APA Guidelines for the Undergraduate Psychology Major
Version 3.0

Empowering People to Make a Difference
in Their Lives and Communities

APA Board of Educational Affairs Task Force
On Psychology Major Competencies (2022)

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A. APA Principles for Quality Undergraduate Education in Psychology (2011) https://www.apa.org/education-career/undergrad/principles-undergrad.pdf
B. APA Introductory Psychology Initiative Outcomes (2021): https://www.apa.org/about/policy/introductory-psychology-initiative-student-outcomes.pdf
C. The Skillful Student in the 21st Century Workplace: https://www.apa.org/education-career/guide/transferable-skills.pdf

Vision

Psychological science will be recognized as a high impact undergraduate major that empowers people to make a difference in their lives and communities.

Mission

To provide a comprehensive revision in the national expectations of what knowledge and skills undergraduate psychology majors should have acquired at the associate and baccalaureate levels of study in undergraduate psychological science programs. The *APA Guidelines for the Undergraduate Psychology Major 3.0* (hereinafter referred to as the *Guidelines 3.0*) should foster collaborative discussions in psychological science programs based on recommendations that reflect state-of-the-science curricular and assessment planning in psychology. Our charge from the American Psychological Association's Board of Educational Affairs was to anticipate the ways that the *Guidelines 3.0* revision needs to reflect changes in culture and context to prepare undergraduates who are optimally prepared to function in the 21st century.

Executive Summary

The *APA Guidelines for the Undergraduate Psychology Major 3.0* capture a set of optimal expectations for performance by undergraduates engaged in the study of psychological science. This document builds on two decades of experience with the American Psychological Association's (APA) support of undergraduate psychology departments and programs for establishing such expectations. APA practice dictates that existing policies need to be revisited and potentially revised every 10 years. This effort represents the second revision of work that was originally approved in 2006.

Guidelines 3.0 specifies five broad educational goals and corresponding student learning outcomes that outline reasonable program expectations for the undergraduate psychology major across educational contexts. Indicators of progress on student learning outcomes represent two levels of development. "Foundation" indicators roughly represent progress that students should make midway through the major. As such, the outcomes can be helpful for psychological science programs at the two-year level or the psychology minor in a four-year program. "Baccalaureate" indicators represent an appropriate endpoint for the completion of the major. The progression describes expectations for how a student would complete the journey of a novice in the discipline to the status of a reasonably informed and skilled undergraduate student on the completion of a four-year program.

The tradition in publication of earlier *Guidelines* was to be aspirational and positive rather than prescriptive in its tone, a tradition we continue in *Guidelines 3.0*. Given that psychological science programs face unprecedented demands in higher education today for accountability data to document high quality educational programming, the *Guidelines* provide

a solid foundation on which psychology educators can engage in effective curricular and

assessment planning. Faculty collaboration *s*hould produce distinctive programs that integrate

local institutional and program-level missions in the context of recommended national

practices, as represented by *Guidelines 3.0*.

Context

History of Undergraduate Guidelines

The American Psychological Association (APA) began deliberations about national guidelines in 2002, convening a task force to develop a set of recommendations with official approval of the document following in 2006. At the time, the emphasis in the original *Guidelines* was the differentiation of outcomes that were liberal arts-based from those that were more specific to the science of psychology. That focus highlighted five goals in each of those areas for a total of 10 goals with corresponding learning outcomes and indicators that captured the 4-year experience in the major, including corresponding student learning outcomes and indicators for each of the goals.

When the original *Guidelines* underwent review, as required by APA policy, critics suggested that the ten-goal structure was a bit cumbersome and perhaps did not highlight the distinctiveness of contributions from learning in the undergraduate experience to think like a psychologist. Educators in associate degree contexts also suggested that the document did not authentically speak to their unique needs and concerns. Consequently, *Guidelines 2.0* made some dramatic revisions based on feedback from these and other stakeholders. The original 10 goals were collapsed to five and an emerging theme for the revision was highlighting the science foundations of the major. The task force differentiated and developed indicators for the student learning outcomes using two levels, "foundation," to represent expectations that should be met at the half-way point in the degree and "baccalaureate" to identify what skills and knowledge existing 4-year degree students should be able to demonstrate. *Guidelines 2.0* can be accessed at the following website: psymajor-guidelines.pdf (apa.org)

The *Guidelines 2.0* document was officially approved by APA in 2013. In a survey of psychological science programs in the United States, Norcross et al. (2016) verified that *Guidelines 2.0* produced remarkable penetration in program planning across the country. According to the survey respondents, 82% of four-year programs indicated that they used the *Guidelines* actively to revise the undergraduate curriculum and build meaningful assessment plans. Respondents in two-year contexts reported a penetration of influence at 50%. In addition, academic program reviewers routinely report that programs undergoing review regularly cite the influence of *Guidelines 2.0* in guiding the curricular and assessment planning, suggesting that they have been quite influential in their impact by providing national performance benchmarks. Understandably, educators who have used *Guidelines 2.0* successfully to build, modify, and assess their programs may express some reluctance to revisit systems that appear to be satisfying local and regional accountability demands.

However, the last 10 years have also encompassed significant changes that should be reflected in our revisions regarding what our undergraduate psychology goals and outcomes ought to be for this century. The traditions and boundaries of psychological science education have been challenged by the rapid growth of online learning opportunities. The consequence of the COVID-19 pandemic forced us to make rapid adaptations in how we designed and delivered the undergraduate experience. We have witnessed an explosion of interest in and commitment to social justice concerns. Accountability demands have proliferated with an emphasis on producing direct measurable evidence in support of any claims of quality. Outcome studies support the importance of incorporating high impact practice in the undergraduate curriculum. Regrettably, one factor that remains unchanged is the public misunderstanding of what

psychologists do. All these factors beg to be addressed in the current revision to make the undergraduate psychology curriculum as functional, contemporary, and high impact as possible.

<div align="center">**Task Force Selection and Operation**</div>

Selection

APA recruited membership on the Task Force for *Guidelines 3.0* in several ways. First, we approached members from *Guidelines 2.0* to see who might be willing to serve again with the goal of having half the task force populated from experienced members to provide continuity. Five individuals stepped up. The remaining members came from a pool solicited by an open call distributed by APA's Education Directorate. Member selection focused on a balance of experience, gender, racial identity, geographical representation, and type of institution (community college vs. four-year college or university). Given the prominence of EDI (Equity, Diversity, and Inclusion) considerations, we added two more members through an open call from the Education Directorate to Persons of Color to enhance representation of diverse viewpoints and experiences. As conversations progressed, we also created opportunities to hear from other colleagues who could more fully inform us regarding the utility and potential for improvement of *Guidelines 3.0* for related populations (e.g., high school psychology, international programs). We thought additional voices and contributions would lead to a more complete vision, broader adoption, and stronger influence.

Operations

The task force committed to keeping what was reported to work in prior versions of the *Guidelines,* but to develop a document that reflected contemporary needs and practices.

Pandemic conditions challenged the routine mode of APA task force collaboration. Under traditional circumstances, committee members convene at APA headquarters for intense debate, policy formulation, and document production. However, pandemic conditions required task force members to collaborate remotely, which we accomplished through monthly or semi-monthly Zoom meetings over the course of a little over one year. The work began in January 2021, during the first wave of COVID-19 disruption. The task force completed the document in early 2022 and worked with the Education Directorate to seek feedback from various stakeholders.

Acknowledgments

The *Guidelines 3.0* task force wants to express appreciation to APA staff members, Susan Orsillo and Martha Boenau. Although newly appointed in her leadership role in the Education Directorate at APA, Susan Orsillo dug right in, carefully reviewed the emerging work of the task force, and made insightful comments that improved the quality of the guidelines. Martha Boenau has faithfully served all the task forces working on undergraduate guidelines. Her careful attention to detail and exemplary organizational skills were not just appreciated, but inspirational as well.

Other APA officials contributed to the review. We are indebted to Maysa Akbar, Chief Diversity Officer, and Mia A. Smith-Bynum, Senior Director for Science Equity, Diversity, & Inclusion, for input that helped us align the document to recent directions adopted by the APA. We further appreciated the reviews provided by Ann Springer and Donna Euben in the APA Office of General Counsel.

Ten scholars with international expertise assisted us in thinking through the implications of what *Guidelines 3.0* might have for building an international psychology educator community. We recruited experts from all over the world, including American scholars with special expertise on the international scene. We are grateful to the following individuals for their assistance in this noble effort:

- Australia: Jacquelin Cranney and Tony Machin

- China: Fanlia Jia

- Colombia: Andres Manuel Perez Acosta

- Hong Kong: Nancy Diehl

- Kenya: Sahaya Selvam

- Slovokia: Lenka Sokolova

- Turkey: Uzeyir Ok

- Ukraine: Illia Yahilaiev

- United States: Harold Takooshian

Several of our colleagues in the Society for the Teachers of Psychology also assisted our process. Kristin Whitlock, widely recognized as an iconic teacher of high school psychology, participated in our discussions about the relationship between *Guidelines 3.0* and the recent Introductory Psychology Initiative. Kristin served as co-chair (along with Jennifer Thompson) of the subcommittee that developed outcomes for Introductory Psychology. Regan Gurung and Maureen McCarthy also helped us build the rationale for inclusion of details on allied APA documents that support improving undergraduate education. Garth Neufeld served the task force graciously as an emergency substitute voice to represent educators in two-year contexts

when one of our original appointees was unable to continue. As co-chair of the APA IPI

initiative, Garth made invaluable suggestions that improved the document. We want to

recognize and thank Stephen Chew for sharing the document he developed with his Samford

University colleagues on diversity. This document was especially useful in unpacking the term

"diversity" to address both diverse backgrounds as well as diverse ideas. We are grateful for the

contributions, insights, and wisdom of all our Society for the Teaching of Psychology colleagues.

Graduate student Lanae Arena provided some polishing of the document. Her eagle-

eyed approach helped the document become more student-friendly and more attuned to APA

writing standards.

Framework for *Guidelines 3.0*

Guidelines 3.0 maintains the structure that was introduced in *Guidelines 2.0.* We specify five "goals" that should characterize work at the undergraduate level as the first-level organizer using the numbers, 1-5. "Student learning outcomes" (SLOs) represent the second-level organizer; we designate the outcomes that correspond to each goal using decimal points to distinguish separate outcomes. Each goal encompasses from one to six outcomes. The third-level organizers constitute "indicators" that represent a developmental scaffold; we designate Foundational indicators with a lower-case alpha and Baccalaureate indicators with a corresponding upper-case alpha.

We provide two versions of the *Guidelines* to assist with curriculum review and assessment planning. The first version summarizes just the learning goals and outcomes, which provides a reasonable overview of the work for programs that may need to concentrate on outcomes that are more broadly defined. The second version provides the more detailed version that includes conceptual scaffolding of Foundation and Baccalaureate indicators, which should be helpful in refining assessment planning.

Summary of Learning Goals and Outcomes

Goal 1: Content Knowledge and Applications
1.1   Describe key concepts, principles, and theories in psychology
1.2   Develop a working knowledge of psychology's major subfields
1.3   Represent significant aspects of the history of psychology
1.4   Apply psychological content to solve practical problems
1.5   Relate examples of psychology's integrative themes*

Goal 2: Scientific Inquiry and Critical Thinking
2.1   Exercise scientific reasoning to investigate psychological phenomena
2.2   Interpret, design, and evaluate basic psychological research
2.3   Incorporate sociocultural factors in scientific research practices
2.4   Use statistics to evaluate quantitative research findings

Goal 3: Values in Psychological Science
    3.1   Employ ethical standards in research, practice, and academic contexts
    3.2   Develop and practice interpersonal and intercultural responsiveness
    3.3   Apply psychological principles to strengthen community and improve quality of life

Goal 4: Communication, Psychological Literacy, and Technology Skills
    4.1   Interact effectively with others
    4.2   Write and present effectively for different purposes
    4.3   Provide evidence of psychology information literacy
    4.4   Exhibit appropriate technological skills to improve communication

Goal 5: Personal and Professional Development
    5.1   Exhibit effective self-regulation
    5.2   Refine project management skills
    5.3   Display effective judgment in professional interactions
    5.4   Cultivate workforce collaboration skills
    5.5   Demonstrate appropriate workforce technological skills
    5.6   Develop direction for life after graduation

* Psychology's Integrative Themes

A. Psychological science relies on empirical evidence and adapts as new data develop.

B. Psychological science explains general principles that govern behavior while recognizing individual differences.

C. Psychological, biological, social, and cultural factors influence behavior and mental processes.

D. Psychological science values diversity, promotes equity, and fosters inclusion in pursuit of a more just society.

E. Our perceptions and biases filter our experiences of the world through an imperfect personal lens.

F. Applying psychological principles can change our lives, organizations, and communities in positive ways.

G. Ethical principles guide psychological science research and practice.

Framework for Expanded Goals and Student Learning Outcomes:

Foundation and Baccalaureate Level Indicators with Signature Attributes

GOAL 1. CONTENT KNOWLEDGE AND APPLICATIONS

Overview

Students should demonstrate comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles apply to behavior and mental processes. Students completing foundation courses should demonstrate breadth of their knowledge and application of psychological ideas to simple problems; students completing a baccalaureate degree should show depth in their knowledge and application of psychological concepts and frameworks to problems of greater complexity. Students should be able to discuss psychological science's integrative themes and their respective sociocultural and historical backgrounds.

Outcomes Students will:	*Foundation Indicators* Students will:	*Baccalaureate Indicators* Students will:
1.1 **Describe key concepts, principles, and theories in psychological science**	1.1a Use basic psychological concepts to describe or explain behavior	1.1A Use psychological concepts to explain and predict behavior with sensitivity to the limitations of that knowledge
	1.1b Recognize that simple explanations rarely explain behavior adequately	1.1B Interpret behavioral phenomena at an appropriate level of complexity
	1.1c Describe how sociocultural context can shape conclusions about behavior	1.1C Provide examples in which the sociocultural context has affected research findings

	1.1d Detail why psychology is a science	1.1D Explain why psychology is a hub science

1.2 Develop a working knowledge of psychology's major subfields	1.2a Describe psychology's major subfields	1.2A Compare and contrast psychology' major subfields
1.3 Represent significant aspects of the history of psychological science	1.3a Describe historically important perspectives (e.g., theoretical orientations) in psychological science	1.3A Justify preferences for different theoretical orientations in psychological science based on perceived advantages and limitations
	1.3b Recognize major historical events and their link to trends in contemporary research	1.3B Evaluate important aspects of psychology's history, including central concerns and theoretical conflicts
	1.3c Identify influential contributions made by psychologists, including those from historically marginalized groups	1.3C Analyze historic examples of how psychologists have both challenged and contributed to unjust, unethical, or inequitable outcomes

1.4 Apply psychological content to solve practical problems	1.4a Describe examples of relevant and practical applications of psychological principles to everyday life	1.4A Apply psychological principles to clarify pressing societal needs and inform public policy
	1.4b Describe problem-solving strategies informed by psychological science	1.4B Appraise the effectiveness of psychological problem-solving strategies
	1.4c Summarize psychological factors influencing healthy lifestyles	1.4C Evaluate how psychological factors interact to influence health
	1.4d Identify how individual differences in beliefs, values, and interactions with others, may give rise to conflicts, including prejudicial and discriminatory behavior	1.4D Use psychological knowledge to identify ways to prevent or resolve interpersonal and intercultural conflicts
	1.4e Describe how psychological science has helped solve problems in applied settings	1.4E Propose appropriate psychology-based solutions in applied settings

1.5 Relate examples of psychology's integrative themes*	1.5a Describe integrative themes that appear throughout psychological science	1.5A Discuss the contributions that integrative themes make to the understanding and impact of psychological science

*Psychological Science's Integrative Themes

A. Psychological science relies on empirical evidence and adapts as new data develop.

B. Psychological science explains general principles that govern behavior while recognizing individual differences.

C. Psychological, biological, social, and cultural factors influence behavior and mental processes.

D. Psychological science values diversity, promotes equity, and fosters inclusion in pursuit of a more just society.

E. Our perceptions and biases filter our experiences of the world through an imperfect personal lens.

F. Applying psychological principles can change our lives, organizations, and communities in positive ways.

G. Ethical principles guide psychological science research and practice.

Attributes Inferred from Successful Demonstration:

Knowledgeable about psychological science   Flexible in thinking
Psychologically literate   Motivated
Capable of coping with complexity and ambiguity   Open-minded
Curious   Prepared

GOAL 2. SCIENTIFIC INQUIRY AND CRITICAL THINKING

Overview
The skills in this domain involve the development of scientific reasoning and investigation including developing proficiencies in research methods and statistics. Although these outcomes should be introduced in foundation coursework, students typically develop these proficiencies

mainly in required courses that focus on research methods and statistics. Students completing foundation courses should learn basic skills and concepts in interpreting behavior using research, studying research, and applying research design principles to drawing appropriate conclusions about behavior; students completing a baccalaureate degree should focus on designing, evaluating, and executing research plans. Research skills should reflect knowledge of and sensitivity to diversity-related issues when targeting samples in study design. Research practice should also evaluate the extent to which research findings can be generalized as applicable to groups beyond the research sample.

