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PSYCHOLOGICAL
ASSOCIATION**
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APA response to the National Institutes of Health (NIH) Request for Information (RFI) on the Office of Behavioral and Social Sciences Research Strategic Plan 2023-2028 ([NOT-OD-22-211](#))

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The American Psychological Association (APA) appreciates the opportunity to provide input to the National Institutes of Health (NIH) Office of Behavioral and Social Sciences Research (OBSSR) Strategic Plan 2023 – 2028.

APA is the leading scientific and professional organization representing psychology in the United States (U.S.), comprised of more than 133,000 researchers, educators, clinicians, consultants, and students. Its mission is to promote the advancement, communication, and application of psychological science and knowledge to benefit society and improve lives. The association is grateful for the chance to advise and partner with OBSSR to accomplish its mission.

APA commends the OBSSR for its recent reports, [Trans-NIH Opportunities in the Basic Behavioral and Social Sciences](#) and [Integration of Behavioral and Social Sciences Research at NIH](#). The association trusts that the recommendations provided in these reports will guide OBSSR's development of this strategic plan. APA wholeheartedly supports OBSSR's role in assisting the NIH in achieving its mission "*to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.*"

NIH-supported research has consistently shown that behavioral factors and the conditions under which people live are the primary drivers of chronic disease incidence, morbidity, mortality, and healthcare costs associated with this individual and societal burden. Accomplishing the agency's mission will require increased recognition of the role and benefit of behavioral sciences by the NIH institutes, centers, and offices. Greater appreciation and integration of behavioral and social sciences research (BSSR) will ensure the real drivers of public health and the cost of health (behavioral and social factors) receive the attention and resources needed to improve public health.

APA strongly supports the draft strategic plan's scientific priorities and cross-cutting themes. Expert scientists from APA divisions informed the association's comments and recommendations.

Scientific Priorities

Scientific Priority 1: Improve the synergy between basic BSSR and research testing approaches to improve health outcomes

Objective 1.1: Identify and encourage promising and ecologically valid basic BSSR relevant to health.

Objective 1.2: Facilitate the translation of basic BSSR into research applying this knowledge to enhance health, lengthen life, and reduce illness and disability.

- **Ethical research.** Insert the word "ethical" into Objective 1.1 so that it reads "ecologically valid and ethical basic BSSR" relevant to health.

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- **Translation of basic BSSR.** Modify Objective 1.2 to note the translation of basic BSSR is critical to the full array of diverse individuals and communities. Accordingly, the association believes the objective should read as: *Facilitate the application of basic BSSR into research applying this knowledge to enhance health, lengthen life, and reduce illness and disability "among diverse individuals and communities."*

Facilitate the application of BSSR across the translational spectrum, promoting a non-hierarchical, interdisciplinary team science approach alongside medical providers and the range of health care providers. Such an approach will enhance the quality of life, lengthen life, reduce illness and disability, and manage the burden of chronic disease and associated costs for the communities served and society. The scientific questions to be studied are directly driven by problems that communities are facing and by the direct involvement of communities in prioritizing interventions and outcomes that matter to them.

- **Ecological validity.** APA welcomes the draft OBSSR Strategic Plan 2023-2028's focus on solid methodological practices to ensure internal and external validity, innovative approaches, and an emphasis on ecological validity. When basic BSSR is ecologically valid, the research findings can be appropriately applied.

Prioritizing the external validity of scientific findings is essential to improving the synergy between basic BSSR and research testing approaches to improve health outcomes. The association suggests that health be clearly defined here to include physical and mental health and demonstrates that BSSR can inform questions about population health and individual health.

Identify and encourage high-risk, high-gain, and ecologically valid BSSR across the translational spectrum relevant to health. In addition to looking at the relationships between basic behavioral and social science research testing, APA encourages the examination of the efficacy of interventions to address challenges related to health and those directly tied to public health emergencies and the growing chronic disease burden in communities and society.

