coordinated action. Journals, funders, academic programs, and professional associations all have roles to play. NEFE's consensus recommendations, developed through a modified Delphi process with experts in the field, offer a roadmap for these changes. These recommendations are not ends in themselves; they are means to a larger goal: building a research infrastructure that supports equity to improve *access* for those who need it the most, rigorous methods and

frameworks that help to ensure *quality* learning experiences and strategically measuring *impact* to increase positive outcomes that increase financial well-being.

Equity in Action: Practical Steps for Inclusive Measurement

Being inclusive requires ensuring intentional accuracy and objectivity in measurement at every stage, from item development to interpretation. This includes:

- Engaging diverse stakeholders in the development process to ensure that constructs and candidate scale items reflect varied lived experiences. For instance, considering language and context to avoid assumptions that privilege certain cultural norms.
- Testing for invariance across key demographic groups being studied to confirm that measures function equivalently.
- Reporting limitations of available measures transparently, including potential biases and gaps in interpretation.

Equity also demands that we couple individual-level constructs with systemic factors in our measurement development efforts and conceptual model design whenever possible, given the empirical limitations concerning multi-level analyses. We need to ensure that all important constructs have valid and reliable measures. Our research requires measures that capture access to financial services, exposure to discrimination, or policy-related barriers to enrich our understanding of financial well-being and inform interventions that address structural as well as individual causes. At NEFE, we are dedicated to ensuring we support and uplift those efforts.

A Strategy for the Future: Building a Measurement Ecosystem

Looking ahead, NEFE envisions a future where everyone has the knowledge, confidence, and opportunity to live their best financial life. As researchers and practitioners who support that future, measurement must be a cornerstone of our work in the field of financial education. We believe that a greater focus on culturally responsive measurement to support more complete conceptual models will make us more capable of supporting financial flourishing. Achieving this vision will require a multi-pronged strategy:

- *Investment in Measurement Science*: Funders must allocate resources for scale development, validation, and adaptation across populations.
- *Integration of Measurement Standards*: Journals and professional associations in our field should adopt guidelines for reporting measurement quality, akin to the American Psychological Association's Standards for Educational and Psychological Testing.
- *Collaboration Across Disciplines*: Insights from psychology, social work, education, economics, and health research can inform best practices in financial measurement, as offered in our Personal Finance Ecosystem.
- *Leveraging Technology*: Advances in agentic artificial intelligence, data science, and adaptive testing offer opportunities to develop measures that are both precise and efficient.
- *Continuous Dialogue*: Measurement must remain a topic of ongoing conversation at conferences, in classrooms, and in policy forums.

This strategy is not merely aspirational; it is actionable. It calls on all of us—researchers, practitioners, policymakers, funders, and journal editors—to recognize that measurement, and its associated usage in practical settings, sets the tone for embedding equity, integrity, and positive impact into all our measurement-related practices. .

Conclusion: A Call to Action

As you engage with the articles in this special issue, we invite you to reflect on the role of measurement in shaping the future of our field. High-quality, culturally responsive measures are essential for building evidence that informs

policy, guides practice and promotes financial well-being for all. They are tools of equity that can help dismantle systemic barriers and create pathways to opportunity.

At NEFE, we are committed to advancing effective financial education through research, collaboration, and advocacy. We believe that by elevating measurement and its associated models and frameworks as a strategic priority, we can strengthen the foundation of our science and its capacity to serve the public good. We hope this special issue sparks dialogue, inspires action, and moves us closer to a shared vision: a field where measurement is rigorous, inclusive, and transformative.

Thank you for joining us in this important conversation.

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