Outcomes Students will:	*Foundation Indicators* Students will:	*Baccalaureate Indicators* Students will:
2.1 **Exercise scientific reasoning to investigate psychological phenomena**	2.1a Define psychological research concepts (e.g., empiricism, variables, operational definitions, measurement)	2.1A Distinguish psychological research concepts in a research study
	2.1b Recognize the potential for flaws in behavioral explanations that are based on anecdotes or pseudoscience	2.1B Develop plausible behavioral explanations that use scientific reasoning
	2.1c Describe common fallacies in thinking (e.g., confirmation bias, post hoc explanations, implying causation from correlation) that potentially impair accurate research conclusions and predictions	2.1C Implement strategies to minimize the influence of common fallacies in thinking that impair accurate research conclusions and predictions

2.2 **Interpret, design, and evaluate basic psychological research**	2.2a Compare and contrast specific research methods (e.g., observational, archival, correlational, experimental, qualitative)	2.2A Select and apply the appropriate research design for a given research question
	2.2b Develop a testable hypothesis based on operational definitions	2.2B Design or replicate a research study to confirm or disconfirm a testable hypothesis
	2.2c Describe research design strategies that facilitate ruling out alternative explanations	2.2C Evaluate the extent to which research strategies rule out alternative explanations and support cause-effect claims
	2.2d Define research transparency and open science practices	2.2D Justify why psychologists are concerned about replicability, open science, and research transparency
2.3 Incorporate sociocultural factors in scientific research practices	2.3.a Recognize that research emerges from the researcher's value system and world view	2.3A Identify examples of how a researcher's value system, sociocultural characteristics, and historical context influence the development of scientific inquiry on psychological questions

	2.3b Identify potential limitations in research studies that do not appropriately consider the role of sociocultural factors	2.3B Incorporate appropriate sociocultural considerations in research design and interpretation

	2.3c Identify research conditions that allow research findings to be generalized appropriately	2.3C Evaluate the generalizability of specific findings including caution in extending western constructs in appropriate consideration of sociocultural factors
	2.3d Recognize that the focus of psychological research may narrowly reflect western concerns and biases	2.3D Incorporate international sources, including nonwestern researchers and samples, in research processes, where appropriate
	2.3e Describe how qualitative research captures variable human experiences, including those of marginalized people	2.3E Evaluate how qualitative research strategies address considerations related to equity, diversity, and inclusion

2.4 Use statistics to evaluate quantitative research findings	2.4a Describe the four scales of measurement (e.g., nominal, ordinal, interval, and ratio) used in research	2.4A Propose appropriate scales of measurement that can be used for different research purposes
	2.4b Describe the value of and/or calculate basic descriptive and inferential statistics	2.4B Apply the appropriate use of descriptive and inferential statistics to a specific research design
	2.4c Explain findings presented in data visualizations	2.4C Communicate research findings using data visualizations

	2.4d Describe how psychologists determine the statistical outcomes of their research from a scientific and ethical perspective	2.4D Distinguish and interpret practical and ethical aspects of statistical analysis
	2.4e Explain why measurement of research variables must be both reliable and valid	2.4E Identify, evaluate, or design high-quality measurement strategies that enhance reliability and validity

Attributes Inferred from Successful Demonstration:

Amiably skeptical   Careful   Collaborative   Constructively critical

Creative	Curious	Intentional	Inventive
Logical	Open-minded	Persistent	Precise
Self-directed	Self-starting	Systematic	Comfortable with ambiguity
Analytical	Skeptical		

GOAL 3. VALUES IN PSYCHOLOGICAL SCIENCE

Overview:

This goal promotes the development of ethical and socially responsible values and behaviors in personal, professional, organizational, and institutional settings. The goal includes ethical reasoning and practices, interpersonal and intercultural responsiveness, and strategies that promote and sustain strong communities and equitable opportunities. Novice students should become familiar with the formal regulations that govern ethical obligations to human and nonhuman participants in psychology and begin to embrace the values that will help them contribute to socially responsible outcomes in academic and work settings and in society. Advanced students have more direct opportunities to embrace and adhere to ethical practices that will help them optimize their personal and professional achievements and contributions. Novice students should recognize how diversity deriving from individual and intersectional differences can enrich human experience. Advanced students should be adept at navigating individual and intersectional differences. The final outcome addresses the ways in which psychological science can promote a more functional and fair society. Novice students should explore the possibilities of using psychological knowledge to build better communities. Advanced students should develop the skills to take appropriate action to improve community functions.

Outcomes Students will:	*Foundation Indicators* Students will:	*Baccalaureate Indicators* Students will:
3.1 **Employ ethical standards in research, practice, and academic contexts**	3.1a Describe the underlying values (e.g., beneficence, privacy) that should be addressed in ethical standards	3.1A Justify the use of ethical principles in research, practice, and academic contexts as well as everyday life

	3.1b Describe key principles in ethics codes relevant to psychological science for the protection of both researchers as well as human and nonhuman participants	3.1B Evaluate psychological research for adherence to relevant ethics code for research involving human or nonhuman research participants

	3.1c Describe the ethical evaluation process for approving research proposals	3.1C Prepare a research proposal to submit to a designated ethical review process
	3.1d Identify key ethical principles governing psychological practice for the protection of clients and practitioners	3.1D Apply ethical principles to dilemmas that psychologists encounter in practice situations
	3.1e Maintain high standards for academic integrity	3.1E Explain how upholding academic integrity strengthens relationships and communities
3.2 **Develop and practice interpersonal and intercultural responsiveness**	3.2a Interact sensitively with people of diverse abilities, backgrounds, and cultural perspectives	3.2A Articulate the value of and seek opportunities to interact sensitively with people of diverse abilities, backgrounds, and cultural perspectives

	3.2b Describe the need for socially responsible personal values in building strong relationships with others	3.2B Promote high standards of socially responsible personal values in interpersonal and work-related relationships
	3.2c Identify how human diversity influences interpersonal interactions	3.2C Evaluate how interpersonal opportunities and challenges develop from differences related to diversity
	3.2d Recognize how heritage, power, and privilege may produce differential access to opportunity	3.2D Seek equitable decisions and actions in allocating resources and opportunities
	3.2e Describe how racism and other discriminatory beliefs and practices harm individuals and weaken society	3.2E Identify and implement ways to reduce racism and other discriminatory beliefs and practices
3.3 **Apply psychological principles to strengthen community and improve quality of life**	3.3a Explain how psychological science can promote civic, social, and/or global outcomes that benefit others	3.3A Participate in activities that promote civic, social, and/or global outcomes that benefit communities

	3.3b Describe psychological issues of global concern (e.g., poverty, health, migration, human rights, international conflict, sustainability)	3.3B Apply psychological principles to address issues of global concern (e.g., poverty, health, migration, human rights, international conflict, sustainability)
	3.3c Recognize psychology's role in developing, designing, and disseminating organizational and public policy	3.3C Analyze the potential effects of psychology-based interventions on public policy issues
	3.3d Identify opportunities to serve others through civic engagement, including volunteer service	3.3D Serve others through volunteer service, practica, and apprenticeship experiences

Attributes Inferred from Successful Demonstration:

Trustworthy	Conventional	Fair-minded	Ethical
Rigorous	Generous	Respectful	Reliable
Community Engaged	Inclusive	Community Involved	Moral
Courageous	Beneficent	Service-Oriented	Sensitive
Accountable	Honest	Empathetic	Flexible

GOAL 4. COMMUNICATION, PSYCHOLOGICAL LITERACY, AND TECHNOLOGY SKILLS

Overview

The skills in this category address the ability of students to build and maintain effective communication skills in processing and expressing information. Novice students should develop the capacity to distinguish appropriate and inappropriate communication strategies in

developing interpersonal relationships. Advanced students should use their knowledge of equity, diversity, and inclusion to improve the effectiveness of their communication skills. Novice students should grow in their ability to express their own ideas with clarity, explain the ideas of others, discuss psychological concepts, communicate a cogent scientific argument, and present information using a scientific approach. Toward the end of their major, students should be able to communicate the results of a research study or other psychology-related project, explain scientific results, and present information to professional audiences in different formats. Students should develop psychological literacy, including applying knowledge of research skills necessary to be an informed consumer of research or critic regarding unsupported claims about behavior. Ultimately, the psychology student should have the tools and motivation to evaluate whether claims have merit. They should also develop some sophistication in using appropriate technology to improve communication outcomes.

Outcomes Students will:	*Foundation Indicators* Students will:	*Baccalaureate Indicators* Students will:
4.1 Interact effectively with others	4.1a Attend to key verbal and nonverbal message elements in communication	4.1A Distinguish between overt and covert messages in communication
	4.1b Recognize that knowledge of culture, values, and biases may reduce misunderstandings in communication	4.1B Deploy psychological concepts to facilitate effective interactions with people of diverse backgrounds

4.2 Write and present effectively for different purposes	4.2a Recognize communication content and form differ based on purpose	4.2A Craft clear and concise communications to fulfill a purpose and address specific audiences

	4.2b Express ideas that accurately reflect basic psychological concepts and principles	4.2B Construct arguments clearly and concisely from evidence-based psychological concepts and theories
	4.2c Organize ideas to fit a basic project's purpose and length	4.2C Develop ideas in formats to fit a complex project's purpose and length
	4.2d Deliver basic communication projects that meet established conventions and professional guidelines	4.2D Deliver complex communication projects that meet established conventions and professional guidelines
	4.2e Show sensitivity to audience through appropriate word choice and examples	4.2E Use inclusive language and examples in communication projects to optimize audience understanding and engagement
	4.2f Accept feedback to improve communication quality	4.2F Revise communication projects by incorporating constructive feedback

	4.2g Ask relevant questions to clarify a communicator's intended meaning	4.2G Generate questions intended to deepen or broaden the discussion related to a communication project
	4.2h Provide relevant general feedback on a communication project	4.2H Offer constructive feedback on a communication project
4.3 **Provide evidence of psychology information literacy**	4.3a Accurately summarize general ideas and conclusions from psychological sources	4.3A Accurately summarize complex ideas from psychology sources and research
	4.3b Identify how information sources differ in credibility and objectivity, favoring expert peer-reviewed scholarship	4.3B Describe the characteristics and relative value of different kinds of information sources (e.g., primary vs. secondary, peer reviewed vs. non-reviewed, empirical vs. nonempirical)
	4.3c Articulate criteria for identifying objective sources of psychology information	4.3C Evaluate psychology information based on the currency, reliability, validity, and generalizability of sources

	4.3d Describe the types of biases or errors that appear in various media	4.3D Evaluate the biases and errors that appear in various media

4.4 Exhibit appropriate technological skills to improve communication	4.4a Distinguish between professional and unprofessional electronic communication	4.4A Use electronic communication professionally
	4.4b Describe how to use digital and social media effectively and responsibly	4.4B Use digital and social media effectively and responsibly
	4.4c Identify and navigate psychology databases and other legitimate sources of information to address psychological questions	4.4C Develop comprehensive and efficient strategies for locating and using relevant scholarship to investigate psychological questions

	4.4d Use technology to create documents and presentations that professionally convey information	4.4D Use advanced features of technology to create engaging, effective, and professional documents and presentations

Attributes Inferred from Successful Demonstration:

Attentive	Comprehensible	Flexible	Investigative
Precise	Prepared	Respectful	Organized
Persuasive	Technology-oriented	Adaptable	

GOAL 5. PERSONAL AND PROFESSIONAL DEVELOPMENT

Overview:

The skills in this domain refer to abilities that sharpen students' readiness for the workplace whether the student's future involves graduate school or a job following the associate or baccalaureate degree. A background in psychological science should confer a workplace advantage because of the specific applicability of content that focuses on understanding human behavior. The skills related to this goal have been influenced by "The Skillful Psychology Student," a document developed by APA's Committee on Associate and Baccalaureate Education, that articulated what skills students will need to be successful in the 21st century. The emphasis in this domain involves self-regulation, project management skills, professional judgment, collaboration skills, and proficiency in workplace technology and career planning. Curriculum design within psychology programs needs to address how to provide explicit feedback to promote development of these skill sets over the duration of study in psychological science. These skills can be developed and refined both in traditional academic settings and internships as well as through extracurricular involvement. Educators should commit to facilitating inclusive opportunities for psychology students from different backgrounds. Campus career professionals can be enlisted to support planning and execution of goals related to selection and pursuit of a professional direction.

Outcomes Students will:	*Foundation Indicators* Students will:	*Baccalaureate Indicators* Students will:

5.1 Exhibit effective self-regulation	5.1a Describe self-regulation strategies (e.g., focused attention, time management, meeting deadlines) that can improve performance	5.1A Use self-regulation strategies (e.g., focused attention, time management, meeting deadlines) to enhance performance and develop evidence for a strong work ethic
	5.1b Accept feedback from peers, educators, and mentors to improve task performance	5.1B Incorporate suggestions from feedback from peers, educators, and mentors to improve task performance
	5.1c Identify self-awareness and self-care strategies to support and promote high quality performance	5.1C Incorporate self-awareness and self-care practices to support promote high quality performance

	5.1d Describe strategies that build resilience in relation to failed efforts or unpleasant events	5.1D Persevere when appropriately challenged by using resilience-based strategies
	5.1e Describe the impact of social change on behavior	5.1E React to change in a flexible and proactive manner that is appropriate to the context

5.2 **Refine project management skills**	5.2a Follow instructions and use rubrics to inform project execution	5.2A Adhere to or exceed project criteria in project completion
	5.2b Identify resources, potential problems, or constraints that may influence project completion	5.2B Develop alternative strategies to expand resources and overcome problems and constraints
5.3 **Display effective judgment in professional interactions**	5.3a Recognize that opinions and personalities will differ in professional and academic contexts	5.3A Accept and adapt to interaction complexity in professional and academic contexts
	5.3b Describe the merits of science-based evidence over personal opinion in solving professional problems	5.3B Develop and implement professional solutions that emphasize the value of data as evidence
	5.3c Identify how civic engagement builds relationships that can produce a positive professional impact	5.3C Engage in civic projects that can produce a positive professional impact

	5.3d Identify how different work settings express and promote specific values	5.3D Discuss how well your personal values align with particular workplaces
5.4 Cultivate workforce collaboration skills	5.4a Give evidence of making positive contributions to team-based efforts	5.4A Collaborate effectively on team-based projects
	5.4b Recognize the potential to develop stronger solutions through collaborative problem-solving	5.4B Seek diverse perspectives to maximize collaboration effectiveness and problem-solving
	5.4c Identify problems that typically develop when working with teams	5.4C Implement possible solutions to problems that develop when working with teams
	5.4d Assess basic strengths and weaknesses in one's own performance as a team member	5.4D Address weaknesses in one's own performance as a team member
	5.4e Describe leadership behavior that contributes to successful task completion	5.4E Exhibit leadership in successful task completion

	5.4f Identify potential personal biases that can influence professional judgment	5.4F Adopt specific strategies to mitigate personal biases that can influence professional judgment

5.5 **Demonstrate appropriate workforce technological skills**	5.5a Identify and use appropriate technology for completing data processing tasks	5.5A Use appropriate technology to improve work quality, efficiency, and productivity
	5.5b Express willingness to learn and adapt to changes in technology	5.5B Develop competence in adapting to changing technologies
	5.5c Conduct online interactions appropriate to the professional contexts	5.5C Establish a strategic online presence
5.6 **Develop direction for life after graduation**	5.6a Identify academic and career options based on interests	5.6A Refine academic and career plan based on accurate self-assessment of abilities, feedback from others, achievements, motivation level, and work habits

	5.6b Identify and locate appropriate career resources	5.6B Use appropriate career resources to clarify academic and career options
	5.6c Identify skill sets/ qualifications preferred by graduate program officials and employers who hire psychology majors	5.6C Collect and share evidence of attaining typical skill sets/qualifications that employers desire in psychology graduates, including preparation through internships, service-learning, and volunteer work
	5.6d Articulate the purpose of a resume or curriculum vitae	5.6D Create and maintain a resume or curriculum vitae that showcases a psychology background

	5.6e Recognize the value of participating in activities that strengthen preparation for job entry or graduate school, such as co-curricular activities, securing mentors, and networking	5.6E Gain experience and develop skills in activities that strengthen preparation for job entry or graduate school admission

Attributes Inferred from Successful Demonstration:

Adaptable	Collaborative	Confident	Conscientious
Dependable	Directed	Efficient	Industrious
Intuitive	Prepared	Reflective	Resilient
Resourceful	Responsible	Sensitive	

Guiding Principles for 3.0

The obligation to revise and update the *Guidelines* prompted members of the task force to reflect on the inherent value of the undergraduate major at this juncture in our history. This question is particularly compelling in light of predictable reports from students that they endure unenthusiastic reactions from loved ones as well as teasing and sometimes even hostility about their choice of an undergraduate psychology major. Consequently, we adopted the vision that *Guidelines 3.0* should provide robust evidence that choosing the major has far-reaching, positive implications for students and the futures they choose to pursue. We believe studying psychological science has enormous potential to transform people; students who major in psychology should develop the capacity to transform others and become agents of positive social change. We adopted the theme, **Empowering People to Make a Difference in Their Lives and Communities,** to provide inspiration for our work. In subsequent sections, we elaborate on both the philosophical and operational principles that guided the recommendations that constitute *Guidelines 3.0.*

Philosophical Principles

Several philosophical principles undergirded our discussions and the decisions that we made about the vision, mission, and content of this revision.

