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INCORPORATING BEHAVIORAL SCIENCE IN USAID ECONOMIC ANALYSIS

FINAL REPORT

May 2023

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INCORPORATING BEHAVIORAL SCIENCE IN USAID ECONOMIC ANALYSIS

Final Report

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ACRONYMS

CBA	-	Cost-benefit analysis
CEA	-	Cost-effectiveness analysis
CEADIR	-	Climate economic analysis for development, investment, and resilience
CER	-	Country economic review
CLA	-	Collaborating, learning, and adapting
DDI	-	The Bureau for Development, Democracy, and Innovation
eMBeD	-	Mind, Behavior, and Development Unit
EMD/E	-	Economics and Market Development
FSN	-	Foreign Service National
FSO	-	Foreign Service Officer
GOH	-	Government of Honduras
IGD	-	Inclusive growth diagnostic
KII	-	Key informant interview
LEAP III	-	Learning, Evaluation, and Analysis Project
MCC	-	Millenium Challenge Corporation
OU	-	Operating Unit
PPL	-	The Bureau for Policy, Planning, and Leaning
SOW	-	Scope of work
USAID	-	United States Agency for International Development
USG	-	United States Government

EXECUTIVE SUMMARY

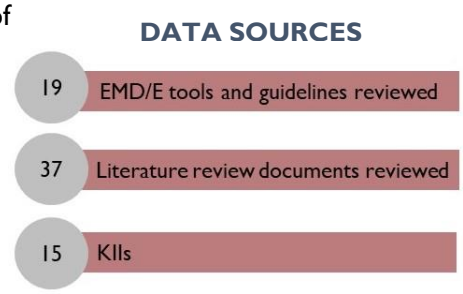
WHAT WERE THE LEARNING OBJECTIVES?

USAID's Learning, Evaluation, and Analysis Project (LEAP III) team collaborated with the Economics team within the Center for Economics and Market Development (EMD/E) to achieve learning objectives related to incorporating behavioral science into the analytical support, activity management support, trainings, and tools it provides to USAID Missions and Operating Units. The study is designed to inform the four learning objectives related to:

- Improving the usefulness of EMD/E tools and technical support for Mission staff
- Encouraging experimental evaluations of behaviorally informed interventions
- Learning about behavioral tools and guidelines from other development organizations and agencies
- Integrating behavioral science concepts into EMD/E economic analysis tools

WHAT WAS THE STUDY APPROACH?

We completed a desk review of EMD/E tools, a targeted review of behavioral science literature and tools, and key informant interviews (KIIs) with select respondents from USAID Missions, other international development organizations, US government agencies with behavioral science teams, and other behavioral science experts. We then triangulated information across data sources to identify common themes and synthesize findings to propose recommendations.



WHAT WERE THE KEY FINDINGS AND RECOMMENDATIONS?

Learning objective 1: Improving the usability of EMD/E tools and supports

Key Finding: Adjustments to EMD/E analysis and outreach to Missions that are informed by behavioral science can improve the usability and uptake of EMD/E work products.

Recommendation: EMD/E analysis should prioritize recommendations that appear most feasible within the Mission's purview, accounting for contextual constraints that Mission staff have shared. For example, EMD/E can adjust the executive summary of a report to distinguish between findings for which it is feasible for the Mission to take action and those which are less feasible. Structuring information in this way can reduce information overload and help decision-makers process the recommendations.

Recommendation: EMD/E should use behavioral science to improve the content and targeting of EMD/E messaging to increase demand for EMD/E support. Behavioral science supports the effectiveness of sharing testimonials from previous users, providing planning prompts, framing EMD/E support as an asset Missions don't want to "leave on the table," and targeting outreach when it is most timely.

Learning objective 2 : Encouraging behavioral experiments

Key Finding: Increasing the use of behavioral experiments requires engaging with multiple touch points in USAID's procurement process and convincing USAID staff of these experiments' value.

Recommendation: EMD/E can increase general interest in behavioral experimentation among Mission staff by finding champions from other Missions and bureaus, leveraging the "learning" component of the Collaborating, Learning, and Adapting (CLA) framework, and showing concrete examples of success drawn from the Bureau for Policy, Planning, and Learning's (PPL) annual case competition. Unless USAID staff develop enthusiasm about the value of behavioral experiments, simply adding requirements for the use of experimental and behavioral designs may not be sufficient to lead to implementation of successful behavioral experiments. Pairing requirements with efforts to build buy-in will improve the likelihood of success.

Learning objective 3: Behavioral science resources from other organizations

Key Finding: Behavioral tools and guidelines exist in various forms but tend to follow a common framework: define, diagnose, design, and test.

Recommendation: EMD/E should adopt the checklists, resources, and templates included in this report for journey mapping and selecting behavioral strategies. The study team selected the tools and resources that we assessed to be the most user-friendly and that had the highest potential to empower Missions and implementing partners to incorporate behavioral science in their project designs.

Learning objective 4: Behavioral science and EMD/E analysis tools

Key Finding: Altering analysis parameters in EMD/E tools to account for behavioral science has limited utility.

Recommendation: EMD/E should limit the time and resources spent incorporating behavioral insights into the content of EMD/E's tools. Although an initial review of the literature at the study's outset indicated that behavioral science concepts such as cognitive biases and social norms might be relevant, the experts interviewed for this study agreed that this would have limited utility in practice. There is more promise in applying behavioral concepts to enrich the interpretation and application of findings from EMD/E analyses than in adjusting analytic models to incorporate behavioral science.

The full report contains 11 recommendations based on insights from key internal and external informants synthesized with findings from a scan of over 450 research studies and other publications. Each recommendation provides concrete examples of steps that EMD/E and partners within USAID can take to implement it. The heading of each Key Finding box above links to the relevant report section, so anyone can dive in to learn about the finding that is most relevant to them.

I. INTRODUCTION

Over the past decade, behavioral science has demonstrated that people do not always exhibit perfectly rational behavior.[1] In practice, people often decide and act without weighing the pros and cons of each option or may fail to act altogether, even when they want to.[2] Accounting for this tendency in policies or programs can have profound impacts on real-world outcomes. As a result, many governments and development organizations have created units dedicated to applying behavioral science to improve program performance, such as the World Bank's Mind, Behavior and Development Unit (eMBeD) or the United Kingdom's Behavioural Science Team. Behavioral science has been successfully employed in various developing country contexts, including but not limited to improving savings rates, reducing unhealthy behavior, boosting worker output, and increasing fertilizer use.[3]

In 2021, Samantha Power, Administrator of the U.S. Agency for International Development (USAID) set forth a vision to put behavioral science at the center of USAID's work, with the goal of enhancing the potency of USAID's efforts.[4] An important step in achieving this objective is ensuring that the Agency incorporates core insights from behavioral science into its analytic support, technical assistance, and interventions. In line with this approach, the Economics team in USAID's Center for Economics and Market Development (EMD/E) seeks to better understand how it can incorporate behavioral science into its analytical support, activity management support, trainings, and tools it provides to USAID Missions and Operating Units (OUs). The EMD/E team offers analytical tools such as cost-benefit analyses (CBAs), cost-effectiveness analyses (CEAs), inclusive growth diagnostics (IGDs) and jobs diagnostics, and country economic reviews (CERs) of USAID partner countries. However, Mission staff face behavioral and bureaucratic barriers that prevent them from fully using these tools to inform their programming. At the same time, EMD/E's tools have historically relied on the assumption that human behavior follows from informed, independent, self-interested decisions. These models often do not factor in recent insights from behavioral science, including concepts such as mental fatigue, present bias, and inertia.

USAID's Learning, Evaluation, and Analysis Project (LEAP III) collaborated with the EMD/E team to achieve its learning objectives related to incorporating behavioral science into its analytical tools and the analytic and activity management support it provides to Missions and OUs. The study is designed to

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[1] The Behavioral Science and Policy Association (BSPA) defines behavioral science as a field that "encompasses the social sciences, and brings together insights and methods from a variety of fields and disciplines," including behavioral economics, organizational behavior, neuroscience, and social and cognitive psychology "to bridge the gap between economic models and everyday reality to shape both private- and public-sector policy and practice". BSPA. "About BSPA." (n.d.) https://behavioralpolicy.org/about/. Accessed May 5, 2023.

[2] Bertrand, Marianne, Sendhil Mullainathan, and Eldar Shafir. "A Behavioral-Economics View of Poverty." American Economic Review, 94, no. 2, 2004, pp. 419–423; Datta, Saugato, and Sendhil Mullainathan. "Behavioral Design: A New Approach to Development Policy." Review of Income and Wealth, vol. 60, no. 1, 2014, pp. 7–35.

[3] Karlan, D., Morten, M., & Zinman, J. "A Personal Touch in Text Messaging can Improve Microloan Repayment." Behavioral Science & Policy, vol. 1, no. 2, 2016, pp. 31–39; Giné, Xavier, Dean Karlan, and Jonathan Zinman. "Put your money where your butt is: a commitment contract for smoking cessation." American Economic Journal: Applied Economics, vol. 2, no. 4, 2010, pp. 213-235; Kaur, Supreet, Michael Kremer, and Sendhil Mullainathan. "Self-control at work." Journal of Political Economy, vol. 123, no. 6, 2015, pp. 1227-1277; Duflo, Esther, Michael Kremer, and Jonathan Robinson. "Nudging Farmers to use Fertilizer: Theory and Experimental Evidence from Kenya." American Economic Review, vol. 101, no. 6, 2011, pp. 2350-2390.

[4] Power, Samantha. "Keynote Remarks at the United Nation's Behavioral Science Week." https://www.usaid.gov/news-information/speeches/jun-21-2021-administrator-samantha-powers-keynote-remarks-united-nations-behavioral-science-week

inform the USAID Economics team's objectives related to (1) improving the usefulness of EMD/E tools and technical support for Mission staff, (2) encouraging experimental evaluations of behaviorally informed interventions, (3) learning about behavioral tools and guidelines from other development organizations and agencies, and (4) integrating behavioral science concepts into EMD/E economic analysis tools.

This report presents findings based on a desk review of EMD/E analysis tools, a targeted review of behavioral science literature, and key informant interviews (KIIs) with selected stakeholders at USAID, other development organizations, U.S. government agencies, and organizations specializing in applying behavioral science in international development. The report is organized as follows: Chapter II provides a brief background of EMD/E and describes the analytic economic tools it offers, Chapter III describes the learning objectives and study approach, Chapter IV presents our findings and recommendations for each of the four learning objectives, and Chapter V concludes with a summary of recommendations. The Appendices include additional details on findings as well as supporting materials.

2. BACKGROUND ON EMD/E AND ECONOMIC ANALYSIS TOOLS

EMD/E works with Missions, and with OUs within USAID technical and regional bureaus, to ensure that country strategies, projects, and activities address key constraints to economic growth and maximize development returns. The team provides direct analytical support, activity management support, and capacity development in the form of customized training. Additionally, the team produces the following analytic tools when requested by Mission or OU staff:

1. **Cost-benefit analysis (CBA):** CBAs seek to measure the estimated financial and economic viability of an investment by comparing the incremental costs and benefits resulting from the investment. They compare the "with" versus the "without" scenarios from the viewpoint of different stakeholders. USAID uses CBA to inform decisions on whether to undertake particular investments and to measure the estimated impact of past investments.
2. **Cost-effectiveness analysis (CEA):** CEAs seek to determine the lowest unit-cost alternative for achieving an outcome. CEA is used when the benefits cannot be monetized or the monetary benefits are not the desired outcome measure. USAID uses CEA to inform decisions on the choice of intervention from a range of alternatives.
3. **Inclusive growth diagnostic (IGD):** IGDs identify the most critical binding constraints to private investment and inclusive growth in a country or region. They focus on growth that benefits all segments of the population and that significantly reduces poverty. USAID uses IGDs to increase selectivity and to focus development planning and programming.
4. **Jobs diagnostic:** A jobs diagnostic assesses the binding constraints to more and better jobs in a country. USAID uses jobs diagnostics to identify development challenges and prioritize interventions at the project or activity level.
5. **Country economic review (CER):** CERs provide an overview of a country's economic development situation that can be used for Mission planning at all levels. They provide key economic information and analysis to the Mission by laying out the country's economic goals, the constraints to achieving these goals, the opportunities to overcome the constraints, and the economic risks the country faces in transitioning toward sustainable, inclusive development.