- **Efficacy of Interventions.** Identify clinical trials to test the efficacy of interventions targeting behavioral or psychological factors in improving health-related outcomes, broaden the range of endpoints for therapeutic trials and studies involving the impact of medical interventions to include behavioral and psychosocial endpoints.
- **Behavioral mechanisms.** Increase investment in funding mechanisms that prioritize behavioral mechanisms (e.g., Behavioral Science Track Award for Rapid Transition [B/START grants] as the focus of the proposals. All too often, excellent proposals with rigorous behavioral testing are undervalued due to criticisms that they lack testing of biological and molecular correlates. The quantitative study of behavior must be communicated to reviewers to be a sufficient study endpoint. (B/START Program Announcement for R03s example from 2016: <https://grants.nih.gov/grants/guide/pa-files/par-16-071.html>)

Facilitate research on the behavioral mechanisms that underlie a problem, such as seeking addictive substances (for example, schedules of reinforcement), which is central to understanding substance use without specific therapeutic testing. Often applications are penalized for not focusing on therapeutic targets despite critical and rigorous methods that will contribute to therapeutics down the line.

Scientific Priority 2: Enhance and promote research measures, methods, and infrastructure needed to support an integrated and more cumulative approach to BSSR

Objective 2.1: Support the development, testing, and application of data collection and measurement approaches that are rigorous, reproducible, and replicable.

Objective 2.2: Facilitate the development and testing of new approaches to measurement with an emphasis on enhanced data quality, harmonization, and sharing.

Objective 2.3: Expand the repertoire and use of innovative and new research methods in the behavioral and social sciences.

▪ **Methods and Measurement.**

Implementation science. Refocus the articulated objectives and priorities concerning methodology, measurement, and mechanisms of behavior change reflected in scientific priority #2. As currently written, the emphasis distracts from the genuine need – and readiness – for implementation science that leverages what is presently known about health message framing, preventive behavior change, and chronic disease management. It also distracts from the full integration of behavioral and social science. Instead, the focus should be on researching and facilitating the implementation of effective treatments (e.g., Objective 3.2 is closer to where the focus should be).

Internal validity. Prioritizing the focus on the internal validity (i.e., soundness) of scientific findings is essential. The association supports using a cumulative approach that allows various methods to converge and inform how the science can apply to the question at hand. APA also supports the development of new assessments. We recommend that the language referring to innovative and new measurement tools and research methods include a reference to using these innovative methods only when appropriate prior assessment confirms their validity.

New research methods. Support development, testing, *standardization*, and application of behavioral data collection and measurement approaches that are rigorous, reproducible, pragmatic (feasible and cost-effective), and replicable. Expand the repertoire and use of innovative and new research methods in the behavioral and social sciences, including developing innovations in data collection and integration in digital health applications and data collection methods that leverage digital and community-based strategies. Additionally, increase support for data collection methods that are "real-time" and maximize ecological validity.

Qualitative research methods. Include qualitative research methods in collecting data related to psychological approaches. For example, qualitative research is the only way to gather data for some psychotherapeutic methods. NIH-supported research would help restore faith in the value of qualitative research methods as it is appropriate to investigate research questions that are not easily or effectively studied using quantitative research methods. Placing value on qualitative methods reduces elitism and fosters novel, innovative research projects on understudied topics. It increases diversity within the field of psychology and offers the public valid scientific data about treatments and approaches otherwise excluded from study.

Innovative approaches to measurement. Facilitate the development, testing, and standardization of novel approaches to measuring behavioral and psychosocial factors, emphasizing enhanced data quality, harmonization, and sharing. New approaches would directly inform the development of national quality (monitoring) programs related to the care provided to our populations and its impact on these populations. They would also inform post-marketing surveillance programs as it relates to the development of new medical interventions. The developed approaches would fit an interdisciplinary health context and support integrated care approaches and evaluating such care approaches.

- **Preclinical research.** Invest in funding mechanisms solely focused on developing and innovating neurobiological measurements in freely moving animals. Preclinical researchers are often forced to restrict behavioral manipulations to allow for complex neurobiological measurements or rely on post-mortem analysis of tissue extracted from time points proximal to the behavior of interest. The more we can do to measure neurobiological processes in parallel with ongoing behavior, the deeper our understanding of the correlates between behavior and biology will be.
- **Data sharing.** Given the resources required to conduct preclinical research, traditionally, data sharing is not normative. However, newly enacted federal data-sharing requirements will weigh the attention to incentives to sharing and tradeoffs in the impact of results.

Scientific Priority 3: Accelerate sustained adoption of BSSR findings in practice

Objective 3.1: Encourage intervention research and implementation science to understand and test mechanisms of action and effectiveness in context (e.g., tested in the intended populations, delivery modalities and settings).

Objective 3.2: Enhance the adoption, scalability, and sustainability of evidence-based behavioral and social interventions.