- **Psychological science is a transformative pursuit.** The discipline of psychology can and should be a transformative force, whether promoting change at the personal, professional, institutional, or community level (Sokol & Kuebli, 2011). Fostering change through therapeutic interventions, consultations, or behavioral research has historically been an obvious contribution psychologists can make to improve the quality of

professional and personal lives. Students can benefit from applying psychological principles to make and sustain healthy choices and to get the most out of their academic experiences. They also need to realize the potential of psychological science as a change agent for academic momentum and success (Wang, 2017), and for social policy and cultural transformation. The undergraduate curriculum should reflect that broad potential. Additionally, students should also recognize the limits of what psychological science can do.

- **Psychological science is an inclusive discipline.** Every person is welcome to learn about psychology and cultivate the related skills. Despite challenges in the history of psychological science with regard to equitable opportunity, we recognize the value of diverse voices in solving problems, large and small. In that spirit, we strived to create a document that reflects our openness and encouragement to all.

- **Psychological science should support movement toward achieving a fair, just, and equitable society.** We believe psychological science has a responsibility for providing an educational experience that contributes to achieving a fair, just, and equitable society (Davidson & Morrissey, 2011; Hulme, 2014). The discipline of psychology is unique in the undergraduate curriculum for the role it plays in shedding light on the intricacies of human interaction. As just one example, our studies in attitude formation and change lend themselves to some important tools for increasing awareness, facilitating more meaningful interaction, reducing conflicts, promoting harmony, and improving the quality of interpersonal and intercultural relationships. Consequently, the document

showcases the way psychological science can support important social and cultural changes that can improve the quality of life.

- **Psychological science should support diversity of ideas and freedom of expression.** Support for diversity addresses not just the individual and cultural differences that exist among people, but also should encompass support for the expression of diverse ideas and experiences (Samford Faculty Senate Committee on Diversity, 2013). We are careful to avoid dictating what one should believe, but instead emphasize how psychological science knowledge and skills can be applied to produce meaningful change. We also endorse the importance of critical thinking and data-informed choices that can mitigate cognitive biases and thinking fallacies inherent in human functioning.

- **Psychological science should promote attention to different global perspectives and contributions.** To thrive in an interconnected, global environment, students need to develop skill sets that will help them function effectively in interdependent global systems (AAC&U, 2007). Although psychological science has developed an intellectual stronghold in the United States, the growth of the discipline in other parts of the world is undeniable (Takooshian et al., 2016). However, we concluded that educators may not always help undergraduates recognize that psychology is a world-wide enterprise. Although we designed this document specifically to address expectations in the United States under the auspices of the APA, we acknowledge the potential that the *Guidelines* may have in influencing policy beyond US borders. A great deal of the psychological literature developed in the US (e.g., Thalmayer et al., 2021) raises questions about the degree to which we can generalize our findings to other groups. A common historical

criticism of the psychology canon is that a significant amount of published human research may have emerged from studying college sophomores. This observation reinforces that our sciences may chiefly be built on observations and measurements of WEIRD (**w**estern, **e**ducated, **i**ndustrialized, **r**ich, and **d**emocratic) populations (Henrich et al., 2010). We simply need to be less insular as a discipline. As educators, we need to remind students to look beyond traditional geographic boundaries in the intellectual sources they use when constructing psychological arguments. To that extent, *Guidelines 3.0* encourages educators to incorporate links to international scholarship that may broaden the value and applications of research, where appropriate. Psychological thinkers benefit from a conscientious pursuit of what we can learn from other countries and cultures.

- **Psychological science should reaffirm the central importance of operating from ethically defensible decisions.** Events on the world stage in the past few years called into question whether psychology's moral center had drifted (Craig et al., 2020; Wingen et al., 2020). We believe education needs to go beyond informing students of the existence of ethics codes by helping students understand and embrace the principles that drive ethical reasoning with the goal of building a just, fair, and honorable society. Students need to recognize how behaving with integrity builds stronger interpersonal and professional relationships and engage with others in a way that promotes perceptions of reliability and trustworthiness.

- **Psychological science should continue its leadership in conducting and advocating open science practices.** Recent concerns with whether the findings of psychological

science are valid and reliable underscore the importance of embracing and teaching open science practices (Nosek, 2019). Rather than adopting a defensive posture regarding the existence and magnitude of reported replication failures, psychologists should feel pride in their willingness to be transparent about their research process and have their results scrutinized. This perspective means that some of the traditions related to empirical research have been changing and need to be communicated to students as reinforcement for how contemporary psychological science should operate.

- **Psychological science students should have a well-rounded grasp of both psychology's accomplishments as well as its failings.** Psychology has a checkered history with regard to its ethical practices (Sinclair, 2017). Although we can cite historical episodes in psychology that demonstrate violation of ethics or moral codes, we also need to emphasize the degree to which psychologists undergo checks and balances to ensure that scientific conclusions are sound and therapeutic processes are selected and properly delivered. Research participants, therapy clients, researchers, and practitioners all should be protected from harm. Because negative episodes tend to garner more attention, we support the strategy that the curriculum needs to balance the historical blights on the discipline with the psychologists' contributions to building a stronger society.

- **Undergraduate programs should do a better job in preparing students who enter the workforce after graduation.** Students who graduate with a degree in psychology should be well-prepared for the 21st century workplace to assume a psychology-related future, whether that future involves entering the workforce or pursuing additional education in

graduate or professional schools (Dunn & Halonen, 2020). Psychology programs have been fairly effective in preparing students for graduate school. However, the majority of students who earn a baccalaureate degree will enter the workforce rather than go to graduate school (See APA's interactive data tool, Degree Pathways in Psychology: https://www.apa.org/workforce/data-tools/degrees-pathways.aspx).

Workforce-sensitive programs will serve the majority of undergraduate majors far better than programs focused primarily on producing good graduate school candidates. This characteristic may prompt some broad curriculum reform to help students understand the degree to which a background in psychological science will inform and enhance their workforce lives. This emphasis will reinforce students' perceptions of the vital link between their psychology major and their occupational choices. Employers place great value on a new hire's ability to think critically, communicate, collaborate, and reason ethically (Finley, 2021), which aligns with the goals supported in *Guidelines 3.0* .

- **Psychological science majors should become important ambassadors who can help correct public misperceptions about the nature of the discipline.** Psychological science suffers in the public eye from some fundamental misunderstandings about the nature of the discipline (Dunn & Halonen, 2020). Every student who completes a degree in psychology has the potential to be an ambassador for the discipline not just in correcting the public view of the discipline, but also in shedding light on other big societal issues. Students will benefit from programmatic encouragement to "seize the narrative" in public discussions about the true nature of psychological science, both as a

matter of accurate and effective self-assessment about what psychological thinkers can accomplish, but also to assist the public in avoiding misconceptions and gaining a clear understanding of the value of psychological thinking in addressing the challenges that face us in the 21st century.

Operational Principles

We concentrated on several design features that helped us with the *Guidelines 3.0* revision:

- **Remain aspirational rather than prescriptive.** The *Guidelines* do not rise to the level of standards that must be achieved or some negative consequence will transpire. However, the document should inspire local discussion to help programs forge their optimal curricular and assessment planning that considers recognized national practices as well as local distinguishing features. Programs should be able to adapt or amend to capture any distinctive features of their program from an informed basis. The emphasis of the document is on what students should be able to know and do upon completion of a two or four-year experience in the psychology major. Although the document is not prescriptive, we stand by the presentation of characteristics of the learner as what would be reasonable to expect to provide some appropriate goals for students and the programs in which they are learning. We offer some strategies to promote effective collaboration on curriculum in the implications section of this document.

- **Retain the overall goal and outcome structure.** Guidelines 2.0 proved to be useful in curriculum planning and accountability practices; therefore, we elected not to change the fundamental structure. That configuration contributed to the widespread adoption

and use of Guidelines 2.0. Student learning outcomes continue to provide benchmarks for preferred practices; Indicators continue to illustrate how we would gather evidence to document that the outcomes have been achieved. We hope to maintain a place of central importance in national curricular/assessment planning and implementation achieved by Guidelines 2.0 but reflect issues of emerging importance over the past decade in Guidelines 3.0.

- **Remain content "agnostic."** For the most part, we do not dictate a specific curriculum or endorse specific content that should be "covered" in achieving the outcomes. How educators address the goals and outcomes should reflect respect for academic freedom. The emphasis in *Guidelines 3.0* addresses additional skill development to produce well prepared majors for the workforce as well as graduate and professional schools. Notably missing from this document are recommendations about course requirements and sequencing as well as specific content that should be taught. We believe content can be addressed with some flexibility if the outcomes themselves are discernible in curricular and assessment design.

- **Reinforce "novice to expert" continuum in skill development.** Complex skills tend to develop over time prompting educators to design educational experiences that foster skill growth over the course of the major (Kalyuga, 2015). This reality should prompt programs to explore how the contributions of individual courses will contribute to cumulative program expectations regarding what students should know and be able to do in their major. We have arbitrarily designated two levels to capture novice-to-expert growth at the midpoint and endpoint of the undergraduate career. We have heavily

relied on terminology from Bloom's Taxonomy (cf., Anderson & Krathwohl, 2001) to differentiate lower versus higher order expectations within the major. We have also tried to stay away from expressing indicators that may be problematic for measurement, such as "understand" or "appreciate." Wherever possible, the outcomes and indicators should lend themselves to observable and measurable behavior.

- **Should be useful to students.** We want students to know about and use *Guidelines 3.0* to enhance their educational success and workforce readiness.

- **Make the ideas practical and accessible.** We wanted to ensure that the indicators we are suggesting were manageable and reasonable across the variable contexts in which psychology programs operate. The language in the document should be user friendly for both faculty and students alike. Consequently, we strive for the simplest expression possible in our recommendations. We are aware that arguments could be made to have specific skills show up in more than one goal. We attempted to use descriptions that limited the use of exemplars ("e.g.") to avoid cataloging and minimize the risk of generating offense by omitting preferred examples of specific stakeholders. For the purposes of simplification, we occasionally consigned a skill to one specific category. When the outcomes or indicators overlapped, we tried to augment the description with qualifiers that addressed why a variation of that outcome or indicator fit in a specific category. Our goal was to reduce redundant information, where appropriate.

- **Integrate prior relevant work.** We saw *Guidelines 3.0* as an opportunity to integrate past related work from APA task forces to produce continuity among related education improvement efforts. Consequently, we align our work with recent outcome-focused

work completed in the following efforts: the Introductory Psychology Initiative (APA

IPI); Strengthening the Common Core; the Equity, Diversity, and Inclusion statement;

the Ethics Report, among others. Our work also reflects preferred practices contributed

from other organizations or disciplines (e.g., AACU, 2007).

- **Accommodate diverse contexts that deliver undergraduate psychology programs.** We

  recognize that the content of the *Guidelines* has potential impact for a variety of

  educational contexts, including high school, college, and even graduate training. The

  variety of contexts that deliver the undergraduate major is quite varied (e.g., public vs.

  private, religious affiliated, selective vs. nonselective). Program sizes differ. Access to

  resources differ. Programs can be strictly face-to-face or fully online. Heterogeneity of

  both student bodies and faculty who teach them vary as well. In this document we

  strive to be as inclusive as possible with a framework that can be adapted to any

  undergraduate context. We designed the document to be hospitable and usable across

  varied institutional contexts and modes of delivery, regardless of their differences.

- **Any outcome or indicator outlined in *Guidelines 3.0* should be assessable.** Task forces

  associated with prior versions of the *Guidelines* were conscientious about assisting

  faculty to assess the outcomes specified in the documents. That intention has only

  increased in importance as regional accrediting bodies add pressure regarding the

  evidence psychology programs can offer about their claims for academic success. We

  believe that any indicator can be assessed and hope that the *Guidelines 3.0* will

  encourage the publication of more assessment strategies to support this claim.

- **Outcomes should represent realistic expectations for psychology majors in 2- and 4-year programs.** The aspirational intent of the earlier versions of the *Guidelines* produced a more idealized set of expectations that did not always clearly lend themselves to precise assessment strategies. Feedback from *Guidelines 2.0* suggested that many of the indicators, especially at the baccalaureate level, may have overshot what could be accomplished by the majority of students in a 4-year degree. Although we acknowledge that baccalaureate level students are not likely to be true disciplinary experts (a term that might be better reserved for graduate education and beyond), we did envision what a reasonably competent graduate should be able to do when we constructed or revised the baccalaureate level goals. Consequently, we focused on what could be realistically achieved by undergraduates at the two- and four-year levels.

Summary of Changes and Improvements from *Guidelines 2.0*

Because *Guidelines 2.0* was popularly received and drove significant curriculum and assessment discussions in the last decade, the challenge to revise encouraged us to be visionary about what the updated *Guidelines 3.0* could accomplish. We asked for feedback and also attended to emerging literature on the impact of the *Guidelines* (Norcross et al., 2016), Besides fine-tuning the outcomes and indicators that would normally transpire in a routine policy update, this document reflects some overarching themes that drove our decision-making in how undergraduate education might change to meet the demands of the 21st century.

Changes in Structure

We have revised some of the titles of the goals in keeping with some of the modifications we propose. We maintained the five-goal structure that emerged in Guidelines 2.0 since those emphases remain at the core of what should transpire in undergraduate education. We are aware that significant scholarship of teaching and learning builds on *Guidelines 2.0,* including the development of APA's *Project Assessment.* We summarize the key differences in goal titles or content below:

- Goal 1 has been retitled, "Content Knowledge and Applications," which addresses not just expertise in comprehending and describing basic terminology and theories but expands to include how such psychological science content can be applied.

- Promotion of psychology as a science continues to be a central consideration in the *Guidelines,* reflected primarily in Goal 2. We retained the label of "Scientific Inquiry and Critical Thinking." However, we also expanded attention to statistical reasoning, which

surfaced as a key omission from *Guidelines 2.0.* The new indicators reflect the vigorous discussion that has been transpiring about expanding considerations on how to interpret research findings statistically.

● We have modified Goal 3 with a name change to provide a showcase for "Values in Psychological Science." Equity, diversity, and inclusion were themes not just housed in Goal 3 but addressed throughout the document where relevant. We retained the importance of building and using psychological knowledge and skills to develop interpersonal and intercultural competence, but also increased the importance of psychology's role in addressing community, national, and global issues.

● The scope of Goal 4 has changed as reflected in the title, "Communication, Psychological Literacy, and Technology Skills." This goal continues to emphasize how psychology majors write and speak reflecting the discipline, but we have added attention to managing technology as well as selecting and processing information.

● Goal 5, "Personal and Professional Development," expanded to address important work accomplished in linking psychology undergraduate education with what employers seek in their hires. To those ends, we have incorporated attention to teamwork skills and the ability to adapt to organizational culture to improve the preparation of students who either head into the workforce after graduation or move into graduate or professional studies.