USAID EMD/E wants to develop approaches to expand the use of these economic tools within Missions and OUs to incorporate rigorous economic thinking into strategy, project, and activity design. EMD/E is also interested in incorporating the latest insights from behavioral science into its tools and the related support it provides to Missions. This study seeks to provide the team, including the Chief Economist and other senior leaders, with actionable findings and recommendations regarding this work.

3. LEARNING OBJECTIVES AND STUDY APPROACH

This study assessed 10 research questions that were developed in collaboration with the EMD/E team. Table 1 groups these questions into four main learning objectives to facilitate concise reporting.[5]

TABLE 1. LEARNING OBJECTIVES
1. IMPROVING USEFULNESS OF EMD/E TOOLS AND SUPPORT FOR STAFF • How can concepts from behavioral science help us understand the utility or use of EMD/E's core analytical tools?
2. ENCOURAGING EXPERIMENTAL EVALUATIONS OF BEHAVIORALLY INFORMED INTERVENTIONS • What language should be added to USAID contracts and grants to ensure contractors and grantees conduct experimental evaluations of behaviorally informed interventions, where appropriate? • What processes does EMD/E need to follow to incorporate that language into future grants and contracts?
3. LEARNING ABOUT BEHAVIORAL TOOLS AND GUIDELINES FROM OTHER DEVELOPMENT ORGANIZATIONS AND AGENCIES • What behavioral economics tools and guidelines are other development assistance organizations and implementing partners using in USAID's priority development sectors? • Given EMD/E's comparative advantage, what behavioral economics tools and guidelines should it adopt? • What (potential) barriers are there to Mission staff in adopting behavioral economics tools and guidelines? • How can EMD/E align these behavioral economics tools and guidelines with the relevant work of other units within the Bureau for Development, Democracy, and Innovation (DDI) and other bureaus at USAID?
4. INTEGRATING BEHAVIORAL SCIENCE CONCEPTS INTO EMD/E ECONOMIC ANALYSIS TOOLS • How can EMD/E's analytical tools be updated to account for the concepts and findings of behavioral science and behavioral economics? • What are the relevant behavioral economics concepts to consider when applying the macroeconomic and microeconomic analysis tools EMD/E commonly uses? • How can EMD/E use behavioral economics to systematically incorporate gender and other inclusion-oriented considerations into its analytical tools?

To address these research questions, we completed a desk review of EMD/E tools, a targeted review of behavioral science literature and tools, and KIIs with select respondents, as described below. These components informed one another, and we took an iterative approach to these tasks, revisiting the data collection methods to obtain the information needed to address the learning objectives. For example,

[5] Appendix A presents the original research questions and learning objectives. The study team worked closely with EMD/E to refine the research questions and learning objectives as the study progressed.

we used the KIIs and desk review to identify search keywords for the literature review while our review of behavioral tools informed topics to explore more deeply in our KIIs. We then triangulated information across data sources to identify common themes and synthesize findings.

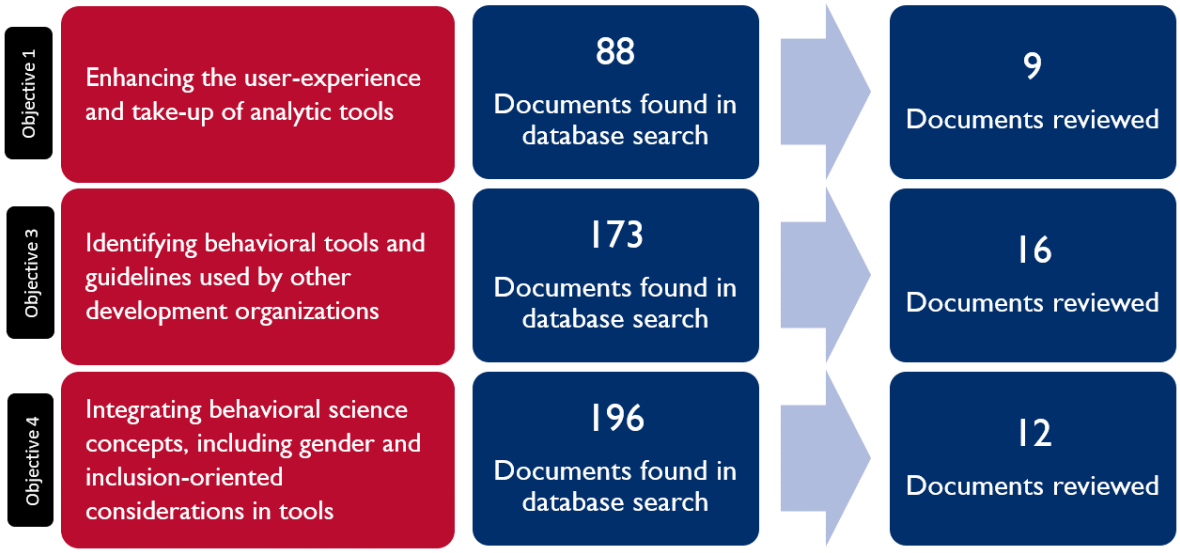
3.1 DESK REVIEW AND INITIAL KIIS

To understand the function and responsibilities of EMD/E, its comparative advantage, and how it interacts with Missions and OUs, our team conducted a desk review, examining EMD/E's analytic tools and capacity development work. We reviewed two examples of each tool, plus any available training material or guidance. Appendix B lists the specific examples we reviewed. To supplement this review, we conducted two sets of interviews, one with Foreign Service Officers (FSOs) and another with Foreign Service Nationals (FSNs), to gather insights on how the USAID EMD/E team supports Missions, their experience using EMD/E tools, and any barriers they might face when scoping and implementing interventions and using EMD/E's economic analysis tools.

3.2 TARGETED LITERATURE REVIEW

We conducted a short, focused literature review of studies, tools, and guidelines related to behavioral science, to address three of the four learning objectives: (1) enhancing the user-experience and take-up of analytic tools, (2) identifying behavioral tools and guidelines used by other development organizations and government agencies, and (3) integrating behavioral science concepts, including gender and other inclusion oriented considerations into EMD/E economic analysis tools.[6] Our initial database and website search generated a set of over 450 documents, which we reduced to 37 that we identified were most relevant to USAID's learning objectives (Figure 1). Appendix C details the process we followed, including the search terms and inclusion criteria we used. To supplement this, we also reviewed articles that were suggested by our key informants but were not identified by our database search (n = 8), and studies with which our team was familiar from applying behavioral science to improve public programs in other contexts (n = 14). We then used data extraction templates to summarize and synthesize findings across documents. Appendix D provides our abbreviated notes on these documents.

FIGURE 1. TARGETED LITERATURE REVIEW PROCESS



[6] We pursued the learning objective on encouraging experimental evaluations only through KIIs.

3.3 KIIS WITH STAKEHOLDERS

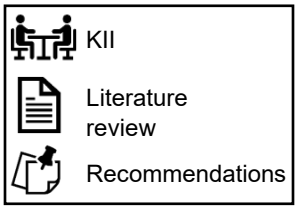
In addition to initial interviews, we conducted a total of 15 virtual, in-depth KIIs with staff from other development organizations, implementing partners, and United States Government (USG) agencies, as well as experts from behavioral science organizations and academic researchers. Table 2 lists these respondent types and the information we gathered from them. Appendix E lists the specific organizations and agencies that participated in the KIIs. We selected respondents collaboratively with EMD/E to focus on perspectives that were of particular interest to USAID. In each KII, we used a semi-structured interview guide to help direct the conversation and ensure we covered common themes relevant to the research questions to facilitate analysis.

TABLE 2. KEY INFORMANT INTERVIEWS

RESPONDENT TYPE	INFORMATION GATHERED
USAID (n=7)	• How EMD/E operates and supports Missions • Challenges and limitations in using analytical tools and proposed solutions • How to use the grants and contracts procurement process to promote experiments of behaviorally informed interventions
Other organizations and agencies (n=5)	• Behavioral science principles used in the field • Experiences using behavioral economics tools • Recommendations for increasing the use of behavioral economics tools
Behavioral science organizations and academics (n=3)	• Examples of successful applications of behavioral sciences that can be used to improve analytical tools and support • Potential barriers to adopting behavioral economics tools, guidelines, and technical support

4. FINDINGS

This chapter is divided into four sections that discuss findings for the four learning objectives. At the beginning of each section, we use desk and paper icons to indicate whether findings were drawn from KIIs, the literature review, or both. Throughout the chapter, we also use a thumbtack icon to mark our recommendations to EMD/E.



4.1. IMPROVING THE USEFULNESS OF EMD/E TOOLS AND TECHNICAL SUPPORT FOR STAFF

BOX 1. LEARNING OBJECTIVE 1 – RESEARCH QUESTIONS

How can concepts from behavioral science help us to understand the utility or use of EMD/E's core analytical tools?

One primary focus for this work was to explore how to leverage behavioral science to improve the usability and usefulness of EMD/E support for Mission staff. To explore this question, we interviewed staff from USAID, other development organizations and USG agencies, and behavioral science organizations, as well as an academic in the field. We complemented these interviews with a literature review of documents that discussed ways to enhance the user experience and take-up of analytical tools. When considering recommendations for EMD/E, we focused on improvements to the tools, as well as process improvements to boost user engagement. This section documents the key barriers USAID staff reported, links them with relevant concepts in the behavioral science literature, and proposes strategies aligned with findings from behavioral science to address these barriers.

4.1.1. COMMON BARRIERS CITED BY MISSION STAFF

Through interviews with Foreign Service Officers (FSOs) and Foreign Service Nationals (FSNs), we learned that these staff viewed the tools as containing valuable information, but they also saw opportunities to improve the tools' utility. Among the interviewees we spoke with, multiple informants shared the following barriers:

1. **Staff feel overburdened by the amount and complexity of information in the tools.** Several informants shared concerns about the length of reports and staff capacity and resources available to review them. Some also commented on the impact of the reduced numbers of staff economists at Missions, suggesting that—without an expert in the field—it could be difficult in some cases to understand, process, and use information in the tools to support decision making.
2. **Analyses are not specific to sectors or subregions in which Mission staff are working.** By design, some EMD/E tools, such as CERs and IGDs, provide detailed information on a broad unit of analysis, such as a national economy. While this comprehensive analysis can be helpful, informants shared that it can be difficult to find specific information that is most relevant to their sector or context. For example, one informant shared that their CER provided accurate and useful information broadly, but they would have benefitted from more specific information on the priorities that were being recommended for the proposed country strategy.

3. **When reports include recommendations that the Mission cannot act on due to lack of authority or resources, this can undermine the perceived utility of the analysis tool.** Multiple informants mentioned that report recommendations sometimes include actions that the Mission cannot pursue. For example, one informant noted that if a growth diagnostic highlighted corruption as a key constraint, that information was likely already known, but Mission funding may not be able to address that challenge. They noted it would be more helpful for the tool to highlight recommendations related to issues that the Mission has ability to address. This would reduce the need to sift through a large amount of information to identify a feasible focus for project design.

> *"The growth diagnostic or whatever tool I am going to employ should focus more on a niche problem we could actually address. The studies have to sync up with the realities of the Mission funding and timeline."*
>
> –FSO

4. **Mission staff were not always aware of EMD/E tools.** In interviews with FSOs and FSNs, we found that informants could only name and describe one or two of the tools EMD/E offers. When we asked how they first learned about these offerings, most often they had some personal connection to EMD/E staff.[7]

5. **Timing of analyses can be a barrier to informing decision making.** Informants shared that, even if EMD/E produces tools that contain useful information, the timing of receipt can be a barrier. If staff receive the analysis findings after the initial design and planning phase has ended, they are less able to incorporate the new information into project implementation. Further, if Mission leaders have concerns about the timing of analyses when they are deciding whether to request EMD/E analysis, this could lead them to underestimate the benefit of working with EMD/E, relative to the time cost of scoping and collaborating on the analysis.

We used this key set of barriers to guide additional KIIs and the literature review to identify best practices and potential opportunities to make EMD/E tools more accessible and their findings more actionable.

4.1.2. BEHAVIORAL EXPLANATIONS FOR BARRIERS TO USE OF EMD/E TOOLS AND TECHNICAL SUPPORT

Concepts from the behavioral science literature help explain several of the barriers that USAID staff described and inform the potential strategies to address them that we describe in section 4.1.3.[8] Appendix F contains a glossary of the behavioral science terms used in this report.

- **Information overload (Barriers 1 through 4).** This phenomenon could influence how Mission staff interact with EMD/E analysis products, for example if they fail to identify highly relevant information due to the detailed and technical document in which it is embedded.[9] Information

[7] When considering this barrier, we acknowledge that the recent decline in economists within USAID may have impacted the knowledge of and demand for these products in the field.

