Arizona State University (ASU) PSY290 Research Methods Exam 1 Practice (Sample)

Study Guide

BY EXAMZIFY

Everything you need from our exam experts!

Table of Contents

Copyright **1**

Table of Contents **2**

Introduction **3**

How to Use This Guide **4**

Questions **5**

Answers **8**

Explanations **10**

Next Steps **16**

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What is a survey method in research?

A. A technique involving experimental manipulation

B. A method that relies on observation of behavior

C. A research technique that uses questionnaires or interviews

D. A statistical analysis of existing data

2. In Latecia's study, what is the term used for the prediction she makes about the participants' behavior?

A. Theory

B. Hypothesis

C. Observation

D. Conclusion

3. Which of these is NOT a characteristic of an edited book?

A. Edited books are typically more focused on a single topic.

B. The peer-review process for edited books is more rigorous than for that of a journal.

C. Edited books compile chapters from various authors.

D. Edited books often include diverse perspectives on a topic.

4. What term describes the approach where psychological scientists base their conclusions on collected evidence?

A. Rationalism

B. Empiricism

C. Deduction

D. Induction

5. Which of the following is a quantitative technique used in some review articles that combines the results of many studies?

A. Case study analysis.

B. Meta-analysis.

C. Qualitative synthesis.

D. Literature review.

6. What type of validity are colleges concerned about when they rely on high school GPA instead of standardized test scores?

A. Content validity

B. Construct validity

C. Criterion validity

D. Face validity

7. Which type of measure involves participants reporting their own feelings or behaviors?

A. Observational measure

B. Experimental measure

C. Self-report measure

D. Biased measure

8. What is a key feature of a good theory in scientific research?

A. Complex and detailed explanations

B. Falsifiable and supported by data

C. Focused on anecdotal evidence

D. Broad and vague interpretations

9. When data does not support a hypothesis, what action is suggested for the underlying theory?

A. Ignore the results

B. Revise the theory

C. Strengthen the hypothesis

D. Publish the findings immediately

10. What is the dependent variable in Professor Nakum's memory experiment?

A. The list of words used

B. The group of participants

C. The duration of the recall period

D. The number of words correctly recalled

Answers

1. C
2. B
3. B
4. B
5. B
6. C
7. C
8. B
9. B
10. D

Explanations

1. What is a survey method in research?

A. A technique involving experimental manipulation

B. A method that relies on observation of behavior

C. A research technique that uses questionnaires or interviews

D. A statistical analysis of existing data

Survey method as a research technique involves gathering information from a group of individuals through structured questionnaires or interviews. This method is primarily used to collect self-reported data from participants, which can include their thoughts, feelings, perceptions, or behaviors regarding various topics. By utilizing surveys, researchers can collect large amounts of data relatively quickly and efficiently, allowing for the analysis of trends, correlations, and group differences. The effectiveness of surveys lies in their ability to reach a wide audience and obtain responses that can be quantified and analyzed statistically. This method is particularly valuable in social sciences, psychology, and market research, where understanding human attitudes and behaviors is crucial.

2. In Latecia's study, what is the term used for the prediction she makes about the participants' behavior?

A. Theory

B. Hypothesis

C. Observation

D. Conclusion

In research methodology, a hypothesis is a specific, testable prediction about the expected outcome of a study. It serves as a foundational component of the research process, guiding the direction of the study and informing the methodology. In Latecia's study, the prediction she makes about the participants' behavior represents a hypothesis because it proposes a clear relationship between variables that can be tested through empirical observation. A hypothesis is formulated based on existing theories or previous research, aiming to contribute to the understanding of a certain phenomenon. In contrast, a theory is a broader conceptual framework that explains a general phenomenon and is usually supported by many studies. Observation refers to the act of watching and recording behaviors, and a conclusion is drawn at the end of a study based on the analysis of data collected, summarizing the findings. These distinctions clarify why the term focusing on Latecia's prediction is hypothesis.