Changes in Emphases

● **Psychological Science Endorsement.** The task force recognizes that the very designation of academic units has been undergoing review and reform. Although many still identify

as "psychology" programs, many others have embraced strengthening the scientific

emphasis with unit names that emphasize "psychological science." We sympathize with

the argument that psychology should not need to make the tie to science explicit since

our colleagues in the natural sciences do not go to these lengths. For example, we do

not see a comparable movement to brand undergraduate programs as "chemical

science" or "biological science." However, psychology educators face a different kind of

legitimacy battle in the eye of the public since the ties of psychology to science are

perceived to be more tenuous. Consequently, we have strategically applied the

designation of psychological science throughout *Guidelines 3.0* to reflect emerging

contemporary practice. We incorporate the term "psychology" when we allude more

generally to the discipline of psychology.

- **Workforce Preparation.** Students who graduate with a degree in psychology should be

  well-prepared to assume a psychology-related future, whether that future involves the

  workforce or additional education in graduate or professional schools. Historically,

  departments have done a defensible job in preparing students for graduate school, but

  we believe that the majority of undergraduate majors--those who choose to enter the

  workforce upon graduation—often end up neglected in their undergraduate pursuits by

  faculty who are better prepared and more focused on graduate school prospects. As

  such, in most programs the graduate-school bound students tend to receive substantial

  privileges that are not accessible for workforce-oriented students (Halonen, 2013). One

  serious consequence of this two-tiered status is that workforce students often

  disconnect their professional identities with their major; if they do not go to graduate

school, they encode "I'm not doing anything with my degree." We think departments need to develop learning opportunities for workforce students that feel honorable and reinforce their connection to their undergraduate degrees. That stance encourages faculty to be explicit about how their courses have the potential to hone skills that will have value in the workplace.

- **EDI matters.** Although attention to diversity concerns has historically been incorporated into previous versions of the *Guidelines,* the current task force focused more extensively on the obligation of psychological science to contribute to fairness and justice. We addressed equity, diversity, and inclusion (EDI) issues in Goal 3 as a fundamental and deeply held value in psychology. However, we also conscientiously infused aspects of diversity into other goal areas. The stance taken in this document is more forthright about psychology's obligation to make conditions more equitable and inclusive.

- **Global considerations.** Our process involved conferring with both domestic and international experts on how educators across the globe deliver the discipline at the undergraduate level. Past versions of the *Guidelines* have been influential in setting expectations beyond the United States for undergraduate student performance. To those ends, we were careful incorporating generic language that might be easier to apply across international boundaries.

- **Ethical prominence.** In parallel with task force work undertaken by the APA to improve ethical understanding and adherence to codes of conduct, we elaborated expectations for undergraduate performance. We expanded the focus to include research, practice, and academic contexts. We also chose to emphasize the principles that underlie ethical

codes to encourage students to appreciate the practical value of having codes that govern professional behavior. Our emphasis includes the role that ethical behavior plays in building and maintaining interpersonal relationships.

- **Statistical updating.** One of the areas in which *Guidelines 2.0* received critical reviews was the underrepresentation of measurement and statistics. We have rectified that problem by elaborating the advantages of using statistics in drawing conclusions about the potential value of research. We incorporated expectations regarding scales of measurement, data visualization, and psychometric criteria that emphasize conclusions about reliability and validity. We also incorporated references to "new statistics" to reflect emerging preferred practices in courses dealing with methods and statistics.

- **Methods elaboration.** We have included expectations that draw distinctions between quantitative and qualitative research, highlighting the relevance and importance of both general approaches in addressing research questions.

- **Thematic adoption.** We incorporated the seven themes that characterize the discipline of psychology that were developed by the American Psychological Association Introductory Psychology Initiative (APA IPI). We expect that students should be conversant in those themes throughout undergraduate study with refined ability to discuss the impact of those themes by the end of their undergraduate experience.

Putting the Guidelines into Action

Engaging Program Personnel in Curricular and Assessment Planning

Guidelines 3.0 provides a framework to facilitate the development of effective undergraduate programs. We recommend a collaborative approach in which everyone involved in delivering the program is also involved in decision-making (Dunn et al., 2020). In addition to the *Guidelines*, helpful guidance about breadth, coherence, sequencing, and other aspects of effective programs may be found in the *APA Principles for Quality Undergraduate Education in Psychology* (see Appendix A).

Faculty vary in their level of passion about program planning, but all have a stake. Curriculum and assessment procedures are more likely to be effective when they are the product of a team effort. It may be useful to remind those who are less enthusiastic about program planning that their participation is an opportunity to have more agency in the future of the program. Another helpful strategy is for program leaders to communicate regularly about assessment and recognize faculty for their efforts (Dunn et al., 2020).

Program assessment in particular is often perceived as a burden imposed by outside forces (Halonen et al., 2020). Clearly, programs must meet expectations of their institutions, accrediting agencies, and various stakeholders. Yet, faculty can and should tailor their program to their priorities, institution, available resources, and student population. Framing assessment as a way of supporting student learning, as opposed to additional work that generates data for reports that may go unread, can reduce the level of burden that faculty perceive.

We have structured *Guidelines 3.0* to address variable accountability practices. We designed the *Guidelines* around five goals with corresponding student learning outcomes and

indicators that reflect expected achievement. Assessment decision-makers can determine how best to incorporate those two levels in the development of the assessment plan. For example, a program striving to be comprehensive in their expectations for graduates may build its assessment plan from the outcomes that best illustrate the distinctive nature of its program. On the other hand, building assessment plans that treat the goals as program outcomes provides more variability in the specific assessment targets a program may pursue. In this case, multiple assessment strategies could be used to document progress made, for example, in Professional Development. Similarly, faculty who are focused on assessment within courses may find the indicators to be most helpful in developing their teaching and learning strategies. Regardless of how educators technically frame their expectations, regional accrediting bodies encourage faculty to be able to support claims of excellence with evidence based on student performance.

Each institution is likely to have an assessment cycle that specifies when reports are due, but programs will benefit from including assessment procedures as part of their ongoing business. Being proactive about assessment work is likely to result in more thoughtful decisions. Spreading the work out over time will also reduce the onerous aspects of attempting to get everything done in one long meeting. An effective assessment infrastructure for a program will include clearly delineated responsibilities. For example, the program should decide whether one person should serve as the assessment point person, whether activities should be coordinated by an assessment committee, and whether administrative support could be made available. Sustainability of assessment efforts can be improved by distributing the workload in an equitable way. Individuals who take on major roles in assessment should receive

compensation, such as stipends, release time, and recognition for promotion and tenure decisions.

A Call to Action

We recommend judicious preparation for program planning meetings. Effective preparation should include sharing an agenda that identifies specific goals for each meeting; scheduling adequate time, including breaks, to accomplish the goals; and providing relevant documents with the expectation that participants will review those materials in advance. It may be tempting to focus on refining assessment procedures, but it is crucial to also use the data for program improvement (Dunn et al., 2020). Reviewing the data should lead to changes in program delivery such as curriculum revision and improved teaching methods. "Closing the loop" in this way may lead faculty to be more enthusiastic about assessment.

Assessment planning should be realistic. If the plans are too complicated or burdensome to carry out, the effort expended to design them will have been wasted (Dunn et al., 2020). Program personnel should strive, where possible, to simplify and automate processes that generate meaningful data. Borrowing from the wisdom of Voltaire, perfect should not be the enemy of good.

Implications of Guidelines 3.0 for Introductory Psychology/High School

Although the *Guidelines 3.0* are helpful to high school and college instructors who advise students in their pursuit of a psychology degree, they may have limited usefulness in teaching Introductory Psychology. Rather, high school teachers should rely on the APA National Standards for High School Psychology Curricula and Introductory Psychology instructors at colleges should look to APA's Student Learning Outcomes for Introductory Psychology, and the

larger scope of work recommended by APA's Introductory Psychology Initiative in the book,

Transforming Introductory Psychology. We include a summary of the proposed outcomes in

Appendix B.

Implications of *Guidelines 3.0* for Community College Contexts

Community college psychology professors teach lower-division courses and prepare

transfer-directed students for academic success in upper-division psychology programs. Our

commitment to our students' success after transfer requires aligning our programs'

foundational outcomes with the baccalaureate outcomes at our transfer colleges and

universities.

Community college faculty indicated that the original Guidelines did not speak well to

the educational experiences offered in a two-year program. In response, *Guidelines 2.0*

differentiated two-year outcomes from baccalaureate achievements. The

Foundation/Baccalaureate differentiation proved helpful in *Guidelines 2.0.* Consequently, this

task force has retained that format and refined the outcomes and indicators for this current

version. The learning indicators presented in *Guidelines 3.0* reflect extensive community college

input, mainly on the foundational content. Five experienced community college teachers served

on the Guidelines task force. Community college psychology faculty can make effective use of

Guidelines 3.0 in several ways. The foundational outcomes can be helpful when our

departments review and update two-year psychology-oriented curricula, articulate program

and course student learning outcomes (SLOs), design assessment activities, and engage in

academic program reviews. *Guidelines 3.0* can also be useful for justifying requests for essential

instructional resources, particularly when faculty can base program needs on preferred national

practices. In addition, the *Guidelines* make a case for revisiting state regulations about what courses departments can and should offer at the two-year level.

Tips on Program Planning

The outcomes presented in *Guidelines 3.0* are aspirational and not prescriptive. We do not propose them as a 'one-size-fits-all' set of learning outcomes. Local factors will, of course, affect how the psychology faculty can incorporate *Guidelines 3.0* into their programs. For example, some community college programs offer a restricted range of the most basic psychology courses, primarily emphasizing General Psychology. In those settings, both the Foundation indicators and the outcomes specified by the Introductory Psychology Initiative will be the most useful in program planning. Other contexts offer a broad range of courses that would be comparable to the options available in four-year settings.

Using the Guidelines to Leverage Resources and Strengthen the Program

In preparing their three-year program review report, one department used *Guidelines 2.0* learning indicators to argue for and eventually hire a tenure-track faculty position. Another department used *Guidelines 2.0* to justify, equip, and staff an introductory psychology lab. Psychology faculty at another community college used *Guideline 2.0* indicators to support placing psychology courses (e.g., General Psychology, Statistics, Biopsychology, and Critical Thinking) on their college's recommended course completion pattern for all AA and transfer students. Another department used the Guidelines to create a comprehensive transfer-ready assessment instrument designed explicitly for psychology majors. The Guidelines have encouraged some departments to implement new courses (e.g., Critical Thinking, Career Development, Cognition). Numerous departmental faculties refer to *Guidelines 2.0* when

identifying course and program SLOs and developing corresponding assessment tools and strategies.

When making a case for new resources or support, faculty can invoke *Guidelines 3.0* as an arbiter of what constitutes best practice. Many administrators may not be aware that the APA has put forth effort to produce a document that identifies what the best programs are doing to serve their students. Linking resource requests to any relevant program metrics (e.g., student retention, graduation rates, alumni earning power) tends to be more successful, so determining how specific implementation of the guidelines improves program performance metrics will have greater appeal for administrators who manage funding decisions.

Articulation Challenges

Community college psychology programs in many states offer Introductory Statistics and Research Methods courses, whereas course articulation rules in some states prohibit the inclusion of those courses from the curriculum. Due to such statewide restrictions, community college transfer students may arrive at their university already disadvantaged compared to "native" students (who began their studies as university first-year students). Without statistics and research course preparation, transfer students must compete with native students who have already completed them. Another consequence is that transfer students may find themselves less competitive when seeking research lab positions. Even more troubling is that many transfer students in psychology's academic and career pipeline come from historically underrepresented ethnic backgrounds, and many are first-generation college students. Because of this articulation barrier existing in contexts that prohibit these basic but essential courses, community college psychology teachers must find alternative ways to help their students

acquire foundational statistics and research experiences and skills before graduating with an

associate degree and transferring. Strategies include embedding research projects in existing

courses or implementing a research lab in the Introductory Psychology course. Other ways

include, but are not limited to, forming a research committee within your psychology club or Psi

Beta chapter, hosting an on-campus student research conference, and supporting student

attendance and participation in a professional psychology conference. Despite being in a more

restrictive state, one enterprising department successfully negotiated an articulation

agreement with the psychology department at their primary transfer college; their community

college program now provides transferrable introductory statistics and research methods

courses.

A Call to Action

We encourage community college educators in psychology to explore how *Guidelines 3.0* can support high-quality courses in two-year contexts. First, widespread support for *Guidelines 3.0* can help reinforce consistency in performance expectations despite differences in context so that students know what skills, experiences, and knowledge we expect them to acquire. Therefore, introducing students to *Guidelines 3.0* can help them. Second, *Guidelines 3.0* can help programs mount compelling arguments for securing needed resources by demonstrating aspirations for accountability and improvement. Finally, the *Guidelines* can serve educators who want to redesign articulation agreements by arguing for relevant access to courses at the two-year level. That stance might not only address the inconsistent treatment of research and statistics but might also justify expanding electives in two-year programs.

Considerations for Occupational Destination:

Workforce vs. Graduate School Readiness

Students who graduate with a degree in psychology should be well-prepared to pursue a psychology-related future in the 21st century workplace, whether they enter the workforce with an undergraduate degree or proceed to graduate or professional school. Many students major in psychology because they are interested in the subject matter, and they have not yet selected a career path. Some students choose the psychology major because they aspire to be psychologists, counselors, or professors. After studying psychology in greater depth and learning more about their own interests and the opportunities that are available, students often realize by their senior year that continuing with graduate school is not for them. These students should recognize that successful completion of an undergraduate degree with a major in psychology is a substantial achievement in and of itself and one that has well prepared them for a wide range of career opportunities. However, savvy psychology majors recognize that they should be actively preparing for a psychology-related career throughout their undergraduate experience, including taking advantage of extracurricular and other enrichment opportunities that will help them be even more competitive on the job market.

Although this section focuses on career options for students completing four-year degrees, we should acknowledge the contribution of two-year degrees in promoting students' occupational outcomes. Certainly, completing an associate's degree with coursework in psychology helps students make informed decisions about future educational and career pursuits, helps them gain access to four-year institutions, and contributes to their understanding of behavioral principles that will apply to virtually any career they choose to

pursue. Additionally, students who have earned an associate's degree have lower

unemployment (Bureau of Labor Statistics, 2016), and earn significantly more than students

whose educational attainment is limited to graduation from high school (Bureau of Labor

Statistics, 2021).

Career Opportunities for Psychology Majors

As shown in Figure 1, a background in psychology can lead to a plethora of employment

opportunities. The APA Center for Workforce Studies (https://www.apa.org/workforce) collects

and disseminates data regarding degrees awarded and post-graduation career pathways for

students who complete an undergraduate degree in psychology. In contrast with the common

criticism, that "you can't get a job with just a baccalaureate degree", the APA Center for

Workforce Studies provides evidence of the breadth of workplace contexts that can provide

meaningful and profitable employment for those who achieve a four-year degree.

Figure 1.

A Breakdown of Careers for Bachelor's Degrees in Psychology in 2019 (APA, Center for

Workforce Studies)

Source: American Psychological Association (2019).

Based on National Science Foundation data that includes 3.7 million students who

earned a bachelor's degree in psychology (APA, 2019), psychology majors follow three primary

career paths upon graduation:

- Careers that can begin with a bachelor's degree (57%)

- Professions requiring graduate degrees in psychology (14%)

● Other professions that require graduate degrees (29%)

Psychology should prepare students for the careers they are most likely to pursue upon graduation.

According to the APA Center for Workforce Studies (APA, 2019), the majority of psychology majors enter the workforce with their bachelor's degree. The most common occupational outcomes include positions in social work (11%) or counseling (7%); administrative (9%), management (7%), service (6%) personnel (4%), or sales and marketing (3%); and preschool or elementary teaching (5%; APA, 2019). These commonly held positions only account for 52% of careers pursued by psychology majors with an undergraduate degree—consequently, the range of opportunities is very broad. Outstanding resources that can help psychology students consider how their undergraduate experiences can prepare them for career opportunities include Dunn and Halonen (2019), Kuther and Morgan (2019), and Landrum and Davis (2020). See Boysen (2020) for a great resource for students who wish to go on to graduate school in psychology.

Historically, psychology departments frequently have demonstrated a stronger orientation toward offering coursework and opportunities that may be most helpful to majors who wish to pursue graduate education; the pursuit of psychology careers requiring doctoral-level training is often vaunted as the ultimate goal for psychology majors. Consequently, those programs may do a very effective job of preparing future graduate students but may inadvertently neglect those who choose instead to enter the workforce. As illustrated in Figure 2, in reality, few psychology majors achieve the goal of graduate education. In fact, of the 3.5

million psychology bachelor's degree holders, only 1 in 7 go on to obtain a graduate degree in psychology (National Survey of College Graduates, 2017).