[8] It is important to note that some of the barriers described above – particularly the fourth and fifth ones – may not be driven primarily by cognitive biases documented in the behavioral science literature. Rather, they may be effects of organizational or structural constraints. However, there are still findings from behavioral science that can help EMD/E understand and address these barriers, and we describe those findings in the sections that follow.

[9] Eppler, Martin, and Jeanne Mengis. "The Concept of Information Overload: A Review of Literature From Organization Science, Accounting, Marketing, MIS, and Related Disciplines (2004)." In Kommunikationsmanagement im Wandel, edited by Miriam Meckel and Beat Schmid. Germany: Gabler Verlag Wiesbaden, 2008, pp. 271–305.

overload could also lead Mission staff to not request EMD/E information if they are already synthesizing a large amount of information when deciding a course of intervention and they therefore avoid the additional information available from EMD/E.[10] Strategies to address information overload include structuring information to make choosing between options easier[11] and connecting information explicitly to decisions it should inform.[12]

- **Status quo bias (Barriers 3 and 4).** This phenomenon is the tendency of decision makers to prefer "doing nothing or maintaining one's current or previous decision" in ways that are not consistent with rational decision-making.[13] Status quo bias could lead Mission staff to disregard or undervalue recommendations in EMD/E analysis reports that address sectors they have not previously worked in, even if designing projects in those sectors could yield large benefits. This effect may also cause Mission staff who are unfamiliar with EMD/E support to simply continue making decisions about interventions as they have in the past, rather than seeking out information about EMD/E analytical support available to them. Previous successful behavioral interventions have framed the status quo—in this case, designing a project without EMD/E support or working in the same sectors where the Mission has previously intervened—as the loss of an opportunity or "leaving value on the table."[14] The goal of this framing is to spur the behavioral effect of **loss aversion** in which people assign more value to losses than to equal-sized gains.[15] If Mission staff come to see EMD/E analysis expertise as an asset that they are "giving up" unless they make use of it, this could lead them to assign more value to EMD/E analyses by triggering an aversion to losing that asset.
- **Limited attention (Barrier 4).** Karlan et al. (2016) propose a working definition of limited attention as paying less than the optimal amount of attention to present opportunities (such as a savings program) that can provide future benefits.[16] Requesting and using EMD/E analysis tools represents a near-term investment of time to receive a future return (in the form of a better development outcome). If Mission staff attention is crowded out by other concerns, they may overlook the opportunity to bring EMD/E technical support to inform the program cycle. In this context, timely reminders can be an effective strategy to address limited attention. EMD/E staff described persistent efforts to make Mission staff aware of their analysis tools. Even so, unless Mission staff are reminded about EMD/E offerings at the time when they are most likely to act on this information, they may not think to request them.

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[10] Bawden, D., and L. Robinson. "Information Overload: An Introduction." Oxford Research Encyclopedia of Politics, June 2020. https://doi.org/10.1093/acrefore/9780190228637.013.1360

[11] Malhotra, N.K. "Reflections on the Information Overload Paradigm in Consumer Decision Making." Journal of Consumer Research, vol. 10, no. 4, March 1984, pp. 436–440.

[12] Simpson, C. W., and L. Prusak. "Troubles with Information Overload—Moving from Quantity to Quality in Information Provision." International Journal of Information Management, vol. 15, no. 6, 1995, pp. 413–425.

[13] Samuelson, W., and R. Zeckhauser. "Status Quo Bias in Decision Making." Journal of Risk and Uncertainty, vol. 1, no. 1, 1988, pp. 7–59.

[14] Amin, Samia; Greg Chojnack; Aravind Moorthy; Irma Perez-Johnson; Matt Darling; and Jaclyn Lefkowitz. "Using Behavioral Insights to Increase Retirement Savings: Trial Design and Findings." Washington, DC: Mathematica Policy Research, 2017.

[15] Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. "Experimental Tests of the Endowment Effect and the Coase Theorem." Journal of Political Economy, vol. 98, no. 6, December 1990, pp. 1325–1348.

[16] Karlan, D.; M. McConnell; S. Mullainathan; and J. Zinman. "Getting to the Top of Mind: How Reminders Increase Saving." Management Science, vol. 62, no. 12, 2016, pp. 3393–3411.

- **Availability bias (Barrier 5).** Availability bias refers to people's tendency to estimate the importance, prevalence or size of a phenomenon based on how easily it comes to mind.[17] Recent research has hypothesized that this bias can affect people's cost-benefit judgments by making costs or risks more salient.[18] This bias could enter into Mission leaders' decision making on whether to request EMD/E analysis. KIIs with Mission staff indicated that they sometimes found that the timing of receiving analysis results was not aligned with the timing of their decision making process. If the time costs of engaging with EMD/E—or the risk that analysis results will not be ready on their ideal timeline—come to mind more easily for Mission staff than the potential benefits from designing a more effective project, this could lead them to underestimate the net benefits of the engagement and discourage them from requesting EMD/E support. As EMD/E staff noted, this dynamic can be exacerbated if staff rotation patterns lead FSOs to experience the time costs of partnering with EMD/E without staying long enough to observe the benefits from a highly effective intervention. Sharing vivid success stories from past collaborations between EMD/E and Missions can make EMD/E's value more salient and thus address this barrier.
- **Identity mismatch (Additional barrier outside those mentioned in KIIs).** This phenomenon might represent an additional barrier beyond those mentioned explicitly in KIIs with FSNs and FSOs. Specifically, the study team hypothesized that if Mission leaders do not identify as economists, they may tend to undervalue economic analysis as a result of identity mismatch, in which one processes options in a decision based on the degree to which different alternatives affirm one's identity.[19] Although FSOs and FSNs did not indicate that they discount an economic perspective, EMD/E staff linked the lower-than-ideal demand for EMD/E analysis tools with fewer economists being embedded in Missions. If a lack of economists among Mission staff is leading to lower demand for economic analysis tools from EMD/E, then identity mismatch could explain this link. Providing **social proof** – examples of peers engaging in the desired behavior (requesting EMD/E analysis and using it to inform decisions) – may be one way to address identity mismatch.[20]

4.1.3. POTENTIAL SOLUTIONS

Strategies that draw on behavioral concepts can make EMD/E analysis tools easier for Mission staff to use and enhance EMD/E's efforts to raise awareness about the analysis they offer. The first three strategies below focus on potential refinements to analysis tools, while the fourth and fifth strategies involve activities that can raise Mission staff's awareness and use of those tools.

[17] Tversky, A., and Kahneman, D. "Judgment Under Uncertainty: Heuristics and Biases." Science, New Series, vol. 185, no. 4157, 1974, pp. 1124–1131. https://doi.org/10.1126/science.185.4157.1124.

[18] Sunstein, C. "The Availability Heuristic, Intuitive Cost-Benefit Analysis, and Climate Change." John M. Olin Program in Law and Economics Working Paper No. 263, 2005.

[19] Rodríguez-García, D., M. Solana, A. Ortiz, and B. Ballestín. "Blurring of Colour Lines? Ethnoracially Mixed Youth in Spain Navigating Identity." Journal of Ethnic and Migration Studies, vol. 47, no. 4, 2021, pp. 838–860; Fiske, S. T., & M. A. Pavelchak. "Category-based versus piecemeal-based affective responses: Developments in schema-triggered affect." In R. M. Sorrentino & E. T. Higgins (Eds.), Handbook of motivation and cognition: Foundations of social behavior, 1986, pp. 167–203. Guilford Press.

[20] Cialdini, R. B.; W. Wosinska; D. W. Barrett; J. Butner; and M. Gornik-Durose. "Compliance with a Request in Two Cultures: The Differential Influence of Social Proof and Commitment/Consistency on Collectivists and Individualists." Personality and Social Psychology Bulletin, vol. 25, no. 10, 1999, pp. 1242–1253.

Strategy 1. Prioritize findings that appear feasible within the Mission's purview, accounting for contextual constraints Mission staff have shared (Barriers 1 through 3). Malhotra (1984) finds that structuring information to help decision makers choose between options can help address **information overload**.[21] When EMD/E develops key findings and recommendations from their research, they could prioritize a subset of findings that they believe are most likely to be feasible. For example, the executive summary of a CER could distinguish between sectors that require intervention *and* are amenable to Mission intervention, and those that may require intervention but are infeasible for Missions to implement, such as those that are highly politicized. If structuring information in this way to mitigate information overload reduces the difficulty of decision making, it can also help to combat **status quo bias** that might otherwise lead Mission staff to favor project types they have designed in the past, even when new information suggests they should adopt new approaches.[22] We expect that this strategy is likely already in use with some Missions, but it could become a more systematic approach to helping Missions take action based on EMD/E findings and recommendations.

> *"The [EMD/E tools] just feed the knowledge base, which is fine. But if they could suggest some ways in which the information could be utilized to make [the recommendations] more tangible and actionable, that would be a big, big help."*
> – FSO

Pursuing this strategy requires EMD/E to use information about local contextual barriers, but existing aspects of the EMD/E engagement with Missions could allow them to gather this information. The EMD/E team regularly meets with users at the beginning of an engagement to collaboratively develop the concept note for their tools. Informants shared that it would be helpful to expand the initial conversations to discuss the major logistical and contextual barriers (such as budget, project timeline, political dynamics, and cultural/social implications) the Mission might face in applying findings to their local context. Box 2 offers an example of how current EMD/E recommendations could be tailored to consider feasibility.[23]

BOX 2. COST-BENEFIT ANALYSIS EXAMPLE

The cost-benefit analysis in Malawi suggests that cultural preferences for cooking methods will remain for certain food items, regardless of the economic benefit of using alternative fuels over charcoal or wood. These cultural preferences may make some recommendations (such as promoting cleaner combustion technologies; substituting charcoal, fuelwood, and briquettes with alternative fuels to reduce the economic costs of greenhouse gas emissions and health risks from fine particulate exposures; and promoting electric hotplates) less likely to gain wide adoption.

EMD/E could make the recommendations in its report easier to act on if it separated them into two sets: (1) one that most aligns with the local context, based on information mission staff have shared, and (2) another that has important economic or environmental advantages but may be less feasible to implement. Notably, resistance to clean options based on cultural preferences could be an example of a feasibility concern where behavioral design could help, for example by using communication strategies to counteract status quo bias. Nonetheless, structuring the information to acknowledge findings that are easier and harder to implement can significantly reduce the cognitive burden associated with understanding the findings, reducing **information overload** and improving the likelihood that decision makers ultimately use them to inform the selection of interventions.

[21] Malhotra, N.K. "Reflections on the Information Overload Paradigm in Consumer Decision Making." Journal of Consumer Research, vol. 10, no. 4, March 1984, pp. 436–440.

[22] Decision difficulty is one key factor the behavioral science literature has documented as a driver of status quo bias, as described in Fleming et al. (2010).

[23] Based on EMD/E experience, Missions may at times have a narrow view of what is feasible to implement. Therefore, EMD/E tools must provide recommendations that challenge Missions to act beyond their current orientation, and the strategy

Strategy 2. Offer illustrative action steps for proposed recommendations in the executive summary (Barriers 1 through 3). While EMD/E's tools are intended to provide contextual information to support Mission decision making, the recommendations are often very broad and Mission staff are often left without guidance on how to operationalize them. Some of EMD/E's tools provide specific examples in the main body of the report, but EMD/E can make this information more salient and accessible by systematically including this level of detail in the executive summaries. By providing examples of how EMD/E findings could translate to action in the executive summaries, EMD/E can increase a tool's accessibility and clearly connect the information to how it is meant to be used.[24] EMD/E generally makes itself available for follow-up questions from Missions about its recommendations; one way these illustrative action steps could be useful is if they make Missions more likely to ask follow-up questions to EMD/E. Prior research agrees that even small nudges, including offering examples, may affect behavior in the face of **information overload**.[25] Box 3 describes how EMD/E can offer concrete examples in the executive summary to help users identify actionable next steps.[26]

BOX 3. JOBS DIAGNOSTIC EXAMPLE

The executive summary in the jobs diagnostic in the Philippines lists broad recommendations for how USAID and the Philippine government can support job creation. To illustrate how these recommendations could turn into action, EMD/E could provide examples in the executive summary of how to implement these recommendations.

For example, for the recommendation to boost transport- and power-related infrastructure investments, EMD/E could provide examples of how to do this, such as streamlining permitting and licensing for infrastructure projects, using competitive bidding and tendering processes for contracts, or promoting public-private partnerships to attract private investment in infrastructure development. This gives decision makers an idea of the types of actions they can consider within their local context to operationalize the recommendation.