3. Which of these is NOT a characteristic of an edited book?

A. Edited books are typically more focused on a single topic.

B. The peer-review process for edited books is more rigorous than for that of a journal.

C. Edited books compile chapters from various authors.

D. Edited books often include diverse perspectives on a topic.

The correct answer is that the peer-review process for edited books is typically not more rigorous than for journals. In general, journal articles often undergo a more thorough and standardized peer-review process due to the pressure of maintaining consistency and quality in academic publishing. Journals usually have specific guidelines and criteria that must be met for acceptance, whereas edited books can vary significantly in their review processes. Some chapters in edited volumes may be subject to peer review, but this is not uniform across all edited books, which allows for more variation in the level of scrutiny each chapter receives. In contrast, edited books often bring together chapters from various authors, showcasing a range of expertise and perspectives on a single topic, thereby enriching the discourse within the field. They also maintain focus on a central theme, ensuring that the collected works relate closely to one another, contributing to the depth of discussion around that topic. This diversity of perspectives in edited volumes serves to offer a more rounded understanding of complex issues, making them valuable resources in academic settings.

4. What term describes the approach where psychological scientists base their conclusions on collected evidence?

A. Rationalism

B. Empiricism

C. Deduction

D. Induction

The term that best describes the approach where psychological scientists base their conclusions on collected evidence is empiricism. Empiricism emphasizes the importance of observation and evidence from the real world in forming knowledge and making conclusions. In the context of psychological science, this means that researchers gather data through methods such as experiments, surveys, and observations to understand behavior and mental processes. This evidence-based approach allows scientists to draw conclusions that are grounded in actual findings rather than speculation or theory alone. In psychology, empiricism is foundational because it ensures that claims about human behavior and cognition are supported by measurable and observable data, providing a reliable basis for scientific inquiry.

5. Which of the following is a quantitative technique used in some review articles that combines the results of many studies?

A. Case study analysis.

B. Meta-analysis.

C. Qualitative synthesis.

D. Literature review.

Meta-analysis is a quantitative technique that synthesizes the results of multiple studies to provide a clearer statistical understanding of a particular phenomenon or research question. By combining data from various studies, meta-analysis calculates an overall effect size, which enhances the ability to detect patterns, generalize findings, and provide more robust conclusions than any individual study could offer. This method is particularly powerful when studies examine similar hypotheses or outcomes, allowing researchers to effectively summarize existing evidence and draw more comprehensive conclusions about a specific area of inquiry. The other techniques listed fall into different categories. For example, case study analysis focuses on an in-depth exploration of a single case or a few cases rather than aggregating data across multiple studies. Qualitative synthesis, in contrast, examines themes and patterns in qualitative data without quantitative analysis. A literature review provides a summary and discussion of existing research but does not quantitatively combine results in the same way that a meta-analysis does. Therefore, the defining feature of meta-analysis is its ability to quantitatively combine results, making it a vital tool in research synthesis.

6. What type of validity are colleges concerned about when they rely on high school GPA instead of standardized test scores?

A. Content validity

B. Construct validity

C. Criterion validity

D. Face validity

Colleges are primarily concerned with criterion validity when they rely on high school GPA as a predictor of a student's potential success in college, rather than using standardized test scores. Criterion validity refers to how well one measure predicts an outcome based on another measure. In this context, high school GPA is used as a criterion to evaluate how well it predicts success in college, such as grades in college courses or degree completion. High school GPA is often seen as a relevant indicator of a student's academic performance and ability to handle college-level coursework. If colleges find that students with higher GPAs tend to perform better in college, this strengthens the criterion validity of high school GPA as a predictor for future academic success. Other types of validity, such as content validity, relate to whether a test covers the relevant material or domain it is supposed to measure. Construct validity assesses whether a test truly measures the theoretical construct it claims to assess, and face validity concerns whether a test appears, on the surface, to measure what it is intended to measure. While these concepts are important in research methodology, they are not the primary concern for colleges focusing on the predictive relationship between high school GPA and college performance.