When faculty interact with students, they should appreciate the value of the broad diversity of career pathways open to psychology majors. Faculty should commit to helping all psychology majors identify the specific knowledge and skills they are developing in their course of study so they can effectively leverage those experiences to pursue unique career goals. Students who discover their own interests, who nurture their strengths, and find their calling with an occupation that helps them to pursue a meaningful life should believe that their undergraduate psychology experiences were valuable to their life journey. Students who do not pursue psychology or psychology-adjacent professions should never conclude that they are "not doing anything with their bachelor's degree in psychology." This claim is rarely accurate. Undergraduate psychology students develop a deep understanding of behavioral science principles and skills that are applicable to almost every career pathway.
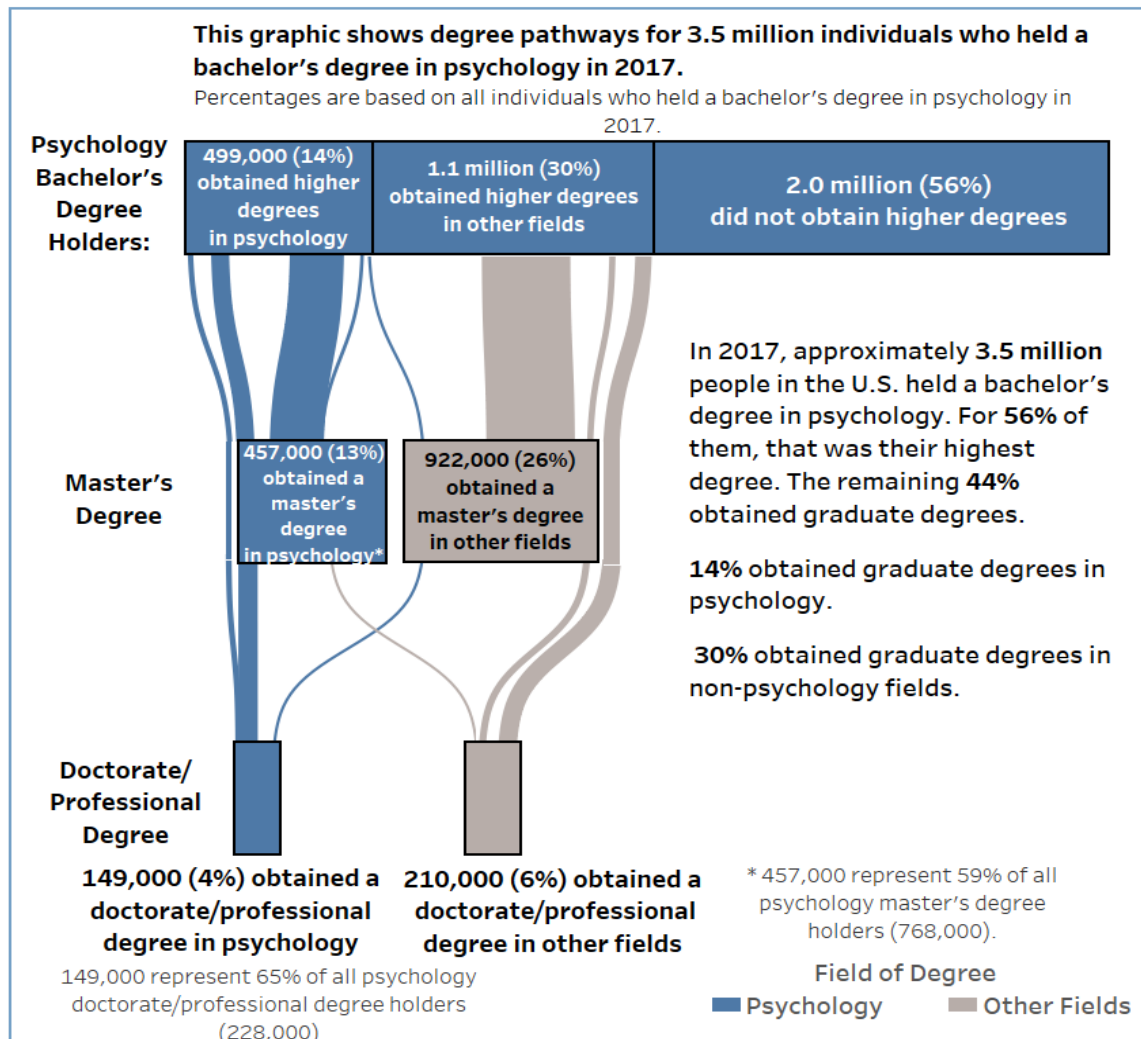
A minority of psychology majors pursue careers requiring graduate school in psychology. Of the psychology majors who complete a graduate degree in psychology, the master's degree in psychology is the most common. Only 3.8% of psychology majors earn a doctoral degree in psychology. Preparation for graduate work in psychology is an important goal of the psychology major, but since a minority of our students follow this pathway, programs should not overemphasize this career outcome or consider it the ultimate goal for the psychology majors. Fortunately, focusing on the undergraduate goals and outcomes that qualify students for entry into the workforce also will facilitate solid preparation for graduate and professional school. Many psychology majors pursue careers that require graduate or professional degrees that are

technically outside of psychology but reap benefits from their background in psychology. APA (2019) reports that the most popular option is education (25%), including teaching, special education, and educational administration. Other psychology-related options include law and other legal studies (21%); medicine and health professions (19%); social work (18%); counselor education (7%); and business and management (5%).

Figure 2 captures a representative year (2017) to demonstrate the professional pathways that psychology majors pursued, including those in psychology as well as those in related disciplines.

Figure 2.

2017 National Survey of College Graduates in Psychology

This graphic shows degree pathways for 3.5 million individuals who held a bachelor's degree in psychology in 2017.

Percentages are based on all individuals who held a bachelor's degree in psychology in 2017.

Psychology Bachelor's Degree Holders:

499,000 (14%) obtained higher degrees in psychology

1.1 million (30%) obtained higher degrees in other fields

2.0 million (56%) did not obtain higher degrees

Master's Degree

457,000 (13%) obtained a master's degree in psychology*

922,000 (26%) obtained a master's degree in other fields

In 2017, approximately **3.5 million** people in the U.S. held a bachelor's degree in psychology. For **56%** of them, that was their highest degree. The remaining **44%** obtained graduate degrees.

14% obtained graduate degrees in psychology.

30% obtained graduate degrees in non-psychology fields.

Doctorate/ Professional Degree

149,000 (4%) obtained a doctorate/professional degree in psychology

149,000 represent 65% of all psychology doctorate/professional degree holders (228,000)

210,000 (6%) obtained a doctorate/professional degree in other fields

* 457,000 represent 59% of all psychology master's degree holders (768,000).

Field of Degree
■ Psychology   ■ Other Fields

Source: American Psychological Association (2019).

For further information on professional opportunities, see APA Degree Pathways in Psychology:

https://www.apa.org/workforce/data-tools/degrees-pathways.aspx

21st Century Workplace Skills

When students complete psychology majors that reflect the goals and outcomes of the

Guidelines, they will become *Skillful Psychology Students* (Naufel et al., 2018) who are well

prepared for a wide range of professional opportunities. Psychology students have the

opportunity to develop the cognitive, communication, personal, social and technological skills that are necessary for success in the 21st century workplace.

Many of the skills cultivated through the undergraduate study of psychology have been identified as highly valuable by executives and hiring managers according to a survey commissioned by the Association of American Colleges and Universities (Finley, 2021), including the following:

- Critical thinking and complex problem solving

- Locating, evaluating, and using information in decision making

- Analyzing and interpreting data, including working with numbers and statistics

- Making sound decisions and ethical judgments

- Communicating in writing and presentations

- Communicating/working with people from different cultural backgrounds

Employers place great value on the same experiences that psychology programs and graduate program admissions committees recommend including:

- Completing Internships, apprenticeships or work experiences

- Working with mentors individually and research project experiences

- Collaborating with people from diverse backgrounds

Employers appreciate applicants who have skills and experiences that are developed during the psychology major; they particularly value candidates who can relate their skills and experiences to the positions for which they have applied.

Unfortunately, many students cannot clearly articulate what they know in ways that apply to a wide range of career options. Graduating students don't always see the connection

between the psychology outcomes they have achieved and their value for workforce positions. The ability to articulate psychology-related skill sets may be even more important given the rise in applicant tracking systems (i.e., bots) that screen out candidates who fail to represent targeted terms. As such, psychology program faculty need to develop opportunities for all students to reflect on what they have learned during their psychology major and how the variety of information and skills applies to any career and their general preparation for life. Opportunities should transpire in the academic advising process as well as in many courses throughout the major. Faculty should address specific skills promoted within their class activities in their syllabi, assignments, and rubrics to help students develop greater facility in understanding the skill sets they are developing in the major. A well-designed capstone course can be especially effective at helping students integrate what they have learned and facilitate making meaningful connections to a variety of career paths.

Students pursuing any psychology-related career opportunity should feel confident that their decisions are justifiable, honorable, and consistent with the goals of an undergraduate psychology program. Psychology faculty help students develop the knowledge and skills that prepare students for a wide range of career opportunities and make career decisions that are right for them. The psychology major curriculum should:

- Develop student's knowledge and skills that are applicable to a wide range of career opportunities;
- Ensure that majors develop a strong working knowledge of the broad range of career options available to psychology majors;

- Help students recognize how that knowledge and skills they have developed as psychology majors are applicable to a range of careers both inside and outside the field of psychology.

Employers and post-graduate programs in all fields will appreciate the broad knowledge and skills developed by students who complete programs that include substantial focus on all five goals articulated in these guidelines.

Advice on Using the Guidelines for High-Achieving Students

Guidelines 3.0 specifically targets the kinds of outcomes that we should expect of any student graduating with a degree in psychology. Achieving the outcomes represents a general statement of fitness as a psychological thinker with an undergraduate background. However, for students who have set their sights on some form of graduate or professional education or other highly competitive career opportunities, faculty need to encourage them to strive to exceed the competence levels specified in the *Guidelines* and seek opportunities for experiential learning on campus and in the community through additional classwork, research experiences, internships, volunteerism, and/or employment. Students who demonstrate their motivation and initiative are more likely to impress graduate school admission committees and potential employers.

Faculty who use the *Guidelines* to create performance rubrics may benefit from thinking about categorizing performance in one of three tiers: Exceeding Expectations, Meeting Expectations, or Not Meeting Expectations. Incorporating some judgment about exemplary performance can encourage students to invest in higher quality work and potentially inspire greater creativity. Consistent high-level performance is more likely to generate favorable

recommendation or reference letters and other high impact opportunities to build a persuasive case for admission or hiring.

A Call to Action

Faculty must help students leverage what they have learned to pursue a wide range of post-graduation opportunities (i.e., Skillful Psychology Student; Naufel et al., 2018) . As illustrated in Figure 1, presenting a wide range of career opportunities available to psychology majors during coursework and career advising throughout the psychology major program will help students recognize that the major supports diverse occupational goals, not only for students who complete graduate school in psychology.

Experiences beyond the basic requirements of the psychology major may be critical to help students achieve their goals. To prepare students for the workforce and professions requiring graduate or professional school outside of psychology, students may need to complete specific coursework or engage in internships, work, or volunteer experiences in settings relevant to the student's chosen profession. Selected coursework and extracurricular activities that may include pre-professional programs (such as pre-health or pre-law), minors, or second majors can provide persuasive evidence of fitness for specific career goals.

The quality of career advising often shows up as a common complaint when students address program weaknesses during program evaluations. Most campuses provide faculty and staff advisors who focus on career and pre-professional questions; however, students' questions about how to find jobs after graduation may surface in other academic interactions in and out of the classroom. Traditionally trained faculty often feel underprepared to respond to career-related questions that don't reflect their own experiences.; however, we should not be

satisfied with sidestepping this critical issue since it is of paramount importance to student satisfaction with the major. This obligation becomes even more compelling when we consider the substantial debt loads students may have to bear upon graduation. Psychology faculty can and should collaborate with colleagues across campus to ensure that all program stakeholders, whether in a formal or informal advising role, can effectively address the career needs of students who major in psychology. Every faculty member does not need to know the specifics of every career option, but all faculty should be conversant in general about the kinds of opportunities that exist for baccalaureate prepared students. They should also be able to direct students to appropriate resources. They should also refrain from reinforcing misperceptions that "you can't get a job without a graduate degree."

The Guidelines and the Open Science Challenge

In the past decade, psychological scientists have experienced significant turmoil surrounding questions about the quality of the discipline's scholarship and scientific practices; this turmoil is referred to as the replication crisis (Diener & Biswas-Diener, 2019). A disturbing meta-analysis involving over 100 researchers published by the Open Science Collaboration (2015) suggested that a substantial number of studies, including classic experiments in psychology, failed to replicate. Contemporary research teams simply were unable to match the results originally published in psychology's literature. Nosek established the Open Science Center to advocate for strategies that would strengthen psychology's research claims.

Causes of replication failure are diverse. Explanations include sloppy or unsystematic execution of either the original study or the attempted replication. Some critics have suggested that researchers may have inappropriately generalized their findings while ignoring important

contextual variables (i.e., findings that fit one group may not apply to another group or a different time). Unfortunately, in some worst-case scenarios, some psychologists have been guilty of fabricating data to produce significant results. The pressures on academic researchers to publish or perish with regard to future tenure decisions placed a premium on generating a substantial number of publishable studies demonstrating statistically significant results. This pressure to publish discouraged research agenda to build a stronger case for a psychological claim through replication.

Psychologists have responded to the turmoil of the crisis by proposing some important changes or refinements in how research transpires that are reflected in *Guidelines 3.0.* Some of the changes represent substantially different ways of proceeding with research design, analysis, and dissemination; other recommendations emphasize the need to reaffirm a commitment to *a priori* theorizing. Consequently, many practical changes—some of them quite dramatic—appear to be shaping preferred practice in the open science movement. The key differences are explained below.

The New Statistics

Null Hypothesis Significance Testing (NHST) has long dominated data analysis protocol in psychology with an emphasis on achieving specified probability levels to determine whether a research design could claim the discovery of relationships between variables. However, critics of this practice (cf. Normile et al., 2019) suggest that traditional statistical practices may have contributed to the replication crisis. The emphasis on interpreting p values produces a dichotomous outcome: Was the result significant or not? Such an all-or-none conclusion provides limited interpretive value in the absence of understanding the effect size. In addition,

substantial research evidence suggests evidence that *p* values are often misinterpreted by researchers and consumers alike. Students regularly report that learning inferential statistics is anxiety-provoking because the logic of NHST is not intuitive and is hard to grasp.

Another concerning tendency is the practice of ad hoc hypothesizing rather than developing *a priori* hypotheses based on theory. The practice of developing and reporting hypotheses after the data have been collected has been referred to as "HARKing" or Hypothesizing After Results are Known. To maximize the likelihood of getting publishable results, researchers may engage in data mining, known as "*p* hacking," to be able to claim any significant finding that will enhance the likelihood of publication. Such practices seem to be fueled by the dichotomous judgment that applies a probability level to determine whether a result is significant or not significant.

Challenges to NHST are not technically new; however, the replication crisis provided new fuel for rethinking how psychologists should interpret the procedures they follow in their research. Flawed statistical procedures, such as the examples described above, make replication failures much more likely. The "New Statistics" shift the emphasis away from significance value to effect sizes to estimate the magnitude of differences (Mormile et al. 2019). The New Statistics also reinforce the specification of confidence intervals and the value of replications. In addition, meta-analyses take on greater importance to determine where the weight of evidence converges across related studies.

Open Science Practices

Commitment to strengthening claims made from psychological research extends beyond statistical analysis. Some journals not only endorse the inclusion of effect sizes as a standard

expectation in research but also may discourage the use of NHST interpretations altogether. To preclude HARKing challenges, open science practices encourage researchers to follow pre-registration protocols in which the research design and statistical plan are stated in advance and made available via a repository, ensuring greater transparency. Some journals allow researchers to submit proposals for studies such that an approved proposal guarantees that research findings will be publishable regardless of whether the results achieve significance. By changing to this strategy, the discipline does not lose important information that occurs when research studies do not achieve significant differences. Open science practices support more comprehensive treatment of phenomena and potentially help researchers avoid pursuing research strategies that produce misleading or unreliable results.