Strategy 3. Incorporate communication best practices into tool design (Barrier 1). In addition to providing an executive summary of main findings, EMD/E could consider reviewing the format and delivery of final tools to ensure they follow best practices in the field. Resources such as the Behavioral Insights Checklist[27] and the examples referenced in Box 4 offer concrete suggestions for improving communications.[28] Best practices also include exploring ways to make tools more user-friendly or engaging, such as enabling users to filter out irrelevant information quickly to reduce

described here is consistent with this facet of EMD/E's role. EMD/E reports can provide recommendations that Missions may perceive as difficult to implement while highlighting those that are most feasible. The source for Box 2 is: Matek, Benjamin; Pablo Torres; Gordon Smith; Eric Hyman; Santiago Enriquez; and Khadija Mussa. 2020. Cost-Benefit Analysis of Charcoal and Wood Use for Household Cooking and Demand- and Supply-Side Alternatives for Forest Conservation in Lilongwe, Malawi. Washington, DC: Crown Agents USA and Abt Associates, Prepared for USAID

[24] Simpson, C. W., and L. Prusak. "Troubles with Information Overload—Moving from Quantity to Quality in Information Provision." International Journal of Information Management, vol. 15, no. 6, 1995, pp. 413–425.

[25] Nagtegaal, R.; L. Tummers; M. Noordegraaf; and V. Bekkers. "Nudging Healthcare Professionals Towards Evidence-Based Medicine: A Systematic Scoping Review." Journal of Behavioral Public Administration, vol. 2, no. 2, 2019, pp. 1–20.

[26] The source for Box 3 is: Avila, John; Greg Gangelhoff; Leonardo A. Lanzona; Caroline Smith; and Leandro Tan. 2017. Philippines jobs diagnostic. USAID, Washington, DC.

[27] Darling, Matthew; Jaclyn Lefkowitz; Samia Amin; Irma Perez-Johnson; Greg Chojnacki; and Mikia Manley. "Practitioner's Playbook for Applying Behavioral Insights to Labor Programs." Princeton: Mathematica Policy Research, 2017.

[28] The source for Box 4 is: Jones, A., Vlaev, I., Herbert, F., and S Richardson. "Response: A behavioral insights checklist for designing effective communications." Ernst & Young (n.d.).

information overload.[29] A recent DOL Behavioral Interventions technical report provides an example of an engaging and easy-to-scan format.[30] EMD/E might also consider requiring a 1-2 page brief that would accompany the comprehensive reports, following the example provided by its recently commissioned review of the USAID CBA guidelines.[31]

BOX 4. EXAMPLES OF COMMUNICATION BEST PRACTICES

- Simplify—reduce text and remove jargon
- Chunk and order information into sections
- Insert most important points in the first two paragraphs and to the left of the page
- Break actions into steps using numbers, bullet points, or checklists
- Use color, images, bold, and larger fonts to highlight titles and key phrases

Strategy 4. Draw on behavioral science concepts to improve the content and targeting of EMD/E messaging to Missions and boost demand for EMD/E support (Barriers 4 and 5).

Tailor the content of outreach messages using insights from behavioral science. Several concepts from the behavioral literature can help make EMD/E outreach messages as effective as possible at generating Mission interest in EMD/E technical support. When possible, outreach should draw on testimonials from Mission staff who have benefited from EMD/E analysis—a form of **social proof** of the value of working with EMD/E.[32] Framing EMD/E support as something that Missions will lose out on if they don't take advantage of it can also draw on **loss aversion** to heighten the perceived value of EMD/E services.[33] Invoking loss aversion as a motivator may help counteract **status quo bias,** and providing social proof of EMD/E's value can help address the perception of **identity mismatch** in which non-economists may undervalue the utility of economic analysis. Messaging that clearly states the next steps a Mission needs to take to engage with EMD/E—and includes **planning prompts** around when and how Mission staff will request assistance, if not right away—can also help combat **limited attention**.[34] Appendix G provides an example message that uses **loss aversion** and clear next steps from a U.S. Department of Labor project to boost retirement savings among employees.[35]

Target EMD/E outreach strategies to Missions that are developing a new Country Development Cooperation Strategy, and Mission staff who have recently attended a workshop or other EMD/E event. To date, EMD/E's work has been primarily demand-driven, with engagements initiated by Mission requests. With fewer USAID staff advocating for the use of economic analysis to support Mission work and the limited reach of personal connections, there is a need for

[29] Dobbins, Maureen, K. DeCorby, and T. Twiddy. "A Knowledge Transfer Strategy for Public Health Decision Makers." Worldviews on Evidence-Based Nursing, vol. 1, no. 2, 2004, pp. 120–128.

[30] Amin, Samia; Greg Chojnack; Aravind Moorthy; Irma Perez-Johnson; Matt Darling; and Jaclyn Lefkowitz. "Using Behavioral Insights to Increase Retirement Savings: Trial Design and Findings." Washington, DC: Mathematica Policy Research, 2017.

[31] ———. "2002 Review of USAID's Cost Benefit Analysis Guidelines." Washington, DC, 2022. https://pdf.usaid.gov/pdf_docs/PA00ZVC7.pdf

[32] Cialdini, R. B.; W. Wosinska; D. W. Barrett; J. Butner; and M. Gornik-Durose. "Compliance with a Request in Two Cultures: The Differential Influence of Social Proof and Commitment/Consistency on Collectivists and Individualists." Personality and Social Psychology Bulletin, vol. 25, no. 10, 1999, pp. 1242–1253.

[33] Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. "Experimental Tests of the Endowment Effect and the Coase Theorem." Journal of Political Economy, vol. 98, no. 6, December 1990, pp. 1325–1348.

[34] Abel, Martin, Rulof Burger, Eliana Carranza, and Patrizio Piraino. "Bridging the Intention-Behavior Gap? The Effect of Plan-Making Prompts on Job Search and Employment." American Economic Journal: Applied Economics. vol. 11, no. 2, 2019, pp. 284-301.

[35] Amin, Samia; Greg Chojnack; Aravind Moorthy; Irma Perez-Johnson; Matt Darling; and Jaclyn Lefkowitz. "Using Behavioral Insights to Increase Retirement Savings: Trial Design and Findings." Washington, DC: Mathematica Policy Research, 2017.

EMD/E to proactively engage with specific Missions to foster new relationships and highlight the added value of using economic analysis to improve strategy and project design. EMD/E staff have noted the channels they already use to raise awareness about their services, such as trainings, "lunch and learn" sessions, and a monthly newsletter. To improve the impact of this outreach, EMD/E could prioritize outreach to Missions that are in the process of developing a Country Development Cooperation Strategy. This option aligns with an informant's suggestion to target Missions that are actively engaged in deciding how to allocate resources. Such timely outreach can help address the barrier of Mission leaders' **limited attention** by making EMD/E support salient at the point when Mission leaders would be most likely to take action and request support.[36] The behavioral science literature supports this strategy, suggesting that in some cases **information overload** can be addressed by providing additional information to decision-makers to distinguish between more and less attractive options,[37] particularly at the point in time when users most need that information.[38]

Another approach to make EMD/E tools more salient would be to work with Washington-based initiatives to embed an expectation that Missions partnering with the initiative would seek analysis support from EMD/E.[39] This type of outreach can be further boosted if an authority such as the Chief Economist articulates the benefits of using EMD/E tools and sets the expectation that Missions use them.

In addition to prioritizing outreach to Missions allocating funding, EMD/E could build on information sharing strategies they have already been implementing, such as hosting lunch and learn presentations and trainings. Specifically, EMD/E could take a targeted approach to follow up with a subset of participants who were particularly engaged to have more personalized conversations about how their Mission work might benefit from economic analysis. The literature confirms that this approach could be effective, suggesting that users are more likely to respond to a personalized message than one that is delivered more broadly.[40]

Strategy 5. Explore approaches to engage more deeply with Mission staff around analysis findings and create space for staff to engage with one another about the tools (Barriers 1 through 5). The behavioral science literature on promoting the use of technical information suggests that productive interaction between the information provider and recipient increases the utility of the information by helping the user manage **information overload**.[41] When EMD/E presents findings for Mission staff, EMD/E can facilitate a working session to ensure users have the opportunity to understand the information, ask questions, and discuss how to apply findings to a current or upcoming project design.[42] Having dedicated time to engage with the material alongside the experts reduces the barriers

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[36] Karlan, D.; M. McConnell; S. Mullainathan; and J. Zinman. "Getting to the Top of Mind: How Reminders Increase Saving." Management Science, vol. 62, no. 12, 2016, pp. 3393–3411.

[37] Malhotra, N.K. "Reflections on the Information Overload Paradigm in Consumer Decision Making." Journal of Consumer Research, vol. 10, no. 4, March 1984, pp. 436–440.

[38] Simpson, C. W., and L. Prusak. "Troubles with Information Overload—Moving from Quantity to Quality in Information Provision." International Journal of Information Management, vol. 15, no. 6, 1995, pp. 413–425.

[39] EMD/E staff noted that a similar approach was successfully adopted as part of the Feed the Future initiative.

[40] Fiorillo, A., L. Potok, and J. Wright. "Applying Behavioral Economics to Improve Microsavings Outcomes." Ideas42, February 2014. https://grameenfoundation.org/documents/y6c9fooi0rbf5jqsnuv0.pdf; "Nudging for Success: Using Behavioral Science to Improve the Postsecondary Student Journey." Ideas42, June 2016. http://www.ideas42.org/wp-content/uploads/2016/09/Nudging-For-Success-FINAL.pdf

[41] Jacobson, C.; A. Lisle; R. W. Carter; and M. T. Hockings. "Improving Technical Information Use: What Can Be Learnt from a Manager's Perspective?" Environmental Management, vol. 52, 2013, pp. 221–233.

[42] The EMD/E team already has some experience implementing this practice. In the Honduras IGD and remittances study, EMD/E held workshops after the initial findings and recommendations were completed. The purpose of these workshops was

noted by Mission staff related to having limited time and resources to read through a long document about technical topics on which they may not have expertise. This also can build the relationship between Mission and EMD/E staff, which can combat **availability bias** by making the benefits of partnership come to mind more easily when Mission staff consider whether to partner with EMD/E in the future.[43]

> *"Having conversations where people can share their own experiences could increase interest…and there is research that if you give advice to someone [such as recommending using EMD/E tools] you're more likely to also do it yourself."*
>
> – Representative from a behavioral science organization

In addition to engaging directly with Mission staff, EMD/E can create opportunities for Mission staff to engage with each other about these tools. EMD/E can facilitate a quarterly community of practice in which economists and other staff across Missions can engage with each other to discuss their personal experiences working with the EMD/E team and its tools and technical support. EMD/E can use this type of forum to leverage professional networks to further stimulate interest and boost the salience of **social proof** for consistently using economic analyses to support Mission work.[44]

4.2. ENCOURAGING EXPERIMENTAL EVALUATIONS OF BEHAVIORALLY INFORMED INTERVENTIONS

BOX 5. LEARNING OBJECTIVE 2 – RESEARCH QUESTIONS

What language should be added to USAID contracts and grants to ensure contractors and grantees conduct experimental evaluations of behaviorally informed interventions where appropriate?

What processes does EMD/E need to follow to incorporate that language into future grants and contracts?

Behavioral science relies on experimental evaluation to help determine how people behave and why they behave that way. These studies often involve randomly assigning individuals or groups to receive different versions of an intervention to isolate features of the intervention that are effective in achieving desired outcomes. USAID's Evaluation Policy mandates Missions to complete an impact evaluation for all new or untested interventions but it does not encourage or require experimental evaluations.[45] EMD/E set out to learn how USAID might encourage more experimental evaluations of behaviorally informed interventions.[46] Specifically, it sought to learn what language could be added to grants and contracts to

to vet findings and to prioritize interventions that could help address them with a diverse collection of local stakeholders. This included a prioritization process that considered the feasibility of implementing each recommendation. This resulted in recommendations that were supported by stakeholders and USAID and implemented by partners.

[43] See Wright (1975) for discussion of "affect referral," or how decision makers can draw heavily on how a past experience made them feel, as a cognitive shortcut when deciding between alternatives later.

[44] Lisman, Michael C. "Research Use for Policy Decisions on Early Literacy Improvement in the Dominican Republic." Doctoral dissertation. The Johns Hopkins University, 2019.