- **Applied psychology.** The proposed third scientific priority for the OBSSR Strategic Plan 2023-2028, which aims to encourage and enhance BSSR findings in practice, leading to effective evidence-based interventions, aligns with the APA's goal of supporting the application of psychological science to inform the development of interventions. Therefore, the research methodology must consider the applicability of the findings when developing the participant sample included and the hypotheses' testing environment.
- **Definition of "evidence-based."** Clarify the term "evidence-based" and adopt more rigorous standards for meeting "evidence-based" status. The definition of "evidence-based" needs to be more transparent alongside research studies' publication and media coverage.
- **Theory-informed interventions.** Promote theory-informed interventions. Encourage pragmatic models of intervention development and testing, thereby supporting high-risk-high-gain approaches that can address urgent public health emergencies and disparities.
- **Interventions.** Increase NIH-wide attention to types of effective clinical research, including a focus on improving clinical trial efficacy, safety, and efficiency of interventions with its NIH partners.

Promote early-stage interventions and demonstrate the feasibility of implementing interventions across diverse settings.

Promote research to understand test mechanisms of action and effectiveness. Specifically, how easy is it to implement interventions tailored to serve high-needs areas that are underserved or high-needs populations.

Develop relevant, acceptable, accessible interventions for patients, providers, health care systems, and payers.

- **Translational research.** Foster and support translational research to help scale the rollout of interventions into clinical practice that also consider different levels of resources (i.e., space, funding, personnel, etc.) needed for a program to be successful.

- Require a translational outlook evaluation and policy implications section in applications, engaging policymakers early on, such that evidence-based interventions get translated into real-world care settings.
- Develop translational research methods that include interdisciplinary approaches to care. Also, address different models of interdisciplinary care.
- **Clinical research.** Develop programs and paths for psychologists in clinical settings to become more involved in NIH-funded research, especially clinicians with a strong research background.

Develop programs to effectively train clinicians and clinical teams in new evidence-based approaches to care.

Cross-Cutting Themes

Integration of BSSR across NIH research – Facilitate multiple aspects of BSSR integration and team science across the NIH research enterprise that may include, but is not limited to, integration across disciplines, diseases, and the translational continuum.

- APA applauds the many ways OBSSR facilitates multiple aspects of BSSR integration and team science across the NIH research environment that can influence physical and mental health. (Frazier, 2020¹; Lehman et al., 2017²; Wade & Halligan, 2017³). The scientific findings can lead to more effective applications when all factors are considered.

Science of Science - Draw from existing knowledge and support the application of new behavioral and social science to support the conduct, use, and quality of science and the scientific process in research, which includes, but is not limited to, open science and data sharing practices, recruitment and retention practices, informed consent, and how science is reported and referenced in the scientific and lay literature.

- APA appreciates NIH's inclusion of this theme that focuses on the quality of the science and the dissemination of scientific findings in a way that makes it accessible to all audiences. We recommend that NIH uses language such as "accessibility to all audiences" to ensure that this theme of "science of science" will inform all members of society.
- Draw from existing knowledge and application of new behavioral and social science to support the conduct, use, and quality of science and the scientific process in research, which includes, but is not limited to, open science and data sharing practices, recruitment and retention practices, informed consent, and how science is reported and referenced in the scientific and lay literature.
- Promote interdisciplinary research and facilitate the collaborative conception of research questions between behavioral and biological researchers in recognition of the growing recognition of the social determinants of health and the behavioral and social sciences.

¹ Frazier, L. D., (2020). The past, present, and future of the biopsychosocial model: A review of the biopsychosocial model of health and disease: New philosophical and scientific developments by Derek Bolton and Grant Gillett, *New Ideas in Psychology*, 57, <https://doi.org/10.1016/j.newideapsych.2019.100755>

² Lehman, B. J., David, D. M., Gruber, J. A. (2017). Rethinking the biopsychosocial model of health: Understanding health as a dynamic system. *Social and Personality Psychology Compass*, 11. <https://doi.org/10.1111/spc3.12328>

³ Wade D.T. & Halligan P.W. (2017). The biopsychosocial model of illness: a model whose time has come. *Clinical Rehabilitation*, 8, 995-1004. doi: 10.1177/0269215517709890. PMID: 28730890.

Diversity, Equity, Inclusion, and Accessibility (DEIA) - Facilitate and support the application of behavioral and social science to inform and enhance DEIA efforts, including DEIA as it applies to the conduct of research and in the intramural and extramural NIH workforce and research communities.