Data Ethics and Transparency

Open science reinforces the idea that science is a public good. Researchers must commit to choosing designs that maximize respect and protection for research participants. They must also apply statistical techniques that clearly communicate their findings. This approach emphasizes that data should be available for scrutiny just as plans for research designs should be transparent. As such, many researchers participate in open science practices such as pre-registration and data sharing, and some journals have added badging protocols for studies that meet open science standards. Open science practice also encourages the use of open sources to promote dissemination of research findings.

Greater Contextual Awareness

Psychologists have long prided themselves on exercising objectivity in their research. However, contemporary researchers recognize that research projects grow out of specific

socio-historical contexts. Differences in context certainly shed light on why older studies may not replicate in contemporary times. We also recognize that, despite a commitment to objectivity, psychological researchers are human beings who are likely to approach problems with their own personal and cultural biases. Consequently, peer review processes would benefit from having greater diverse representation in reviewing panels (Munsafo et al., 2017).

New Software Support

Many researchers report moving away from SPSS as the standard data management software strategy and toward open-source statistical programs (e.g., JASP, R, Jamovi) that work effectively with other data management software. According to Baturk (2005), students who are skilled at software applications tend to achieve higher grades in later courses. Using open-source software may promote sound statistical practices well beyond graduation. However, making this transition may require additional professional development for psychology faculty who may be unfamiliar with the software.

Smith (2020) observed that *Guidelines 2.0* supported an open science approach. However, the refinements in Goal 2 of *Guidelines 3.0* provide even greater emphasis on open science and emerging preferred science practices. We expanded the articulation of statistical outcomes in a purposeful way to reflect the open science trends. Undergraduates do need to understand that traditional practices are evolving and especially to appreciate the practical advantages of communicating effect sizes rather than significance levels in data interpretation. This approach will be more straightforward and confidence building for students who struggle with the rationale for inferential statistics.

A Call to Action

Guidelines 3.0 endorses open science practices. Consequently, educators may seek some statistical re-education to keep current with preferred practice. Normile et al. (2019) advocated that during this time of transition it may be most helpful, and perhaps least disruptive, to combine NHST interpretations with those strategies that grow out of open science practices. They recommend a six-episode video sequence developed by APS to assist faculty in becoming more well informed about open science practices.

International Implications of *Guidelines 3.0*

Psychology higher education, historically dominated by the United States, is now increasingly international. As Takooshian and colleagues (2016) reported, undergraduate psychology is "hugely popular around the globe," noting that the share of all psychologists who worked in the U.S. was 80% in the 1980s, but as of the publication of their article, the share of U.S. psychologists had dropped to 21-24%. This change is particularly notable given that the sheer number of psychologists in the U.S. and worldwide has been skyrocketing. The internationalization of our field suggests that 1) we, as psychology instructors, need to be aware of international education trends, and 2) we, in turn, should make our courses more international. The third iteration of the *APA Guidelines for the Undergraduate Psychology Major* emphasizes this internationalization to a greater degree than its predecessors, including soliciting input from U.S. psychologists with international experience and from psychology instructors working outside the U.S.

Many SOTL articles dedicated to international concerns have cited past versions of APA guidelines, including articles about students studying outside the U.S. (i.e., study abroad experiences), instructors and administrators internationalizing the U.S. psychology curriculum,

and the internationalization of psychology education generally. We predict *Guidelines 3.0* will remain a popular citation source. We also hope that the latest guidelines will help the U.S. play a bigger role in an ongoing and growing international conversation about what a psychology major should be able to do in terms of competencies. These guidelines should reduce concern that the psychology community in the U.S. seeks disciplinary dominance or that it is indifferent to or unaware of pedagogical advances in other nations.

International Trends in Psychology Higher Education

Harmonization

In 1999, a consortium of 29 European countries, through what came to be called the Bologna Process, committed to the development of a European Higher Education Area (EHEA) to increase the quality of higher education and facilitate international and institutional mobility of students and degree holders. The consortium aimed for flexibility through "harmonization" among institutions and countries rather than a more prescriptive standardization across its member institutions and countries. Consortium members agreed to create comparable degrees through a "tuning" process, develop explicit connections with employers, facilitate mobility, and collaborate with respect to minimum competencies, assessment, and quality assurance (Bologna Declaration, 1999). The Bologna countries have met many of these goals (Eurydice/European Commission/EACEA, 2018). [The Bologna countries also developed a diploma, the EuroPsy Certificate, that outlines minimum competencies for practicing psychologists in the EHEA for whom the terminal degree is the Master's – as it is in most parts of the world (EFPA, 2017). EuroPsy facilitates quality assurance, competencies with respect to ethics, and mobility of clinician psychologists.]

The Bologna Model has been widely admired and copied. With more than 4,000 psychology educational programs around the world, demands for international frameworks to promote quality and mobility have increased (Bullock, 2014). In line with this call, a Bologna Follow Up Group has led to partnerships between the EHEA and consortiums of institutions and countries in almost every part of the world, often with funding from the European Union (e.g., Dang, 2015; Knight, 2014; Nolan et al., 2020). Knight explains that Bologna "has propelled other regions and sub-regions around the world to look more seriously at the significance and modality of building closer alignment of their higher education systems" (Knight, 2014, p. 106).

Two important lessons are apparent from the EHEA and other Bologna-like initiatives. First, psychology educators should broaden the range of stakeholders in higher education to include employers, community organizations, and the general public. Second, emphasizing harmonization and the related concept of "tuning" promotes mobility across institutions and countries. We hope that the APA *Guidelines 3.0* will facilitate both goals because of its overlap with international trends, such as psychological literacy. Because the possibility that faculty across the globe will review and perhaps adopt the guidelines, a more common language regarding psychology competencies and degrees may result; however, we acknowledge that even if instructors and programs outside the U.S. wish to implement *Guidelines 3.0,* that outcome may not be feasible. Cultural considerations and concerns that the Guidelines are U.S.-centric may discourage broader use. In addition, governments in many countries guide curricula with no flexibility at an institutional or departmental level to make wholesale changes in line with a document such as *Guidelines 3.0.*

Psychological Literacy

In 2010, former APA president Diane Halpern and her colleagues memorably wrote that:

To bring about change in the perceptions of the general public and policy

makers, all psychologists should develop the concept of psychologically literate

citizens and convey this message so that policy makers and the general public

will understand that the need to be psychologically literate is similar to being

able to read or use numbers in thinking. (p.172)

The simple, if somewhat radical, idea was that psychological knowledge and skills should

become as familiar to people as the ability to read, write, and do basic math computations. In

other words, they should become *psychologically literate*—able to use psychological theory and

empirical evidence to enhance or improve everyday decisions and daily life in general at local,

national, and international levels. Indeed, the concept of global citizenship is an integral part of

psychological literacy (e.g., Cranney & Dunn, 2011). Thus, psychology students should be taught

to recognize and to rely on the utility of psychological knowledge both in as well as beyond

academic settings (Cranney & Dunn, 2011).

In effect, psychological literacy enables students and university graduates to use what

they have learned to adjust to the stresses and strains found in their work settings, their

families, and in their local and global communities. The unplanned experiment that was the

COVID-19 pandemic, beginning in spring 2020, illustrates how related behavioral compliance

(e.g., lockdowns, mask wearing, vaccinations, booster shots) was more successful in some

nations than others, a fact that points to the importance of applying psychological knowledge

to influence the welfare of whole communities.

Psychology education can contribute to solutions for global threats like the pandemic or climate change, as well as smaller, more local issues. Universities around the world are under some strain to educate students who can enter the workforce while acting as knowledgeable citizens who can and will contribute in meaningful ways to improve their cultures and nations. Psychology can have a large role in shaping the next generation of psychologically literate global citizens.

As Morris et al. (2021), recently noted, there:

> …appear to be two current approaches to defining and operationalizing [psychological literacy]: (a) as a set of capabilities – knowledge, skills, and attitudes, that a student should acquire during their psychology education, and (b) as a general capacity to intentionally apply psychology to achieve personal, professional, and societal goals. Regarding the former, although there is some consensus regarding what constitutes the set of capabilities, further development is required. Regarding the latter, practical implications, challenges and opportunities require further exploration (p. 1).

Clearly, creating psychologically literate international citizens—those who see using psychological science to benefit all of humanity—is a good idea.

Internationalizing Our Courses

Thus far, we have been discussing broad global trends. However, we want to emphasize that each of us, as instructors, can contribute to a global conversation within psychology education by internationalizing our own courses. We can apply the same tactics that we describe elsewhere in this document with respect to diversity, equity, and inclusion to internationalization. Specifically, we can consider the topics we choose, the research we cover, and the readings we assign. The Association for Psychological Science recently published an excellent essay about the grand challenges of psychology, many of them international, (https://www.psychologicalscience.org/observer/grand-challenges) as well as a three-part series from a team of international authors entitled "Psychological Science Needs the Entire Globe" (see https://www.psychologicalscience.org/observer/global-psych-science). These essays suggest a wide range of topics and research that we can incorporate across the psychology curriculum. On a seemingly smaller level, but one that is quite important in terms of inclusion, we also can relatively easily diversify the examples we use to clarify concepts in class, including with broader representation in names and photos (Littleford & Nolan, 2013).

International Input on Guidelines 3.0

We invited 21 colleagues to provide input on a draft of the guidelines; most were from countries outside of the U.S., although some were from or working in the U.S. but with extensive international experience. We received feedback from 10 of these colleagues representing 9 different countries from Africa, Asia, Europe, North America, Oceania, and South America.

Of these 10 psychology educators, 6 were previously aware of APA's Guidelines. Of those who were aware, some indicated that individual instructors used the *Guidelines 2.0* at the course level, but noted that at the institutional level, country-specific guidelines made it difficult to apply the guidelines; however, one non-U.S. colleague wrote that "this set of documents is possibly the most comprehensive readily accessible set of teaching resources for undergraduate psychology in the world." One international colleague lauded the emphases on internationalization, open science, ethics, and technological literacy, and another appreciated the "global vision." One contributor highlighted the emphasis on diversity and inclusion, and yet another praised focuses on social justice and on career development.

One colleague suggested strengthening connections with similar documents from other countries, including EuroPsy, mentioned above in conjunction with the Bologna Process. We agree, and hope that international scholarship will continue to address similarities and differences across countries, so that the future *Guidelines 4.0* can more effectively reflect international realities. Criticisms included a lack of attention to "application to self," including related to students' "values and sense of morality," particularly with respect to careers; insufficient attention to psychological literacy; and "mixed messages" with respect to minimal vs. aspirational outcomes. Another respondent noted that EDI as understood in the U.S. is not universally applicable, noting, for example, "ethnicity" is not a viable or meaningful concept in all countries. One colleague asked for an increased emphasis on the place of psychology in the context of other fields in the social, physical, and natural sciences, as well as in the humanities and in cultural studies.

Relatively universally, the respondents viewed *Guidelines 3.0* as helpful for developing courses, curricula, and programs. Several stated that they hoped to use these guidelines to effect changes in their own countries. One colleague expressed the hope that our understanding of psychology's history would expand to include an international perspective, writing, "I understand most of the theories were from Europe and U.S., but also important to see how the history of psychology moves globally. It would be very difficult to go country by country but still important to see some of the benchmarks of the historical movement in Asia, Africa, and other places." We agree and hope that the increased international emphasis in *Guidelines 3.0* will encourage broader conversations among U.S. instructors and between U.S. instructors and our international colleagues.

A few respondents took the time to send additional comments, observations, and suggestions outside the survey they received. One individual wrote to express gratitude that the *Guidelines 3.0* identified optimal expectations for psychology programs to consider. This individual urged that minimum expectations be highlighted, as many systems outside the U.S. need to know the minimum structure they must provide in order to pass quality reviews for accreditation or program review processes. Currently, undergraduate psychology programs in the U.S. do not have any sort of accreditation requirement or process, nor is one on the horizon. Nonetheless, the *Guidelines* can serve as a proxy for such a process, as they encourage some level of standards or a form of quality control. Finally, the colleague also praised the revised section on Communication, Literacy, and Technological skills as important. The colleague suggested that the literacy skills (e.g., speaking, writing) be expanded to include

careful or critical listening as well as what might be best called "media literacy," that is, attending to the veracity of the media sources being cited or relied on for information.

Another colleague identified an important distinction between U.S. training in psychology—especially training oriented toward practice—and that found elsewhere, including in Colombia and other parts of Latin America. The U.S. is highly focused on degree acquisition beyond the baccalaureate level; however, other nations have "historically strong social needs associated with poverty and wars" that have encouraged them to allow individuals with undergraduate degrees in psychology to perform clinical, community, and educational interventions, in much of Latin America through the decades-old "Bogotá model" (Ardila, 1978; Benito, 2009). These budding psychologists work as acknowledged professionals who often use their earnings to pay for their postgraduate studies.

Finally, we asked these international colleagues whether they thought the guidelines were too U.S.-centric to be useful. Most did not, with one respondent commenting that "It has a global outlook - and very conscious about it." Another respondent seemed to capture an overall perception: "I don't think it is too US-centric to be useful, but it is clearly a US-centric document." Another respondent noted that "It would be interesting to have an international perspective on what undergrad psychology degree can do internationally." We agree, and hope that there will be ongoing research and collaborations in this area.

A Call to Action

Based on international trends and on the feedback from our international colleagues, we suggest several ways in which the Guidelines might be useful in a global context. First, departments (or even students on their own) might use *Guidelines 3.0* to communicate what

their students have learned, which could be helpful when working in international contexts in the U.S. or moving internationally for work or school. Relatedly, students could use *Guidelines 3.0* to shape their experiences, including choosing courses, when studying internationally. Some U.S. Departments of Psychology implicitly communicate that when their undergraduate majors study abroad, taking psychology courses is not necessary or even desirable (i.e., a form of the U.S.-centric concern). They speculate that finding "equivalent courses" will be difficult. Instead, students should be encouraged to study abroad to develop a better and broader understanding of international perspectives on psychology. Psychology programs should be flexible in terms of accepting international psychology courses as psychology electives for their study abroad students.

Second, although the guidelines might be useful in non-U.S. contexts, they would have to be interpreted based on the local culture, educational system, and approach to psychology; moreover, U.S. psychologists must be cautious about applying the guidelines when working outside the U.S. Generally, we should be clear that they represent a U.S. perspective. See Morgan-Consoli et al. (2018) for a discussion of both general and teaching-specific competencies for U.S. instructors working internationally. Readers should remember that the U.S. undergraduate experience is structured differently than that found in many or most other nations; for example, the typical American undergraduate degree is completed in four years, whereas many other nations grant a bachelor's degree in three years' time. Similarly, most U.S. undergraduates complete a set of general education courses designed to provide them with a broader understanding of other educational areas in the humanities, arts, and social and natural sciences. Other nations often focus primarily or exclusively on the major area of study.

Nonetheless, an ongoing conversation about similarities across countries and world regions might enhance both higher education quality and mobility. As Nolan and colleagues (2020) wrote, those involved in psychology higher education in the U.S. "could benefit from examining the complex, sometimes limited, often varied, but also inspiring Tuning projects initiated by our colleagues around the world" (p. 194). We hope that *Guidelines 3.0* will inspire our colleagues to join this international conversation.

Resources

Our international colleagues wisely suggested that we include resources for international organizations related to psychology teaching and learning, as well as other relevant documents. We hope that this list will grow, particularly with organizations and input from the Global South.

- APA's Office of International Affairs: https://www.apa.org/international (In particular, see the list of international organizations, networks, and meetings: https://www.apa.org/international/networks)

- APA. (2004). Resolution on Culture and Gender Awareness in International Psychology. http://www.apa.org/about/policy/gender.aspxAustralian Psychology Learning and Teaching (AusPLAT): https://www.facebook.com/Ausplat/

- European Federation of Psychology Teachers Associations (EFPTA): https://www.efpta.org/home

- European Society of Psychology Learning and Teaching (ESPLAT): https://www.esplat.org/ (Note: ESPLAT has a journal, *Psychology Learning and Teaching*, that has an international editorial board and international contributors.)