[45] ———. "USAID Evaluation Policy." Washington, DC, 2020. https://www.usaid.gov/sites/default/files/2022-05/Evaluation_Policy_Update_OCT2020_Final.pdf

[46] Behavioral experiments are evaluations that use an experimental method to measure the impacts of a behavioral intervention, one that is designed to draw on insights from behavioral science. This report section focuses primarily on the more general goal of encouraging the use of experimental evaluations (whether they are measuring impacts of a behavioral intervention or another type of intervention). In practice, encouraging the use of behavioral experiments would entail very similar steps to those described below. However, to promote the use of behavioral experiments, each step would also need to draw on a staff member with expertise in behavioral science to ensure that the requirements and scope of work promote the application of behavioral science to the intervention design.

ensure that USAID contractors and grantees will conduct experimental evaluations, and the process to incorporate this language into future grants and contracts. Our findings in this section draw from our interviews with staff from USAID's Office of Acquisition and Assistance and from other development organizations with experience deploying experimental evaluations. Although our initial expectation was that adding language in contracts and grants would be sufficient to encourage behavioral experimentation, we heard from informants that increasing the use of experiments will require multiple touch points in the procurement process and beyond.

Informants discouraged the use of standardized language requiring the use of experimental evaluations in contracts and grants. Our informants believed that any language on experimental evaluation to be used when soliciting proposals from contractors or grantees should be tailored closely to the context because evaluation needs to be responsive to the nature of the intervention and local context.[47] Indeed, USAID's guidance for writing evaluation statements of work (SOW)s indicates that while Missions may prescribe the evaluation methods that must be used, they must also describe data collection and analysis, sample sizes, and other parameters.[48] Standardized language will be unable to capture these details. To incorporate tailored language in SOWs, informants recommended having a technical officer who is knowledgeable about the program's design and experimental evaluations draft this language for Missions, drawing on the Mission's desired project parameters. One way to facilitate inclusion of language requiring behavioral experiments, where appropriate, would be to create a checklist of important elements related to experimental evaluations to consider including in solicitations, which the technical officer and procurement staff could both draw on.

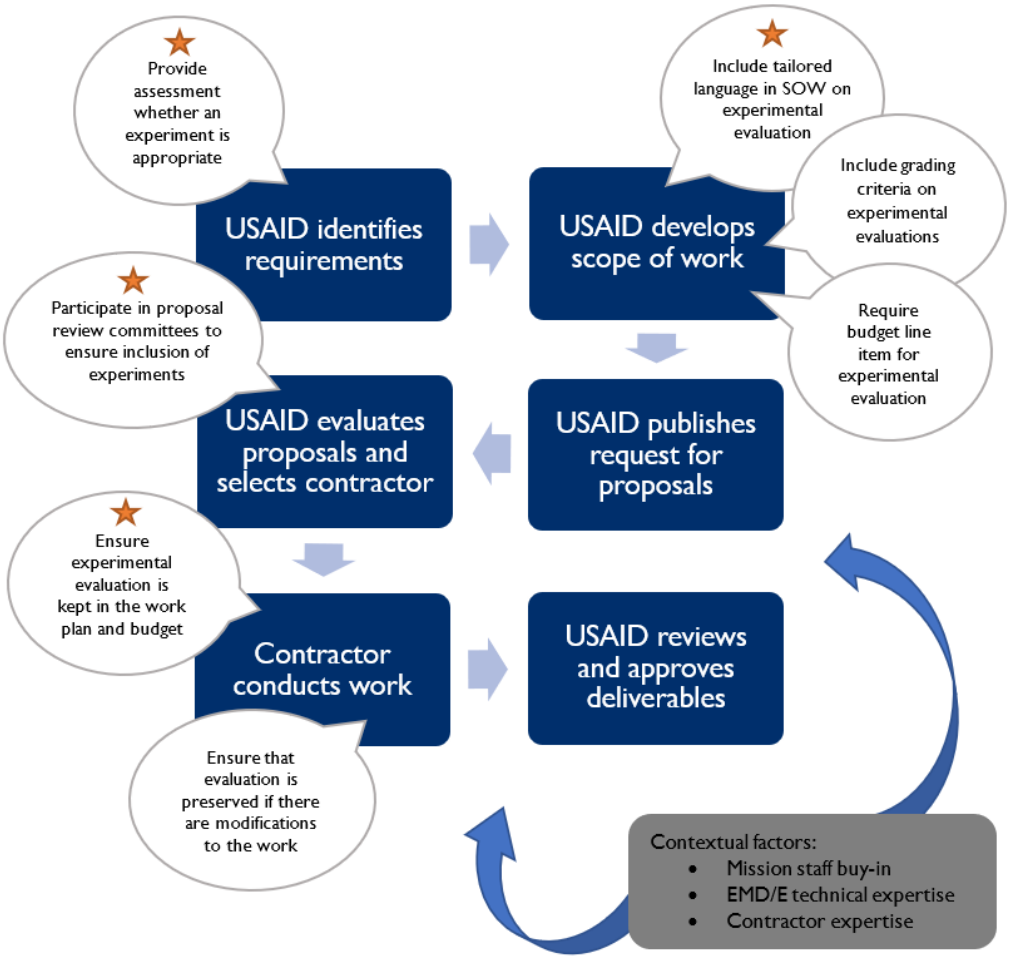
Informants underscored the need to promote experimental evaluations at multiple steps in the procurement process. They emphasized several other factors apart from SOW language that influence whether experimental evaluations are ultimately conducted. These factors will need to be addressed in each step of the contracting and grant-making process. Drawing on informants' descriptions, we annotate each step in the procurement process in Figure 2 with suggested actions to promote experimental evaluations. Although our interviews were not conclusive about who at USAID should take responsibility for these actions, EMD/E or the Office of the Chief Economist may focus its efforts on a few actions that are high impact and draw on their expertise in behavioral intervention design and evaluation design.

EMD/E can take several high-priority actions to encourage experimental evaluations in the procurement process. These actions include: (1) assessing whether an experiment is appropriate, (2) assisting in drafting tailored language for the SOW, (3) participating on the technical review committee to evaluate proposals and select implementing partners, and (4) ensuring that the contractor or grantee includes experimental evaluation in the initial work plan and budget. Figure 2 marks these steps with stars. High-priority actions are those most likely to reduce the chance programs proceed without an experimental evaluation and those that draw from EMD/E's present methodological expertise based on our assessment.

[47] For example, school infrastructure programs delivered at the community level will need to be evaluated differently than a cash transfer program delivered at the household level

[48] United States Agency for International Development (USAID). "How-To Note: Evaluation Statements of Work." Washington, DC, 2022. https://usaidlearninglab.org/sites/default/files/resource/files/htn-evaluation_sow_final2022.pdf

FIGURE 2. ENHANCING USAID'S PROCUREMENT PROCESS TO ENCOURAGE EXPERIMENTAL EVALUATIONS



Note: The blue boxes describe the steps in USAID's procurement process. The word bubbles contain suggested actions that can be taken at each step of the process to encourage experimental evaluations. The high impact actions are marked with a star based on our assessment of actions that (1) are most likely to reduce the chance programs proceed without an experimental evaluation and (2) draw on EMD/E's present methodological expertise. The gray box indicates contextual factors that influence the procurement process.

Source: Report authors.

Successfully modifying the procurement process to encourage experiments requires drawing on staff—and contractors—with relevant technical expertise. Informants in procurement emphasized that USAID staff with technical expertise on experimental design will need to be engaged throughout the procurement and project cycle. To design and conduct behavioral experiments, contractors will also need to have technical experts, who may be challenging to recruit. In fact, one informant expressed concern that USAID's recent Localization Strategy of contracting with more local organizations may not align with this goal, as these organizations, which are often smaller, may lack the evaluation expertise that larger international organizations possess.[49] As a result, USAID may need to invest in partner-training programs to develop technical expertise in behavioral

[49] ———. "Localization at USAID: The Vision and Approach." Washington, DC, 2022. https://www.usaid.gov/sites/default/files/2022-12/USAIDs_Localization_Vision-508.pdf

experimentation or include mechanisms to allow those organizations to subcontract with experts in behavioral and experimental design.

To support the enhanced procurement process, USAID will also need to boost general interest around incorporating behavioral experimentation among Mission staff. Informants at USAID and other organizations reported that simply adding requirements for the use of experimental and behavioral designs will not, on their own, lead to implementation of successful behavioral experiments. Unless Missions develop enthusiasm and buy-in around the value of behavioral experiments, such requirements risk resulting in poorly conducted experiments that attempt to meet the requirement with as few resources as possible. Our findings identify several ways USAID can persuade Mission staff of the value of behavioral experiments:

- **Find champions.** A recurring theme from our interviews with staff from other organizations also seeking to elevate behavioral science within their organizations is that finding "champions" is crucial. A champion is a high-profile individual who can generate enthusiasm for behavioral science and experimentation. In USAID's case, this may be a Mission Director who has previous experience in behavioral experimentation and can profess to its usefulness. Such champions can provide a clear example of success and can influence others to adopt the same behavior through **social proof**, as described under learning objective 1. Searching for champions in other bureaus such as Global Health that have previously implemented behavioral change campaigns may be an efficient recruitment strategy.
- **Build on the existing collaborating, learning, and adapting (CLA) process to identify compelling success stories of experiments and incentivize use of experimental evaluations.** In 2012, USAID's Bureau for Policy, Planning and Learning (PPL) introduced the concept of CLA as the Agency's approach to organizational learning and adaptive management throughout the program cycle.[50] The CLA framework (Figure 3) helps Missions and implementing partners think more deliberately about how to plan for and implement CLA approaches that fit their contexts. To encourage more evaluations of behaviorally informed interventions, EMD/E could promote these evaluations as one form of the "learning" component of this framework in any existing messages related to CLA.[51] In particular, EMD/E may be able to leverage PPL's annual case competition to capture real-world examples from USAID staff and partners to showcase concrete examples of success. The goal of the competition is to compile stories about what does and does not work when implementing CLA. EMD/E may be able to review cases and the CLA evidence base to identify and leverage examples of behavioral experiments that achieved Missions' objectives, in line with the approach used by the World Bank behavioral science team known as eMBed (Box 6). Such examples can make the steps for designing and conducting experiments more concrete and familiar and thereby help overcome **status quo bias** among Mission staff, driven by the perceived risk of trying something too unfamiliar. If feasible, partnering with PPL to launch a case competition focused specifically on conducting behavioral experiments as an approach to CLA could present a salient call to action that focuses Mission leaders' **limited attention** on this agency priority.

[50] ———. "Collaborating, Learning, and Adapting Framework & Key Concepts." Washington, DC, 2016. https://usaidlearninglab.org/sites/default/files/resource/files/keyconcepts_twopager_8.5x11_v7_20160907.pdf

[51] One strategy to promote experimental evaluations as part of CLA might be to add a requirement that Monitoring, Evaluation and Learning (MEL) teams consider experiments to be the preferred or default evaluation approach when they review an implementing partner's MEL plan.

FIGURE 3. THE CLA FRAMEWORK

Source: USAID (https://usaidlearninglab.org/cla/cla-toolkit/understanding-cla).

BOX 6. USING CONCRETE EXAMPLES OF SUCCESS TO BOOST EXPERIMENTAL EVALUATIONS

Since its founding in 2015, the World Bank's behavioral science unit, known as eMBed, has worked with project teams in over 50 countries to design and evaluate interventions informed by behavioral science. Today the unit has more work than it has capacity for, but it initially needed to establish its presence among prospective partners. According to a key informant, eMBed's early research on tax compliance proved to be an effective tool in promoting behavioral experimentation. By deploying experiments on diverse approaches to encourage tax compliance in several countries, the unit was able to bolster government revenues. Sharing this success story widely within the organization aided the unit in broadening its scope to other sectors and partnerships.

4.3. LEARNING ABOUT BEHAVIORAL SCIENCE TOOLS FROM OTHER ORGANIZATIONS

BOX 7. LEARNING OBJECTIVE 3 – RESEARCH QUESTIONS

What behavioral economic tools and guidelines are other development assistance organizations and implementing partners using in USAID's priority development sectors?

Given EMD/E's comparative advantage, what behavioral economic tools and guidelines should it adopt?

What (potential) barriers are there to Mission staff in adopting behavioral economics tools and guidelines?

How can EMD/E align these behavioral economics tools and guidelines with the relevant work of other units within DDI and other bureaus at USAID?