- Modify this cross-cutting theme to clearly state that researchers consider the application of their findings to populations typically not included in scientific research, which often leads to a lack of investigations on questions particularly applicable to those underrepresented groups (Dodson & Duarte, 2020⁴; McDonough et al., 2022⁵). One of APA's guiding principles in its strategic plan is to "champion diversity and inclusion." Importantly, this priority will provide the ability to eliminate health disparities and inequities and focus on greater inclusivity more successfully.
- Include "community and stakeholder engagement" in the list of examples (following "include, but is not limited to, ...") as efforts to engage communities and stakeholders are critical to BSSR that promotes DEIA. Modify the theme to read: *Draw from existing knowledge and support the application of new behavioral and social science to support the conduct, use, and quality of science and the scientific process in research, which includes, but is not limited to, open science and data sharing practices, recruitment and retention practices, community and stakeholder engagement, informed consent, and how science is reported and referenced in the scientific and lay literature.*
- Improve the synergy between basic BSSR and research testing approaches to improve health outcomes highlighted in Priority 1 via the seeding of collaborations between PIs in smaller and less resourced institutions (for example, 4-year colleges). Doing so may close gaps in grant award success and ensure that the pathway to preclinical research is opened to more students.
- Focus efforts on grantsmanship training and the mechanics of proposal review to address DEIA in the preclinical research area.
- Facilitate and increase support of behavioral and social science applications to inform, enhance, and sustain DEIA efforts, including DEIA, as it applies to research and the intramural and extramural NIH workforce and research communities.
- Increase the focus on the social determinants of health to improve health and reduce healthcare costs as part of the agency's expanded focus on DEIA. APA shares NIH's goal to fully incorporate DEIA across the institutes and centers.

Training and capacity building – Identify and inform the development and enhancement of cutting-edge methods, measures, and skills that expand the BSSR workforce's capabilities to continue addressing future research questions and adapt to evolving research needs and contexts.

- APA supports this theme as the association works to train the next generation of BSS researchers in psychology. APA's latest strategic plan includes a goal and objective dedicated to preparing those entering the field of psychology. We agree that it is essential that the curriculum of programs preparing students in the behavioral

⁴ Dotson V.M., & Duarte A. (2020). The importance of diversity in cognitive neuroscience. *Annals of the New York Academy of Science*, 1464(1), 181-191. doi: 10.1111/nyas.14268.

⁵McDonough, M., Harrell, E. R., Black, S. R., Allen, R. S., & Parmelee, P. A. (2022). Sources of nonreplicability in aging ethnoracial health disparities research. *Psychology and Aging*, 37, 60-71. <https://doi.org/10.1037/pag0000606>

and social sciences must include the most up-to-date methodologies and newest technology to address the many societal issues that can be best tackled with psychological science in mind.

- The ability to develop cutting-edge methods, measures, and skills can also be enhanced by encouraging partnerships and clear lines of communication between researchers and business and industry leaders. Researchers can then learn from those leaders the type of methodologies that best fit the environment in which we would like to generalize the research findings.
- Use more robust and precise language in cross-cutting theme #4 around training and capacity building to emphasize the need for new funding mechanisms to develop the needed workforce. For example, consider creating new initiatives within the T32 mechanism that require side-by-side training of biomedical and behavioral professionals in pursuing research questions and care delivery models that address the behavioral and social disparity issues that drive chronic disease burden. In addition, expansion of current T32 grant opportunities that focus on research methodology and mechanisms is needed to create opportunities for integrated care and implementation science training.
- Identify and inform the development and enhancement of cutting-edge methods, measures, and skills that expand the BSSR workforce's capabilities to continue addressing future BSSR research questions and adapt to evolving research needs and contexts.

Finally, APA urges the consideration of an additional cross-cutting theme: **Policy Implications (and Translation) of Evidence-Based Behavioral Health Interventions** – Require early planning and engagement of legislators and policymakers to create pathways of translation and continuity of care that can inform value-based care and that can directly benefit the populations for which these interventions are designed.

Again, APA is grateful for the opportunity to respond to OBSSR's request for information from the scientific community and other stakeholders. The association believes that the OBSSR Strategic Plan 2023 – 2028 will assist the NIH in achieving the agency's mission. Accordingly, APA welcomes the opportunity to be a resource to OBSSR. Please do not hesitate to contact Angela Sharpe, Senior Director, Congressional & Federal Relations (asharpe@apa.org), if the association can assist in any way.

Sincerely,



Mitch Prinstein, PhD, ABPP
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