- International Compilation of Human Research Standards

  https://www.hhs.gov/ohrp/sites/default/files/2018-International-Compilation-of-

  Human-Research-Standards.pdf

- International Council of Psychology Educators (ICOPE):

  http://www.psychliteracy.com/icope-inc

- International Union of Psychological Science: https://www.iupsys.net/about/

- Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations:

  http://www.researchintegrity.org/Statements/Montreal%20Statement%20English.pdf

- Velayo, R. S. (2016). *Internationalizing our psychology courses: Resources for faculty*.

  http://www.apa.org/education/undergrad/internationalize.aspx

- World Health Organization – Mental Health Resources.

  https://www.who.int/teams/mental-health-and-substance-use

Equity, Diversity, and Inclusion in *Guidelines 3.0*

APA has the foundational goal, "To advance EDI [equity, diversity, and inclusion]

through psychological science that champions thought leadership, innovation and excellence"

(APA Framework, 2021, p. 6). Psychology instructors, by way of their roles, convey the history,

values, and principles of the field to psychology students. In doing so, they teach students the

norms of the field. Therefore, psychology instructors should view as both the opportunity and

responsibility to incorporate EDI frameworks into courses and curricula. Achieving this goal will

require concerted cultivation in all aspects of instruction at the associate and baccalaureate

education levels. As such, we took intentional steps to ensure that the indicators of *Guidelines*

3.0 aligned with equity, diversity, and inclusion (EDI) in light of the importance of empowering students to make a difference in their lives and communities.

We believe that instructors can help students to understand the prevailing attitudes, beliefs, and values that influence, and sometimes limit, the impact of psychological research. We created *Guidelines 3.0* with a commitment to uncover/identify/explore implicit assumptions that have influenced the field of psychology since its inception, such as objectivity, universalism, and individualism, among others. Heine and Norenzayan (2006) explained, "Few people would dispute that culture is relevant to psychology. Yet for much of the history of their field, most psychologists have sought to discover and explain human thought and behavior in terms of universal principles" (p. 251). Similarly, psychology developed with a strong preference for individualism, which encompasses ideas of individual freedom and responsibility. This bias often results in looking for and attributing observations to individual sources at the expense of other factors, including those derived in collectivistic and communal values. Although objectivity, universalism, and individualism have a place in the field, their dominance has limited the relevance and importance of psychological knowledge to the diverse U.S. and global populations.

A greater focus on EDI is associated with an abundance of favorable academic and related outcomes. Course elements that involve EDI increase student awareness of privilege and marginalization, and social action (Case, 2007; Weinstock 2019). EDI activities can also help students to learn about cultural diversity (Baumgartner & Johnson-Bailey, 2008). These learning opportunities augment skills in multicultural competence and reduce prejudice (Smith & Trimble, 2016). Students also show improvements in ethnocultural empathy, relinquishing

claims of colorblind racial attitudes and reporting greater interest in pursuing more multicultural experiences (Patterson et al., 2018).

Incorporating EDI-informed pedagogy in educational experiences is associated with increases in sense of belonging, especially among historically marginalized students. Useful strategies include intentionally showing appreciation for the ideas and experiences of historically marginalized students (Good et al., 2012; Howansky et al., 2021), high quality social learning opportunities (Surr et al., 2018), communicating the relevance of the course content to personal and collective identities (Eccles, 2009; Hunn, 2014), and including work by underrepresented psychologists (Good et al., 2012).

Steps Taken to Address Equity, Diversity, and Inclusion in the Guidelines 3.0

To promote EDI throughout *Guidelines 3.0*, each change or addition included background research, consideration of APA's *Guiding Framework* (2021), consultation with experts, and extensive discussion. We elevated the importance of cultural/ contextual factors with indicators that encourage the development of self- and other-awareness, knowledge, and skills. We also highlighted disparate access to opportunities, strategies to overcome discrimination, and systems and community perspectives within the indicators to counteract the historical overemphasis on universalism, individualism, and other values and practices that marginalize others. We discussed how an EDI focus can augment interest in policy-level interventions. We further attended to characteristics of institutions and the level at which students learned this information so that students at both associate and baccalaureate levels would enhance their knowledge, skills, and abilities pertaining to EDI.

Undergraduates should acknowledge that the discipline has a checkered history in regard to privilege and marginalization. Psychologists have contributed important scholarship in understanding bias and prejudice. Many seminal works of psychologists have shaped progressive public policies designed to reduce discrimination. However, the history of the discipline also reveals egregious examples of inappropriate and unethical practices related to systemic discriminatory practices. Understanding our complex history is vital to encouraging a commitment to the importance of EDI.

Additionally, higher education has practical reasons for pursuing an enlightened stance regarding equitable opportunity and supportive strategies. Implementation of EDI goals should improve retention and graduation rates, which often become a central consideration in funding allocations. Graduates who are more sophisticated with regard to EDI considerations will also be more competitive in the workforce.

Promoting Equity, Diversity, and Inclusion Using Guidelines 3.0

Therefore, these *Guidelines* can serve as a tool to help psychology programs augment EDI in their curricula. Foremost, the *Guidelines* provide a blueprint for what, where, and when students should acquire related EDI knowledge and skills. The blueprint can also help faculty identify gaps in their own curricula where EDI topics should be addressed and fill them accordingly.

The *Guidelines* were set up not only for students to understand EDI, but also to promote EDI within the psychology curriculum. Assessment of these indicators can provide evidence regarding the extent that students are achieving and acquiring the necessary skills that they

need to be able to function successfully in complex social contexts. If students are not meeting these expectations, then faculty can adjust accordingly.

Following this blueprint creates the opportunity to strengthen EDI within both the discipline of psychology and the broader working environment. Students should begin with a fundamental basis for understanding EDI, which occurs in introductory psychology courses. As they progress, they should acquire more skills and knowledge. When they finish courses and enter the workforce or pursue graduate degrees, they become equipped with tools to apply these knowledge and skills in novel contexts.

A Call to Action

Business as usual is not an option; the integrity and relevance of the field is at stake. Incorporating EDI into the psychology curriculum should be deemed essential to meet the needs of current students of psychology and responsibly expand the knowledge base of psychological science toward improving lives and communities (Gillborn et al., 2021). We encourage psychology programs to consider EDI areas in the curriculum that need greater attention. For Instance, syllabi reviews of undergraduate and graduate education in psychology across undergraduate and graduate programs revealed that psychology has lagged in addressing EDI in the psychology curriculum (Boysen, 2011; Fuentes & Shannon, 2016). Programmatic discussions about commitment to EDI principles that highlight good examples emerging from syllabi reviews can be a productive way to initiate this important conversation.

As we created *Guidelines 3.0,* we were intentional at every step to promote justice and equity. And, as our final call to action, we encourage programs, too, to model a process of being intentional and deliberate when creating curricula or adopting strategies. We encourage

programs to dig deep; consider word choices; reflect on how courses and experiences will include or exclude others and examine how traditional practices might have contributed to inequitable opportunities. We encourage programs to seek feedback from those whose voices may not always be heard, including students; to recognize the importance of research when guiding these decisions, but also to recognize the limitations that the research itself may have. In short, we encourage programs not only to use the Guidelines themselves as tools to promote EDI, but also to use the process to engender a stronger commitment to the principles of social justice.

Articulation with Related APA Documents

Advances in psychology's Scholarship of Teaching and Learning (SOTL) literature, especially documents that have been produced to improve curriculum from the APA, have been incorporated in *Guidelines 3.0.* This iteration of *APA Guidelines* attempted to integrate various influences in their recommendations regarding curriculum and assessment.

APA Principles for Quality Undergraduate Education Psychology (2011)

Beginning with the St. Mary's Conference in 1991, the APA has supported articulating Quality Principles to provide recommendations to guide programs and departments in their educational practices. Conclusions from the conference were published as the first formal principles in 1994. The principles were revised in 2011 in conjunction with the 2008 National Conference on Undergraduate Education in Psychology held in Tacoma, WA.

The quality principles included the following:

Quality Principle 1: Students are responsible for monitoring and enhancing their own learning.

Quality Principle 2: Faculty strive to become scientist-educators who are knowledgeable about and use the principles of the science of learning.

Quality Principle 3: Psychology departments and programs create a coherent curriculum.

Quality Principles 4: Academic administrators support and encourage quality practices in teaching and learning.

Quality Principle 5: Policymakers and the general public understand why psychological literacy is necessary for informed citizens and an effective workforce.

The document also offered 30 recommendations to support effective undergraduate curricula.

A third task force is updating the *Quality Principles* in 2022*.* We incorporate the revised principles in *Guidelines 3.0* to provide one comprehensive resource for undergraduate programs. The *Quality Principles* have been revised to reflect emerging preferred practices that faculty and departments can enact to realize a quality program. The new *Quality Principles* are displayed in Appendix A.

The APA Guide to College Teaching (2020)

In 2018 APA's Committee on Associate and Baccalaureate Education (CABE) charged a working group with the development of a document that would encapsulate the best research-based concepts related to teaching in higher education. *The APA Guide to College Teaching: Essential Tools and Techniques Based on Psychological Science* (APA, 2020) captures principles related to how students learn, evidence-based practices for motivation, and the importance of context in learning. In addition, the document addresses concepts in classroom management and assessment as they relate specifically to undergraduates. The principles outlined in the document support high quality instruction strategies that can optimize the achievement of outcomes outlined in *Guidelines 3.0.* Here is the link to that document: https://www.apa.org/ed/precollege/undergrad/college-teaching-guide.pdf.

The APA Introductory Psychology Initiative (APA IPI)

We endorse the work of the APA IPI that addressed outcomes for introductory psychology and that mirrors many of the foundational indicators presented here. The APA IPI SLOS (APA, 2021) can be seen as precursors to many of the current Guidelines 3.0 goals and indicators, and recommendations from the IPI are similarly content agnostic and aspirational (Gurung & Neufeld, 2022). The focus of this document is addressing content knowledge and applications (a theme we adopted in the new title for Goal 1). We also endorse and incorporate

the specification of themes that an education in psychological science should foster. We provide the summary of introductory psychology outcomes in Appendix B.

APA's Teaching, Learning, and Assessment

in a Developmentally Coherent Curriculum (2008)

The Board of Educational Affairs convened a group of educators specifically to create a bridge between the original version of the undergraduate Guidelines and the challenge of crafting outcomes that would be helpful in two-year college contexts. Their work was based on the work of Bloom's Taxonomy (Anderson & Krathwohl, 2001) and provides a compendium of useful course-based outcomes. That document can be accessed at this link:

https://www.apa.org/ed/governance/bea/curriculum.pdf

The Skillful Psychology Student:

Prepared for Success In the 21st Century Workplace (2018)

Recognizing the need for psychology students to translate their skills to careers, the Committee on Associate and Baccalaureate convened a working group to examine how Guidelines 2.0 mapped onto skills that employers often seek. Through qualitative analyses, quantitative analyses, and discussion, the working group created *The Skillful Psychology Student* document (Naufel et al., 2018; 2019). The *Skillful Psychology Student* is comprised of five skill domains (e.g., cognitive, social, technological, personal, and communication) with 17 skills (e.g., analytical thinking for the cognitive domain) within these domains (Naufel et al., 2018). This document connects psychology to the language of employers, and students can use this document for resume writing purposes, searching for potential psychology-related jobs, or to see how

psychology is represented in a variety of career fields. Finally, the *Skillful Psychology Student* may be used in curricular development and program assessment.
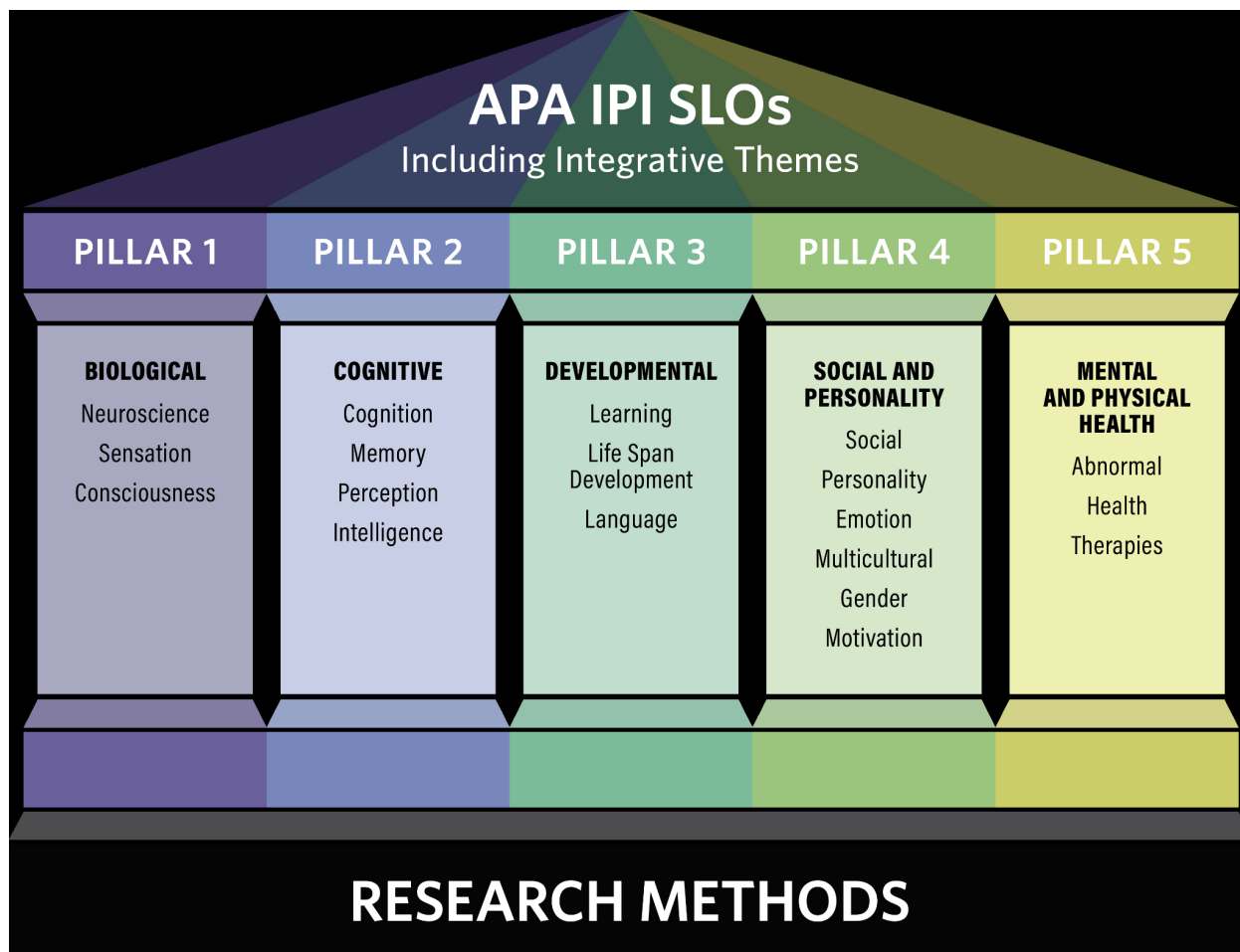
https://www.apa.org/education-career/guide/transferable-skills.pdf

APA's Strengthening the Common Core

of the Introductory Psychology Course (2016)

Recommendations by the APA Board of Educational Affairs Working Group on Strengthening the Common Core of the Introductory Psychology Course (APA, 2014, Gurung et al., 2016) provide a guide to selecting content, suggesting instructors cover at least two topics from each of five domains or pillars. As shown in Figure 3, the Pillar Model evokes an architectural plan similar to an ancient Greek structure. The base of the building represents the need to teach the foundational principles of scientific inquiry. Each pillar of the structure signifies the content of psychology divided into domains (biological, cognitive, development, social, and personality, and mental and physical health).

Figure 3.

The Strengthening the Common Core of Introductory Psychology Pillar Model adapted to include new IPI SLOs.

APA IPI SLOs
Including Integrative Themes

PILLAR 1	PILLAR 2	PILLAR 3	PILLAR 4	PILLAR 5
BIOLOGICAL	**COGNITIVE**	**DEVELOPMENTAL**	**SOCIAL AND PERSONALITY**	**MENTAL AND PHYSICAL HEALTH**
Neuroscience	Cognition	Learning	Social	Abnormal
Sensation	Memory	Life Span Development	Personality	Health
Consciousness	Perception	Language	Emotion	Therapies
	Intelligence		Multicultural	
			Gender	
			Motivation	

RESEARCH METHODS

Source: American Psychological Association (2021).