Another objective of EMD/E was to learn about the behavioral science tools and guidelines used by other organizations so that it could consider adopting or adapting them. To accomplish this, we conducted a search to identify the most relevant tools and guidelines used by federal agencies and development organizations.[52] We also consulted with key informants who have experience using these tools to gather insight on their best practices, potential barriers to adopting the tools, and how EMD/E might leverage the tools. In the following section, we describe our findings and recommendations resulting from these activities.

Behavioral tools developed by various organizations contain very similar guidance and recommendations, but some are more accessible than others. Our review of tools found that the tools tend to present very similar content, and one of our key informants independently reported the same conclusion (discussed below). The apparent consensus around key content, regardless of the organizational context, suggests that there is limited value in EMD/E developing its own behavioral tools. Rather, it will be most efficient for EMD/E to make strategic use of existing resources, focusing guidance on how their use can align with the USAID program cycle.

To be responsive to EMD/E's goal to support Missions in applying behavioral science to their project designs, we recommend using the **BASIC Toolkit** as it strikes the best balance between being comprehensive and user-friendly.[53] The toolkit provides step-by-step guidance on how to apply behavioral science at all stages of the program cycle from problem diagnosis to evaluation and scale-up. This would be the main resource to circulate to interested Mission staff. Moreover, we recommend two tools to use as supplementary resources. Despite its considerable length, **Mind, Society, and Behavior** offers the most concrete examples of successes in the application of behavioral science in a range of sectors relevant to USAID.[54] These examples can be used to effectively communicate the value of behavioral science. EMD/E could use this resource to pull relevant examples to share with Mission staff who are less likely to be involved in technical details of design or implementation. Although not as comprehensive as the BASIC Toolkit, the **EAST Framework** summarizes fundamental behavioral concepts into an incredibly succinct format. Its four-page executive summary outlines four simple rules-of-thumb for applying behavioral insights into policy work that is easily accessible.[55] EMD/E could use this resource to share with staff who are curious about behavior science but may not have the time or capacity to delve into a more extensive resource.

[52] Our literature search uncovered 173 documents describing behavioral research, concepts, tools, and guidelines that were produced by the 18 organizations we identified as closely related to USAID. From this list, we narrowed our focus to review tools or guidelines addressing USAID's priority sectors; Appendix D summarizes the key information from this review. USAID priority sectors include water and sanitation, climate change, governance (including corruption), education (including workforce development), agriculture, nutrition, democracy, human rights, gender, and energy.

[53] ———. "Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit." OECD Publishing, 2019.

[54] World Bank Group. "Mind, Society and Behavior." World Development Report, Washington, DC: World Bank, 2015.

[55] Service, Owain; Michael Hallsworth; David Halpern; Felicity Algate; Rory Gallagher; Sam Nguyen; Simon Ruda; Michael Sanders; Marcos Pelenur; Alex Gyani; Hugo Harper; Joanne Reinhard; and Elspeth Kirkman. "EAST: Four Simple Ways to Apply Behavioural Insights." Behavioural Insights Ltd., 2014.

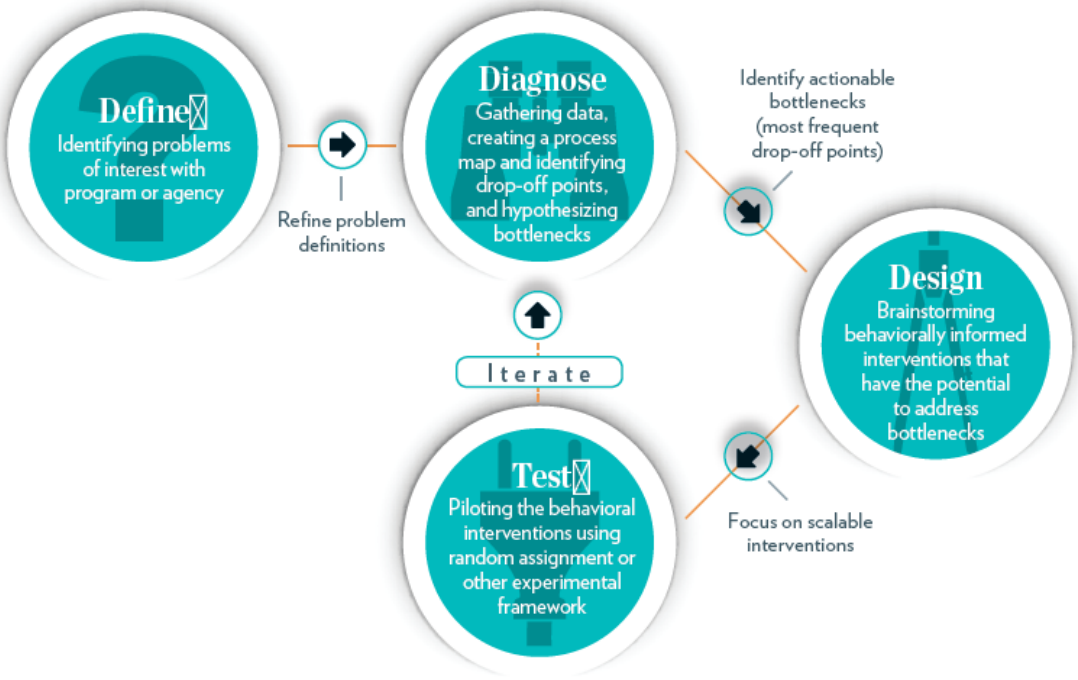
Across organizations, behavioral tools tend to recommend four core steps. As shown in Figure 4, the behavioral diagnosis and design process envisions four key steps:

> "Every organization has its own behavioral framework and they're all the same…defining the problem, diagnosing the problem, applying something to design an intervention, testing the intervention and scaling it up."
>
> – Representative from a behavioral science organization.

1. Defining a problem as specifically as possible.
2. Using data and the behavioral science literature to diagnose the barriers that prevent people from achieving the intended outcome.
3. Designing an intervention to address the barriers.
4. Rigorously testing whether the intervention improves outcomes.

The approach also emphasizes the value of iterating between the diagnosis and testing phases to learn what might be the binding constraints if the original diagnosis turns out wrong.

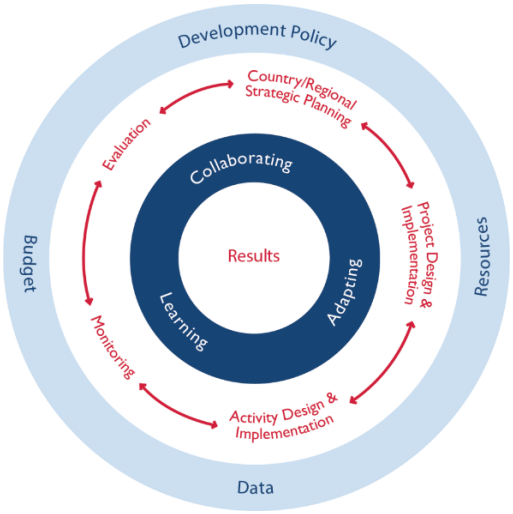
FIGURE 4. THE BEHAVIORAL DIAGNOSIS AND DESIGN PROCESS



Source: Richburg-Hayes, Lashawn, Caitlin Anzelone, and Nadine Dechausay. "Nudging change in human services: Final report of the Behavioral Interventions to Advance Self-Sufficiency (BIAS) project." OPRE Report 23, 2017.

The four-step behavioral process aligns well with the USAID program cycle. To conduct development programming in a region or country, USAID Missions follow a process to plan, design, implement, monitor, and evaluate (Figure 5). This suggests that adopting a behavioral framework at USAID does not require overhauling the system but supplementing it. In the previous section, we discussed how USAID might be able to encourage experimental evaluations of behaviorally informed interventions in the "evaluate" phase of the program cycle. However, successful application of behavioral science requires attention and engagement at the plan and design phases as well. Below, we discuss recommendations for how USAID might be able to embed a behavioral framework in the plan and design phases.

FIGURE 5. THE USAID PROGRAM CYCLE



Informants reported that what sets the behavioral framework apart from other intervention planning processes is its focus on additional constraints that influence decision making and behavior, such as limits on self-control, attention, cognition, and understanding. The behavioral framework underscores the importance of properly diagnosing behavioral bottlenecks in any situation and designing interventions that explicitly counter them.

To encourage Missions to incorporate a behavioral framework in the plan and design phases of the program cycle, EMD/E can promote use of key behavioral science resources. This has the dual purpose of increasing staff members' familiarity with the diagnose and design process and lowering the cost associated with implementing a behavioral science approach. From our review of tools and suggestions from key informants, the behavioral templates and processes that are most readily adoptable by Missions are journey mapping and checklists to identify promising behavioral intervention options. In Box 8, we also point readers to an introductory resource related to user-testing, an important component to behavioral design.

Journey mapping

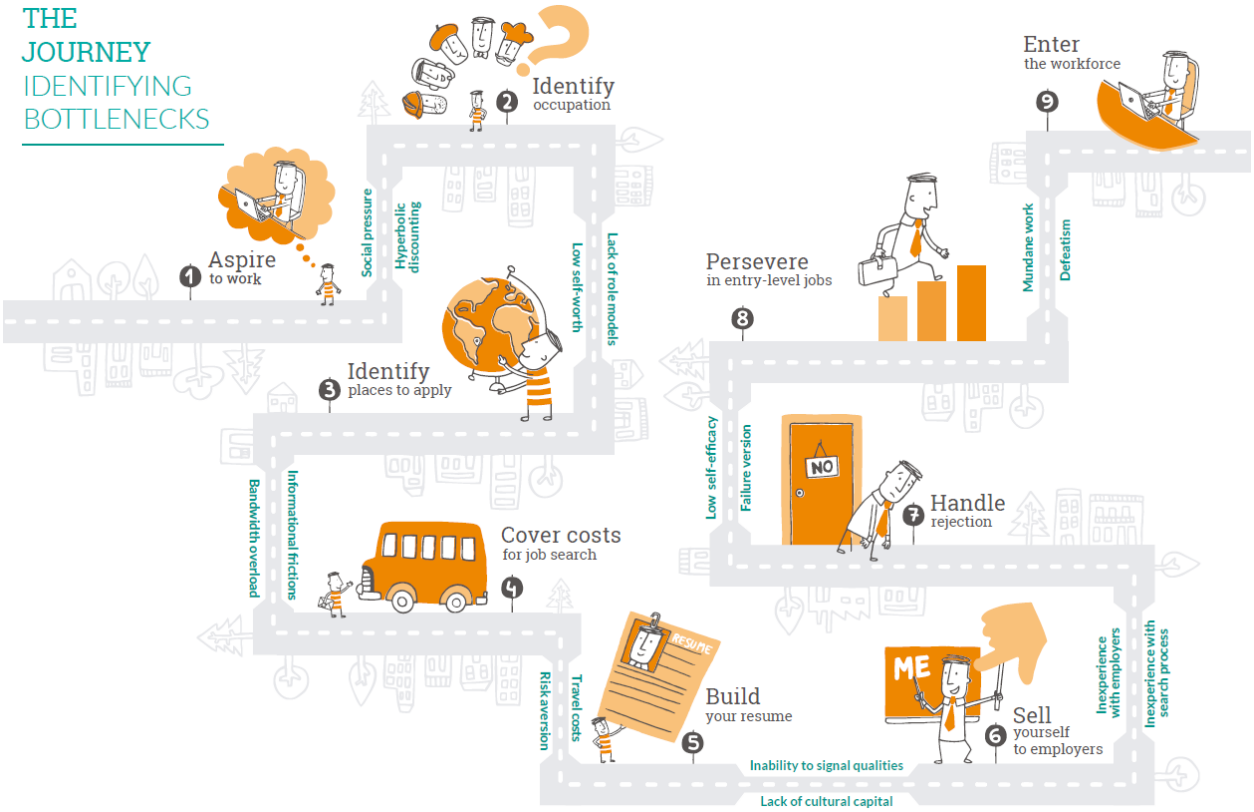
Journey mapping is a systematic process for identifying barriers, or drop-off points, that could prevent a target population from achieving a desired outcome. When used in the project design stage of the program cycle, it enables a clear definition of specific problems the intervention should aim to solve to achieve desired outcomes. It entails creating a map that details all the processes a user goes through to reach a goal and then identifying points at which users need to act or face obstacles that prevent them from acting in the desired way. Figure 6 presents an example of a journey map from a report detailing why youth might be unable to find employment. Appendix H provides a figure that can be easily adapted as a template by Mission staff to create a journey map that indicates key steps and behavioral bottlenecks that may prevent progress on the journey.