7. Which type of measure involves participants reporting their own feelings or behaviors?

A. Observational measure

B. Experimental measure

C. Self-report measure

D. Biased measure

Self-report measures involve participants directly providing information about their own feelings, thoughts, or behaviors. This type of measure is fundamental in research, as it allows researchers to gather subjective data directly from individuals, giving insight into their personal experiences and perceptions. Self-report measures can take various forms, such as surveys, questionnaires, or interviews, and they are often used to assess emotions, attitudes, beliefs, and behaviors. In contrast, observational measures rely on researchers observing and recording behaviors without directly asking participants about their feelings or thoughts. Experimental measures focus on manipulating variables to determine cause-and-effect relationships, while biased measures refer to data collection methods that may lead to skewed or unrepresentative results due to various factors, such as leading questions or lack of anonymity. Therefore, the clarity and subjectivity that self-report measures provide make them an essential tool in psychological research.

8. What is a key feature of a good theory in scientific research?

A. Complex and detailed explanations

B. Falsifiable and supported by data

C. Focused on anecdotal evidence

D. Broad and vague interpretations

A key feature of a good theory in scientific research is that it is falsifiable and supported by data. This means that the theory must be testable through experimentation or observation, allowing for the possibility that it could be proven wrong. This characteristic is essential because it ensures that the theory can be evaluated based on empirical evidence and subjected to rigorous scrutiny. A theory that is not falsifiable cannot be scientifically validated or challenged, rendering it less useful in the scientific community. Moreover, being supported by data means that the theory is based on systematic observations and experiments, which provide the necessary evidence to support its claims. This reliance on data helps to establish credibility and allows for ongoing refinement and verification of the theory as new evidence emerges. In contrast, the other options lack critical components of a strong scientific theory. Complex and detailed explanations can sometimes obscure understanding rather than clarify it, while focusing on anecdotal evidence disregards the need for systematic investigation and scientific rigor. Broad and vague interpretations fail to offer clear predictions or insights, making them less effective as theories in advancing knowledge and guiding research.

9. When data does not support a hypothesis, what action is suggested for the underlying theory?

A. Ignore the results

B. Revise the theory

C. Strengthen the hypothesis

D. Publish the findings immediately

When data does not support a hypothesis, it is important to consider that the underlying theory may need to be revised. This is a crucial aspect of the scientific method, which emphasizes that theories must adapt based on empirical evidence. Theories are not static; they evolve as new data is collected and analyzed. If the results do not align with the expectations set by the hypothesis, it indicates a potential gap or flaw in the theoretical framework informing the hypothesis. Revising the theory allows researchers to better reflect the complexities of the phenomena being studied and to accommodate new insights. This process not only leads to a more accurate understanding of the underlying mechanisms at play but also strengthens the validity of future hypotheses derived from the revised theory. Continuous improvement and adjustment of theories based on evidence are fundamental to scientific progress, ensuring that conclusions are grounded in reality. In contrast, ignoring the results or rushing to publish findings without thorough consideration would undermine the integrity of the research process. Strengthening the hypothesis without addressing the underlying theory fails to acknowledge the data's implications, while simply publishing findings can lead to the dissemination of potentially misleading information that does not contribute to the advancement of knowledge.

10. What is the dependent variable in Professor Nakum's memory experiment?

A. The list of words used

B. The group of participants

C. The duration of the recall period

D. The number of words correctly recalled

In Professor Nakum's memory experiment, the dependent variable represents the outcome that is measured to assess the effect of the independent variable. In this case, the independent variable could be the type of words presented or the conditions under which participants are tested. The dependent variable is the number of words correctly recalled, which is what the researcher is ultimately interested in measuring to determine how well participants have retained the information. This measurement reflects the performance of participants based on their memory capabilities and is influenced by the experimental conditions set by the researcher. The list of words used serves as a stimulus for the participants rather than a measurement of their memory. The group of participants represents the subjects involved in the study, but does not indicate the outcome being measured. The duration of the recall period might influence performance, but it is not the variable being measured for the study's outcomes. Thus, the number of words correctly recalled is indeed the performance metric that is analyzed to draw conclusions from the experiment.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://asu-psy290exam1.examzify.com

We wish you the very best on your exam journey. You've got this!