The Pillar Model takes significant pressure off instructors who can now be supported in covering ten topics in a course, in addition to research methods. While instructors may also cover material from other chapters that fits their own department or university needs, the focus is educating students on the integrative themes of psychology and ensuring that they get at least a basic exposure to the breadth of psychology through the five major domains of the field. Although some instructors may decide to include more topics, the APA IPI work clearly notes the value of achieving outcomes by making strategic choices about content coverage that

does not require exposing students to all the available material. Here is the link to the "pillar document:" https://www.apa.org/ed/precollege/psychology-teacher-network/introductory-psychology/selecting-content

APA's *Assessment Cyberguide*

The original *Guidelines* spurred the development of the *Assessment Cyberguide,* which was published shortly after the *Guidelines* appeared but revised in 2009 (Pusateri et al.). The *Cyberguide* offers a comprehensive discussion on making assessment decisions at the course and program level and is still regularly accessed by those dealing with contemporary assessment problems. The *Cyberguide* is available a*t*

https://www.apa.org/ed/governance/bea/assessment-cyberguide-v2.pdf

APA's Project Assessment

More recently, APA's *Project Assessment* established a website (pass.apa.org) to assist in implementing assessment strategies linked to *Guidelines 2.0.* The website was developed from two conferences, the Summit on National Assessment of Psychology (2016) and the Summit on High School Psychology Education (2017). Although the website was established to provide exemplars of assessment practice to illustrate outcomes in *Guidelines 2.0,* the content of the website remains relevant to *Guidelines 3.0.* The site is organized not just by relevant outcomes, but also by type of assessment and whether the exemplar reports data in support of claims (i.e., "evidence based") or is merely "evidence informed." Access for the website is at *pass.apa.org.* Registration is required, but access to, and use of, the database is free.

***The APA Assessment Guide for Psychology Teachers* (2017)**

The Assessment Subcommittee from the 2017 High School Psychology Summit

generated a primer that provides a strong orientation to assessment practices. The document

offers basic orientation to assessment practices along with exemplars. The document can be

accessed at https://www.apa.org/ed/precollege/topss/assessment-guide.pdf

APA's Equity, Diversity, and Inclusion (EDI) Statement (2021)

The APA Equity, Diversity, and Inclusion Framework (2021) presents a model for

progressive action within APA, the field of psychology, and society. The model is based on an

integration of decades of psychological research. It recommends various actions including

acknowledging oppression, operating from a systems perspective, including marginalized

voices, and striving for continued EDI growth in all areas of psychology, among others. The

document can be accessed at https://www.apa.org/about/apa/equity-diversity-

inclusion/framework.pdf.

APA Ethical Principles of Psychologist and Code of Conduct (2002)

The APA has provided support to its members in navigating professional ethical

standards since the publication of its first code in 1953. The code, intended to provide guidance

on professional ethics for psychological professionals including educators, is regularly revisited,

reviewed, and updated. The current code became effective in 2002 with minor amendments in

2010 and 2017. At the present time, a task force is currently doing a major review of the code.

Guidelines 3.0 supports the importance of ethical oversight, particularly reflected in Goals 2

(Scientific Inquiry and Critical Thinking) and 3 (Values in Psychology). The link to the most

current version can be found here: Ethical principles of psychologists and code of conduct (apa.org).

Assessment Resources

This non-exhaustive list of references strives to capture scholarship in accountability practices that will assist programs in curriculum design and assessment. The list includes both classic sources and more contemporary works in contexts across the undergraduate curriculum.

General Assessment Books

Finney, S. J., Wells, J. B., & Henning, G. W. (2021, March). The need for program theory and implementation fidelity in assessment practice and standards (Occasional Paper No. 52). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA). Downloaded from https://www.learningoutcomesassessment.org/wp-content/uploads/2021/03/Occ_Paper_51-1.pdf

Fulcher, K. H., Good, M. R., Coleman, C. M., & Smith, K. L. (2014, December). A simple model for learning improvement: Weigh pig, feed pig, weigh pig. (Occasional Paper No. 23). Urbana, Il: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment. Downloaded from https://in.ewu.edu/facultycommons/wp-content/uploads/sites/129/2016/12/A-Simple-Model-for-Learning-Improvement_Weigh-Pig-Feed-Pig-Re-Weigh-Pig.pdf

Fulcher, K. H., Prendergast, C. O. (2021). *Improving student learning at scale.* Stylus Publishing.

Maki, P. (2004). *Assessing for learning: Building a sustainable commitment across the*

institution. Stylus Publishing.

Suskie, L. (2018). *Assessing student learning: A common sense guide*. John Wiley & Sons.

Walvoord, B. E. F. (2010). *Assessment clear and simple: A practical guide for institutions,*

departments, and general education (2nd ed.). Wiley & Sons.

Equity in Assessment

Montenegro, E., & Jankowski, N. A. (2020, January). *A new decade for assessment: Embedding*

equity into assessment praxis (Occasional Paper No. 42). Urbana, IL: University of Illinois

and Indiana University, National Institute for Learning Outcomes Assessment (NILOA)

Downloaded from https://www.learningoutcomesassessment.org/wp-

content/uploads/2020/01/A-New-Decade-for-Assessment.pdf

National Institute for Learning Outcomes Assessment

https://www.learningoutcomesassessment.org/equity/

Assessment Books Focused on Psychology Education

Dunn, D. S., Mehrotra, C., & Halonen, J. S. (Eds.) (2004). *Measuring up: Educational assessment*

challenges and practices for psychology. American Psychological Association.

Dunn, D. S., Baker, S. C., Mehrotra, C. M., McCarthy, M., & Landrum, R. E. (Eds.). (2012).

Assessing teaching and learning in psychology: Current and future perspectives.

Cengage.

Halpern, D. F. (Ed.). (2010). *Undergraduate education in psychology: A blueprint for the future*

of the discipline. American Psychological Association.

Nolan, S., Hakala, C., & Landrum, R. E. (Eds.). (2021). *Assessing undergraduate learning in*

psychology: Strategies for measuring and improving student performance. American

Psychological Association.

Assessment for Beginners

Halonen, J. S., Dunn, D. S., Feldman, A. J., Franks, S. A., Gonzalez, S. C., Gurung, R. A. R.,

Miriya, J., McEntarffer, R., & Vita, M. C. (2018). *Assessment guide for psychology*

teachers, APA, https://www.apa.org/ed/precollege/topss/assessment-guide.pdf

Pusateri, T., Halonen, J. S., Hill, W., & McCarthy, M. A. (November, 2009). *The assessment*

cyberguide for learning goals and outcomes. American Psychological Association

https://www.apa.org/ed/governance/bea/assessment-cyberguide-v2.pdf

Stanny, C. J. (2015). Assessing learning in psychology: A primer for faculty and administrators. In

D. S. Dunn (Ed.), *Oxford handbook of undergraduate psychology education* (pp. 813-

831)*.* Oxford University Press.

Assessment Philosophy

Halonen, J. S., Beers, M. J., & Brown, A. N. (2020). Assessment at the crossroads: How did we

get here and what should we do? *Scholarship of Teaching and Learning in*

Psychology, *6*(3), 254–268. https://doi.org/10.1037/stl0000243

Halpern, D. (2013). A is for assessment: The other scarlet letter. *Teaching of Psychology, 40*(4),

358-362. https://doi.org/10.1177/0098628313501050

Promoting an Assessment Culture

Dunn, D. S., McCarthy, M. A., Baker, S. C., Halonen, J. S., & Boyer, S. (2011). Understanding

faculty reluctance as reactance and opportunity for persuasion: A social psychology of assessment. In D. Mashek & E. Y. Hammer (Eds.), *Empirical research in teaching and learning: Contributions from social psychology* (pp. 143-159). Wiley.

Dunn, D. S., Troisi, J., & Baker, S. C. (2020). Faculty receptivity to assessment: Changing the climate for evaluating teaching and learning in psychology. *Scholarship of Teaching & Learning in Psychology, 6*(3), 244-253. https://doi.org/10.1037/stl0000247

Gurung, R. A. R. (2021). Scholarship of teaching and learning and assessment: Advancing a collaborative model. In S. A. Nolan, C. M. Hakala, & R. E. Landrum (Eds.), *Assessing undergraduate learning in psychology: Strategies for measuring and improving student performance* (pp. 13–23). American Psychological Association.

Stanny, C. J., & Halonen, J. S. (2011). Accreditation, accountability, and assessment: Faculty development's role in addressing multiple agendas. In L. Stefani (Ed.). *Evaluating the effectiveness of academic development practice: A professional guide* (pp. 169-182). Routledge.

Assessment in Associates and Baccalaureate Degree Programs

Amsel, E., McGregor, L. N., Alexander, D., Leppien-Christensen, K., Gerber, B, Wilson-Doenges, G, & Hailstorks, R. (2020). Context matters: Outcome assessments for associate's degree psychology programs. *Teaching of Psychology, 47*(4), 316-326. https://doi.org/10.1177/0098628320945128

Appleby, D. C., Bosack, T. N., Mayo, J. A., Poe, R. E., Puccio, P., Rudmann, J. L., & Halonen, J.S. (2008). Teaching, learning, and assessing in a developmentally coherent curriculum.

American Psychological Association.

https://www.apa.org/ed/governance/bea/curriculum.pdf

Hailstorks, R, Norcross, J. C., Pfund, R. A., Aiken, L. W., Stamm, K. E., & Christidis, P. (2016).

Assessment drivers and practices in undergraduate psychology programs: A survey of

associate and baccalaureate degree programs. *Scholarship of Teaching and Learning in

Psychology*, *2*(2), 99-111. https://doi.org/10.1037/stl0000059

Academic Program Reviews

Chew, S. L., Halonen, J. S., McCarthy, M. A., Gurung, R. A. R., Beers, M. J., McEntarffer, R., &

Landrum, R. E. Practice what we teach: Improving teaching and learning in psychology.

Teaching of Psychology, 45(3), 239-245. https://doi.org/10.1177/0098628318779264

Dunn, D. S., Coffman, C., Bhalla, M., Boysen, G. A., Diaz-Granados, J. L., McGregor, L. N.,

Morgan, B., & Smith, P. (2020). Doing assessment well: Advances for undergraduate

psychology programs and psychology educators. *Teaching of Psychology*, *47*(4), 251-

261. https://doi.org/10.1177/0098628320945097

Dunn, D. S., McCarthy, M. A., Baker, S. C., & Halonen, J. S. (2011). *Using quality benchmarks for

assessing and developing undergraduate programs.* Jossey-Bass.

Dunn, D. S., McCarthy, M. A., Baker, S. C., Halonen, J. S., & Hill, G. W. (2007). Quality

benchmarks in undergraduate psychology programs. *American Psychologist, 62*(7)*,* 650-

670. https://doi.org/10.1037/0003-066X.62.7.650

Halonen, J. S., & Dunn, D. S. (2021). The sound and fury of academic program reviews: What

they reveal about assessment and accountability. In S. Nolan, C. Hakala, & R. E. Landrum (Eds.), *Assessing undergraduate learning in psychology: Strategies for measuring and improving student performance* (pp. 41-56)*.* American Psychological Association. https://doi.org/10.1037/0000183-004

McCarthy, M. A., Dunn, D. S., Halonen, J. S., & Baker, S. C. (2014). Academic program reviews in psychology: Challenges and opportunities. In D. S. Dunn (Ed). *The Oxford handbook of undergraduate psychology education* (pp. 833-841). Oxford University Press. doi:10.1093/oxfordhb/9780199933815.013.066

Classroom Assessment Strategies

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Appendix A.

Here is where the new Quality Principles should appear.

Appendix B

APA Introductory Psychology Initiative (IPI)

Student Learning Outcomes for Introductory Psychology

The APA Introductory Psychology Initiative (IPI) created a set of proposed student learning outcomes (SLOs) as part of its effort to transform the introductory course to meet the needs of 21stcentury education. These student learning outcomes (SLOs) are intended for multiple venues, formats, and contexts and are intentionally broad to apply to an introductory level survey course. The SLOs address basic psychological concepts, methods, and themes. The SLOs do not emphasize course content; instead, they focus on the application of practical skills that will help students navigate their lives. The SLOs promote themes that are the enduring lessons students can take away from the introductory psychology course. For example, Psychology continuously examines its own history of successes and abuses, actively committing to the ethical practices that build a responsible future for the profession and contribute to building a just and equitable society.

Psychology Content: Identify basic concepts and research findings

1.1. Define and explain basic psychological concepts.

1.2. Interpret research findings related to psychological concepts.

1.3. Apply psychological principles to personal growth and other aspects of everyday life.

Scientific Thinking: Solve problems using psychological methods

2.1. Describe the advantages and limitations of research strategies.

2.2. Evaluate, design, or conduct psychological research.

2.3. Draw logical and objective conclusions about behavior and mental processes from empirical evidence.

2.4. Examine how psychological science can be used to counter unsubstantiated statements, opinions, or beliefs.

Key Themes: Provide examples of psychology's integrative themes

A. Psychological science relies on empirical evidence and adapts as new data develop.

B. Psychology explains general principles that govern behavior while recognizing individual differences.

C. Psychological, biological, social, and cultural factors influence behavior and mental processes.

D. Psychology values diversity, promotes equity, and fosters inclusion in pursuit of a more just society.

E. Our perceptions and biases filter our experiences of the world through an imperfect personal lens.

F. Applying psychological principles can change our lives, organizations, and communities in positive ways.

G. Ethical principles guide psychology research and practice.

Appendix C:

American Psychological Association

The Skillful Psychology Student:

Prepared for Success in the 21st Century Workplace

[import the official document here]

THE SKILLFUL PSYCHOLOGY STUDENT

PREPARED FOR SUCCESS IN THE 21ST CENTURY WORKPLACE

Psychology provides skills that employers value.

COGNITIVE

Analytical thinking: Solve complex problems, attend to details, plan proactively, and display comfort with ambiguity.

Critical thinking: Display proficiency with statistics, program evaluation, and research design necessary for the study of social and technical systems.

Creativity: Use innovative and resourceful approaches to problem solving and new tasks.

Information management: Be adept at locating, organizing, evaluating, and distributing information from multiple sources.

Judgment and decision making: Engage in logical and systematic thinking and ethical decision making when considering the possible outcomes of a particular action.

COMMUNICATION

Oral communication: Demonstrate strong active listening and conversational abilities in both informal and professional environments, as well as aptitude for public speaking and communicating scientific information to diverse audiences.

Written communication: Comprehend relevant reading materials to produce professional documents that are grammatically correct, such as technical or training materials and business correspondence.

PERSONAL

Adaptability: Adjust successfully to change by responding in a flexible, proactive, and civil manner when changes occur.

Integrity: Perform work in an honest, reliable, and accountable manner that reflects the ethical values and standards of an organization.

Self-regulation: Manage time and stress by completing assigned tasks with little or no supervision; display initiative and persistence by accepting and completing additional duties in a careful, thorough, and dependable manner.

SOCIAL

Collaboration: Work effectively in a team by cooperating, sharing responsibilities, and listening and responding appropriately to the ideas of others.

Inclusivity: Demonstrate sensitivity to cultural and individual differences and similarities by working effectively with diverse people, respecting and considering divergent opinions, and showing respect for others.

Leadership: Establish a vision for individuals and for the group, creating long-term plans and guiding and inspiring others to accomplish tasks in a successful manner.

Management: Manage individuals and/or teams, coordinate projects, and prioritize individual and team tasks.

Service orientation: Seek ways to help people by displaying empathy; maintaining a customer, patient, or client focus; and engaging in the community.

TECHNOLOGICAL

Flexibility/adaptability to new systems: Be willing and able to learn and/or adapt to new computer platforms, operating systems, and software programs.

Familiarity with hardware and software: Demonstrate competency in using various operating systems, programs, and/or coding protocols; troubleshoot technical errors; and use software applications to build and maintain websites, create web-based applications, and perform statistical analyses.

About This Document

The *Skillful Psychology Student: Prepared for Success in the 21st Century Workplace* was commissioned by the American Psychological Association's Committee on Associate and Baccalaureate Education (CABE). The contributing members, listed in random order, are:

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Related Readings

Appleby, D., Young, J., Van Kirk, J., Rudman, J., Naufel, K. Z., Spencer, S. M., … Richmond, A. S. (2019). The skillful psychology student: Skills you will need to succeed in the 21st-century workplace. *Psychology Student Network, 7(1).* Retrieved from https://www.apa.org/ed/precollege/psn/index

Naufel, K. Z., Spencer, S. M., Appleby, D., Richmond, A. S., Rudman, J., Van Kirk, J., … Hettich., P. (2019). The skillful psychology student: How to empower students with workforce-ready skills by teaching psychology. *Psychology Teacher Network, 29(1).* Retrieved from https://www.apa.org/ed/precollege/ptn/2019/03/workforce-ready-skills

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