Journey maps are a powerful tool for diagnosing behavioral bottlenecks when planning for development programs, though not all barriers are behavioral. Some bottlenecks are structural, such as when lack of training, or poor access, hinder youth from finding employment. However, because journey maps try to capture all drop-off points, practitioners can identify often overlooked behavioral factors that influence

behavior, such as emotions, motivations, and goals. This information can then be used to develop interventions that meet the user's needs.

A good journey map is based on how individuals actually behave, rather than how they should behave. It should also highlight the potential barriers that individuals may encounter on their journey to achieve desired outcomes, as shown in the green text in Figure 6. To this end, it is crucial to observe target users and obtain their feedback when journey mapping to plan an activity.

FIGURE 6. AN EXAMPLE OF A JOURNEY MAP



Source: World Bank. "Behavioral Solutions for Youth Unemployment." Washington, DC, 2018.

Checklists and other resources that help identify promising behavioral intervention options

Checklists can provide a clear and concise set of steps for Missions to follow to better integrate behavioral science into the work they do. Checklists can ensure that Missions focus on the critical insights of behavioral science, while reducing the risk of omission. When used at the intervention design stage, they can also significantly lower the cognitive burden associated with embedding behavioral insights in project designs. Our survey of behavioral tools and discussions with key informants uncovered several resources that may be useful for Missions to adopt when planning and designing interventions.

First, the EAST framework presents a simple, four-letter mnemonic to apply when thinking about effective behavioral approaches.[56] When designing any activity, it reminds practitioners to:

[56] Service, Owain; Michael Hallsworth; David Halpern; Felicity Algate; Rory Gallagher; Sam Nguyen; Simon Ruda; Michael Sanders; Marcos Pelenur; Alex Gyani; Hugo Harper; Joanne Reinhard; and Elspeth Kirkman. "EAST: Four Simple Ways to Apply Behavioural Insights." Behavioural Insights Ltd., 2014.

1. Make it **E**asy
2. Make it **A**ttractive
3. Make it **S**ocial
4. Make it **T**imely

Second, the U.S. Department of Labor's practitioner's playbook presents a ready-to-use checklist of questions to ask program users when diagnosing behavioral bottlenecks.[57] The checklist can be useful when interviewing users for a journey map (Figure 7).

FIGURE 7. A CHECKLIST OF SAMPLE QUESTIONS FOR BEHAVIORAL DIAGNOSIS

Topics	Sample questions	
Familiarity	☐ Have you heard of the program? ☐ What is the purpose of the program? ☐ Have you used the program?	*These are good questions for understanding **low take-up** and **false beliefs**.*
Perceptions	☐ What is the program's reputation? ☐ What is your personal impression of the program? ☐ How do others describe the program? ☐ What influenced your decision to use or not use the program? ☐ Would you recommend the program to a family member or friend? Why or why not?	
Goals	☐ What personal goals or needs did you expect the program to help you address? ☐ In what ways did the program do this well? ☐ In what ways did the program fall short of your expectations?	*These are good questions for understanding **poor follow-through** and **high attrition**.*
Needs	☐ What was it like when you used the program? ☐ Would you use the program in the future? Why or why not? ☐ If not, what would make you more likely to use the program? ☐ If you started the program, but stopped participating, what led to that? What would have helped you continue?	

Source: Darling et al. (2017).

Third, the Behavioral Evidence Hub provides a valuable resource for USAID Mission staff seeking to plan development interventions that are evidence-based. The hub offers a digital library of behaviorally informed interventions that have proven impact in the field through experimental evaluations. Each evaluation is accompanied by a brief overview, highlighting the impacts that were achieved and providing implementation guidelines for practitioners wishing to replicate the interventions in other settings; the hub categorizes these by sector, topic, and location. While not a checklist per se, this ready-to-use resource can aid USAID Mission staff in designing effective interventions that address behavioral problems in a target population.

[57] Darling, Matthew; Jaclyn Lefkowitz; Samia Amin; Irma Perez-Johnson; Greg Chojnacki; and Mikia Manley. "Practitioner's Playbook for Applying Behavioral Insights to Labor Programs." Princeton: Mathematica Policy Research, 2017.

BOX 8. USER TESTING

Another practice EMD/E may consider promoting with USAID Missions designing behavioral interventions is user testing. User testing is the process of evaluating an early prototype of a service or product with a sample of end users before its release. Its purpose is to identify usability issues, user experience problems, and other potential barriers to adoption or effective use of a service or product. It provides practitioners with valuable feedback from intended users, allowing them to make necessary refinement to an intervention's design to better meet users' needs before it is rolled out. User testing may involve one-on-one interviews, focus group discussions, or online surveys.

User testing methods need to be tailored to the intervention and context and we did not find a template or guide that EMD/E can use across a range of contexts. As a starting point for identifying appropriate user-testing methods, IDEO's field guide to human-centered design offers practical tips in obtaining and integrating feedback in designs (pp. 126-127).

4.4. ASSESSING THE VALUE OF INTEGRATING BEHAVIORAL SCIENCE INTO EMD/E ECONOMIC ANALYSIS TOOLS[58]

BOX 9. LEARNING OBJECTIVE 4 – RESEARCH QUESTIONS

How can EMD/E's analytical tools be updated to account for the concepts and findings of behavioral science and behavioral economics?

What are the relevant behavioral economics concepts to consider when applying the macroeconomic and microeconomic analysis tools commonly used by EMD/E?

How can EMD/E use behavioral economics to systematically incorporate gender and other inclusion-oriented considerations into its analytical tools?

A final component of this work was to assess the value of integrating behavioral science into EMD/E economic analysis tools. To explore this question, we interviewed USAID staff, other development organizations and USG agencies, behavioral science organizations, and academics to gather insights and determine whether the marginal benefit of changing the content in the current economic analysis tools outweighs the marginal costs. We complemented these interviews with a literature review of documents to explore which behavioral science concepts, if any, would be appropriate to integrate into the existing economic analysis tools.

[58] Some research sub-questions related to incorporating behavioral concepts into EMD/E's tools were deprioritized in consultation with EMD/E, based on an early finding that there was little value in incorporating behavioral concepts into EMD/E analysis models. As a result, the findings in this section do not directly address those sub-questions, which can be found in Appendix A. The research question on use of behavioral concepts to improve data collection is also not addressed because the five KII respondents we asked about this topic did not have recommendations to share.

Altering parameters in EMD/E tools to account for behavioral science has limited utility. Although an initial review of the literature indicated that behavioral science concepts such as cognitive biases and social norms might be relevant to the economic analyses that EMD/E conducts, there was consensus from our informants that there is likely limited utility in altering the parameters of EMD/E's analyses to enhance the final product. One informant noted that incorporating behavioral science into the parameters might yield a more accurate model, but that each context is so specific that it would be a burdensome process to have to conduct systematically for every product. The idea that there may be limited utility in changing the tools aligned with Chief Economist Dean Karlan's perspective. He highlighted that to develop a precise model, economists can use data from how people actually responded to an intervention in a similar context instead of trying to use behavioral science to generate assumptions about parameters.

> *"I think [incorporating behavioral science into the parameters] could make it more accurate…but no models are perfect. I think the problem is when do you stop—you will never get a perfect cost-benefit analysis. Also, each context is so specific. I would use those two caveats, and if the model is good enough, I would stop there."*
>
> - Representative from a behavioral science organization.

Other informants in the development field further shared there may be a mismatch between the levels or scales at which economic analysis and behavioral science are most effective. They noted that many of the analyses that EMD/E conducts are very broad and high level, but behavioral science is best leveraged at a smaller scale to plan and design individualized interventions that are localized and context specific.

Despite limited value in changing the parameters in the tools themselves, behavioral science concepts may help inform interpretation of analysis results as well as the interventions that Missions plan in response. EMD/E staff noted that while scoping and conducting analyses, they sometimes find quantitative or anecdotal evidence of social exclusion such as gender-based employment discrimination or inequitable allocation of different types of farmland. The behavioral science literature can offer novel options to address this social exclusion. This is because recent studies have highlighted individual-level solutions that can mitigate the effect of social exclusion even when it is not possible to change broader structures—such as unequal access to social capital embedded in social networks—that might drive inequality.

A recent review of behavioral studies suggests that even in the presence of structural factors that cause inequality, individual-level interventions informed by behavioral science can improve their outcomes by weakening the effect of those structural factors.[59] For example, one project cited by the review closed a gender gap in job search success by guiding female job candidates to request recommendation letters from past employers.[60] Study results indicate that when negative stereotypes affect a potential employer's assessment of a female candidate's skills (a structural disadvantage), providing additional information that counteracts the stereotype, in the form of a recommendation letter, can mitigate the effect of this structural factor on women's employment outcomes. A second study examined an intervention designed to mitigate the effect of stereotypes experienced by African American students in the United States.[61] The study hypothesized that because negative stereotypes impose additional stress

[59] Hoff, Karla, and James Walsh. "The Whys of Social Exclusion: Insights from Behavioral Economics," The World Bank Research Observer, vol. 33, Issue 1, February 2018, pp. 1–33. https://doi.org/10.1093/wbro/lkx010

[60] Abel, M., Burger, R. and Piraino, P. "The value of reference letters: Experimental evidence from South Africa." American Economic Journal: Applied Economics. vol. 12, no. 3, 2020, pp.40-71.

[61] Cohen, G.L., Garcia, J., Apfel, N. and Master, A. "Reducing the racial achievement gap: A social-psychological intervention." Science. vol. 313 no. 5791, 2006, pp.1307-1310. For a study on a similar intervention to combat stereotypes outside of the

on African American students, reducing their learning, an intervention that buffered students from this stress by prompting them to affirm their own personal value would improve their academic achievement. The study found large, statistically significant impacts on academic achievement from a short intervention that prompted students to write an essay about an aspect of their personal value that they perceive as important. Drawing on the factors and potential solutions highlighted in this review of interventions that combat social exclusion, EMD/E staff can offer Missions innovative intervention ideas to address social exclusion such as gender- or race-based discrimination.

United States, see also Paluck, E. L. "Reducing Intergroup Prejudice and Conflict Using the Media: A Field Experiment in Rwanda." Journal of Personality and Social Psychology, 96(3), 574-587.

5. SUMMARY OF RECOMMENDATIONS

Our findings point to several ways EMD/E can further incorporate behavioral science into its work. In this section, we summarize recommendations from the previous chapters and identify high priority recommendations which offer steps that are concrete, low effort, and build on existing processes at USAID. These high priority recommendations are marked below with a diamond. While the feasibility of the recommendations may depend ultimately on EMD/E's capacity and resources, these steps leverage the team's comparative advantage and unique role as knowledge partner to USAID Missions and other OUs.

To improve the usefulness of EMD/E tools and technical support for staff:

- ♦ Prioritize findings that appear feasible within the Mission's purview, accounting for contextual constraints Mission staff have shared. EMD/E can identify feasible findings in the analysis' executive summary, for example by distinguishing between sectors that require intervention *and* are amenable to Mission intervention, and those that may require intervention but appear less feasible from the Mission's perspective, such as those that are highly politicized.
- ♦ Draw on behavioral science concepts to improve the content and targeting of EMD/E messaging to Missions and boost demand for EMD/E support: (1) use testimonials from Mission staff who have previously benefited from EMD/E analysis,[62] (2) frame EMD/E support as something that Missions lose out on if they do not take advantage of it, (3) clearly state next steps Missions need to take to engage with EMD/E including planning prompts to combat limited attention, and (4) target outreach to Missions that are developing a new Country Development Cooperation Strategy and to participants in previous and upcoming EMD/E webinars, lunch and learn, and training sessions.[63]
- Offer illustrative action steps for proposed recommendations in the executive summary.
- Revise the final format and delivery of EMD/E tools to ensure they follow best communication practices for making content simple, attractive, and interactive.
- Explore approaches to engage more deeply with Mission staff around analysis findings and create space for staff to engage with one another about the tools by holding workshops after the delivery of a tool and by facilitating quarterly community of practice meetings.

To encourage experimental evaluations of behaviorally informed interventions:

- ♦ Boost interest in behavioral experimentation among Mission staff by finding champions from other bureaus, leveraging the "learning" component of the CLA, and showing concrete examples of success drawn from PPL's annual case competition.[64]
- Implement additional steps in the procurement process: (1) help assess whether an experiment is appropriate for Missions, (2) assist in drafting tailored language for SOWs, (3) participate in technical

[62] EMD/E noted that boosting this outreach would also benefit from the Chief Economist articulating the value of working with EMD/E and setting the expectation that Missions work with EMD/E tools.

