

Basic and Applied Research

For some, the word research brings to mind sterile laboratories divorced from the real world. But in reality, research is a highly creative endeavor, and the knowledge it generates helps organizations make evidence-based decisions and implement sound policies.

Research is HumRRO's lifeblood, integral to all our diverse capabilities. Conducting sound basic and applied research demands an unbiased perspective coupled with deep methodological and statistical expertise. We are an independent, nonprofit organization with a long history of providing trusted, objective research and evaluation services. We help clients "do research right" by working with them to:

- ask the right questions,
- generate the right data, and
- conduct the right analyses.

Of course, "right" depends critically on a client's unique context and goals. The fact that our client relationships often span decades ensures that our research solutions always reflect these crucial factors.



Asking the Right Questions

Our research projects generate answers to our clients' most pressing human capital, educational, and assessment-related challenges. Stakeholders rely on these results to inform critical policy and personnel decisions. For example:

• How can students be prepared to meet high school graduation requirements? We identified which interventions best help students pass the California High School Exit Exam (CAHSEE).

- How can personality be assessed in an accurate and engaging way? For the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), we are exploring how game-like simulations can shed light on people's personalities.
- Which raters provide the most accurate information about job skill requirements?
 We helped the Department of Labor decide whether job incumbents or trained analysts should provide information about skills within the Occupational Information Network (O*NET).
- What leadership competencies are needed in today's military? For ARI and the School for Command Preparation, we mapped the competencies needed to command brigades and companies to improve officer leadership training.
- Which incentives have the greatest impact on military recruits' occupational choices? Our research led to the development of a Decision Support Tool that the Army can use to efficiently allocate recruitment incentives.

Generating the Right Data

The depth and breadth of our methodological expertise allows us to explicitly address our clients' questions through creative and thoughtful research. For example, we designed a study for the HR Certification Institute (HRCI) to examine the value of their two most popular certifications—Professional in Human Resources (PHR®) and Senior Professional in Human Resources (SPHR®). By collecting both self- and supervisor-reports of career achievements, promotions received, income, and job performance among both certificants and non-certificants, we were able to highlight a number of very tangible career benefits associated with these certifications.

HumRRO has decades of experience collecting data through the most appropriate methods (e.g., surveys, focus groups, interviews, direct observation) in light of the research questions to be addressed. Our role as the lead quality assurance contractor for the National Assessment of Educational Progress (NAEP) reflects our strong commitment to following rigorous data collection procedures that ensure the accuracy and integrity of the results.

Conducting the Right Analyses

HumRRO's unparalleled technical expertise ensures that we always employ the right analyses to address the question at hand—and that our research generates findings that are accurate, unbiased, and responsive. For example:

- To examine the impact of testing disruptions (i.e., server crashes) on student high-stakes test scores, we used item response theory to generate student ability estimates before and after the disruption occurred.
- To study the factors responsible for employee turnover within a financial services firm, we used event history models to clarify the impact of key demographic variables.
- To illuminate the role of employee engagement within a Fortune 500 company, we used hierarchical linear modeling to predict important business outcomes from engagement survey data.

Giving Back to the Community

A commitment to improve organizations and society by sharing our expertise is the cornerstone of HumRRO's mission. Our robust internal research and development (IR&D) program is a tangible manifestation of this commitment, with recent IR&D efforts focused on defining ethical performance and assessing reliability among "messy" or ill-structured data. Our researchers go beyond being highly skilled analysts by also giving back to the scientific community through service on journal editorial boards and scientific panels, and through dozens of conference presentations and publications each year—often in partnership with our colleagues outside of HumRRO (e.g., clients, academia).

For more information contact:



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HumRRO was established in 1951 and is an independent, nonprofit corporation dedicated to the development and application of state-of-the-art scientific principles and technologies to solve the real-world challenges facing private and public sector organizations and educational institutions. Our professional staff is composed of psychologists with diverse expertise in: personnel selection, classification, and promotion; education assessment and accountability; strategic human capital management; program evaluation and policy analysis; employee development and training; credentialing; modeling and simulation; and survey research. Our client base includes the military, government agencies, private industry, and professional associations. HumRRO is an industry leader in working collaboratively with clients to create customized, best-practice solutions.