[63] EMD/E noted that another potential opportunity to target EMD/E messaging was to explore partnerships with high profile USAID initiatives and embedding an expectation that Missions that participate in the initiative incorporate economic analysis in collaboration with EMD/E, as it had done in the past with Feed the Future.

[64] Acknowledging that experiments carry the risk of failure—and building broad awareness of resources to inform successful completion of experiments—should accompany efforts to increase interest in behavioral experimentation. EMD/E must also devise strategies to sustain commitment to complete behavioral experiments that are in progress when the experiments' initial champions depart.

review committees to evaluate proposals and select implementing partners, and (4) ensure implementing partners include experimental evaluation in their initial work plan and budget.

To leverage behavioral science tools from other organizations:

- Adopt the checklists, resources, and templates included in this report for journey mapping and selecting behavioral strategies, to make incorporating behavioral science as easy as possible for Missions.
- Use the BASIC Toolkit as the primary resource for helping Missions adopt behavioral science at all stages of the program cycle. Consider the Mind, Society, and Behavior and the EAST Framework as supplemental resources.

To ensure EMD/E economic analysis tools incorporate behavioral science where appropriate:

- Limit the time and resources spent incorporating behavioral insights into the content of EMD/E's tools, given expert consensus that this would have limited utility.
- Instead, incorporate behavioral science concepts into interpretation of findings, and especially into the design of interventions to pursue development goals.

APPENDIX A: ORIGINAL RESEARCH QUESTIONS

At the inception of the study, EMD/E had 11 research questions that were grouped into two learning objectives. As the team started gathering data, EMD/E requested to add two research questions on encouraging experimental evaluations of behaviorally informed interventions (questions 7 and 7a); we grouped these questions into a new learning objective. We also recognized a distinct learning objective on behavioral tools and guidelines from other development organizations and agencies, which encompasses research questions 3, 6, 6a, and 6b. Some research sub-questions (questions 2a, and 2b) related to incorporating behavioral concepts into EMD/E's tools were deprioritized on consultation with EMD/E. Based on early findings that there was little value in incorporating behavioral concepts into EMD/E analysis models, EMD/E stated a preference to focus this study on using behavioral science to improve information uptake. The research question on use of behavioral concepts to improve data collection (question 4) is also not addressed because the 5 KII respondents we asked about this topic did not have recommendations to share.

TABLE A.1. LEARNING OBJECTIVES AND RESEARCH QUESTIONS

LEARNING OBJECTIVE 1. INTEGRATING BEHAVIORAL SCIENCE INTO USAID ECONOMIC ANALYSIS TOOLS
1. How can EMD/E's analytical tools be updated to account for the concepts and findings of behavioral science and behavioral economics?
2. What are the relevant behavioral economics concepts to consider when applying the macroeconomic and microeconomic analysis tools commonly used by EMD/E?
**2a. How do social norms and cognitive biases affect inclusive growth diagnostics and jobs diagnostics?
**2b. How do social norms and cognitive biases affect end-user participation and adoption rates in development programs and what are the implications for EMD/E's analytic tools, if any?
2c. How can EMD/E use behavioral economics to systematically incorporate gender and other inclusion-oriented considerations into its analytical tools?
3. What behavioral economic tools and guidelines are other development assistance organizations and implementing partners using in USAID's priority development sectors?
***4. How can EMD/E use behavioral economics to improve primary data collection when visiting Missions?
LEARNING OBJECTIVE 2. INCREASING STAFF USE OF ECONOMIC ANALYSIS TOOLS
5. How can concepts from behavioral science help us to understand the utility or use of EMD/E's core analytical tools?
6. Given EMD/E's comparative advantage, what behavioral economics tools and guidelines should it adopt?
6a. What (potential) barriers are there to Mission staff in adopting behavioral economics tools and guidelines?
6b. How can EMD/E align these behavioral economics tools and guidelines with the relevant work of other units within DDI and other bureaus at USAID?
*7. What language should be added to USAID contracts and grants to ensure contractors and grantees conduct experimental evaluations of behaviorally informed interventions where appropriate?
*7a. What processes does EMD/E need to follow to incorporate that language into future grants and contracts?

*These research questions were added after the inception of the study as an additional focus for the remaining work.

**These research sub-questions were deprioritized.

***This research question was not addressed in this study because informants did not have recommendations.

APPENDIX B: SPECIFIC DESK REVIEW MATERIALS

TABLE B.1. EMD/E TOOLS REVIEWED BY THE LEAP III TEAM

TOOLS	EXAMPLES REVIEWED
Cost-benefit analysis	USAID/Sahel Regional Office RISE II CBA CEADIR Malawi Cookstoves CBA Guatemala AGEXPORT CBA model and report CBA guidelines and training materials
Cost-effectiveness analysis	CEA of nutrition interventions in Mozambique CEA of Aflatoxin Control Interventions in Groundnuts and Maize Value Chains in Malawi CEA guidelines and training materials
Inclusive growth diagnostics	Honduras inclusive growth diagnostic Bangladesh inclusive growth diagnostic IGD guidelines and training materials
Jobs diagnostics	Philippines jobs diagnostic Getting Employment to Work for Self-Reliance: A USAID Framework for Programming Jobs diagnostic guidelines and training materials
Country economic reviews	Central Asia, Organization of Eastern Caribbean States (OECS) Regional Economic Reviews Ethiopia economic review Bangladesh economic review Country economic review guidelines and training materials
Other ad-hoc analyses	Economic Analysis of the Honduras Remittances Ecosystem Indonesia's economic exposure to PRC

APPENDIX C: LITERATURE REVIEW SEARCH PROCESS

The following details the process we followed in the targeted literature review, including search terms and inclusion criteria, for each of the learning objectives.

Enhancing the user-experience and take-up of analytic tools

We conducted our search in the following databases: Academic Search Complete, APA PsycInfo. Business Source Corporate Plus, EconLit with Full Text, and Sociology Source Ultimate.

We ran the following query and identified 88 documents:

TI ((communicat OR disseminat* OR (knowledge N2 tranfer*) OR framing OR messag* OR (technical N2 document*) OR document* OR training OR instruction OR material* OR resource*)) OR AB ((communicat* OR disseminat* OR (knowledge N2 tranfer*) OR framing OR messag* OR (technical N2 document*) OR document* OR training OR instruction OR material* OR resource*))*

AND

TI ((adopt OR (take N2 up) OR uptake OR utilize* OR use OR improv* OR increase* OR accept*))*

AND

TI (Behavio N2 (economic* OR science* OR insight*))*

To narrow down the list to documents that were most relevant to the learning objective, we examined the abstract of each document to identify those that contained substantive findings on facilitators and barriers to uptake of information in an organizational setting. We conducted a full review of the 9 documents we identified through this process.

Identifying behavioral tools and guidelines used by other development organizations

We used Google to search the websites of relevant government agencies, international development organizations, and behavioral research organizations. We used the following search terms to identify 173 documents describing behavioral research, concepts, tools, and guidelines:

site:.mcc.gov filetype:pdf intext:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.worldbank.org filetype:pdf intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.un.org filetype:pdf intitle:(behavioural AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.who.int filetype:pdf intitle:(behavioural AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.adb.org intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.oecd.org filetype:pdf intitle:(behavioural AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.oecd.org filetype:pdf intitle:(behavioural AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.oecd.org filetype:pdf intitle:(behavioural AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.busaracenter.org filetype:pdf intext:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.normsandbehavior.sas.upenn.edu intext:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.gridimpact.org intext:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.impactually.se/ intext:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.epa.gov intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.fda.gov intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.fda.gov intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.transportation.gov intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

te:.ftc.gov intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines|applications))

site:.hhs.gov filetype:pdf intitle:(behavioral AND (analysis|diagnostics|reviews|reports|evaluations|tools|frameworks|guidelines))

From the full list, we narrowed our focus to review tools or guidelines addressing USAID's priority sectors. USAID priority sectors include water and sanitation, climate change, governance (including corruption), education (including workforce development), agriculture, nutrition, democracy, human rights, gender, and energy. We conducted a full review of the 16 documents we identified through this process.

Incorporating behavioral insights on gender and inclusion in tools

We conducted our search in the following databases: Academic Search Complete, APA PsycInfo. Business Source Corporate Plus, EconLit with Full Text, and Sociology Source Ultimate.

We ran the following query and identified 196 documents:

TI (Equit OR disparit* OR inequit* OR equal* OR inequality* OR unequal* OR differences OR gaps OR fair OR fairness OR unfair* OR justice* OR injustice* OR unjust* OR disservice* OR cultural* OR divers* OR inclus*)*

AND

TI (Behavio N2 (economic* OR science* OR insight*))*

To narrow down the list to documents that were most relevant to the learning objective, we examined the abstract of each document to identify those that elaborated on behavioral concepts that related to gender and inclusion and how these might be applied by organizations. We conducted a full review of the 12 documents we identified through this process.

APPENDIX D: LITERATURE REVIEW NOTES

The following tables provide our abbreviated notes on documents we reviewed in the targeted literature review. We grouped the documents into three topic areas: (1) enhancing the user experience and take-up of analytic tools, (2) behavioral tools and guidelines used by other development organizations and government agencies, and (3) incorporating gender and other inclusion-oriented considerations in tools. Within each topic area, we ranked documents by priority level. Priority Level 1 resources have information that is most relevant to EMD/E's learning objectives and context, Priority Level 2 resources have medium relevance, and Priority Level 3 resources are only tangentially related to EMD/E's learning objectives.

TABLE D.1. LITERATURE REVIEW NOTES ON ENHANCING THE USER EXPERIENCE AND TAKE-UP OF ANALYTIC TOOLS

RESOURCE	FACILITATORS TO UPTAKE OF INFORMATION	BARRIERS TO UPTAKE OF INFORMATION
Priority Level 1		
A Knowledge Transfer Strategy for Public Health Decision Makers (Dobbins et al. 2004)	• Credibility and reliability (relying on familiarity of logos, authors' names, recommendations of peers, and source of the research) increase the likelihood user will review materials • Sharing expectations around the amount of information in a product is an important part of reliability • Ensuring the quality of the information (current, frames within the user's context, jargon-free and transparent, provides recommendations, etc.) supports usability • Receivers perceive products to be high quality when information is well-written, concise, easily understood, well-organized, easy to scan quickly, linked to other relevant and high-quality documents • Information should be directly related to user's current work choice and they should have control over how the information is received (amount of detail and how the info was delivered [electronic vs. hard copy]) • Customize products to the reader and develop audience-specific messages • Present information in user-friendly and concise format • Find ways to allow users to screen out nonrelevant information quickly	• Users have limited time, expertise, and resources to identify, retrieve, read, synthesize, and translate the best available evidence into practice • Users lack education and training on how to manage data received and knowledge around critical appraisal, organizational change theory, and knowledge brokering to be able to use the information

RESOURCE	FACILITATORS TO UPTAKE OF INFORMATION	BARRIERS TO UPTAKE OF INFORMATION
Elizabeth Usher Memorial Lecture: How do we change our profession? Using the lens of behavioral economics to improve evidence-based practice in speech-language pathology (McCabe 2018)	• Help users act reflectively instead of automatically by using heuristics such as framing effects, reciprocity, social proof, consistency, and commitment	• Inconsistency of belief or cognitive dissonance • Automatic cognitive processes such as sunk cost fallacy, loss aversion, social desirability bias, choice overload, and inertia
How Can Research Organizations More Effectively Transfer Research Knowledge to Decision Makers? (Lavis et al. 2003)	• Research on managerial and policy decision making shows research in the form of "ideas" not "data" most influences decision making • Target audiences must be clearly identified, and the specifics of a knowledge-transfer strategy must be fine-tuned to the types of decisions they face and the types of decision-making environments in which they live or work • Credibility of the messenger delivering the message, whether the messenger is an individual, group, or organization, is important • Passive processes are ineffective and interactive engagement may be most effective, regardless of the audience • Performance measures for knowledge transfer should be appropriate to the target audience and to the objectives	• Sender's knowledge of target audience needs and circumstances • Audience's capacity to build skills needed to use and apply information
Improving Technical Information Use: What Can Be Learnt from a Manager's Perspective? (Jacobson et al. 2013)	• Productive interaction between information provider and recipient • Information that is accessible, clearly valuable and salient, credible, and from a legitimate source more likely to be used • Must consider relationships and understand others' views to better understand their decision-making processes	N/A
Priority Level 2		
Research Use for Policy Decisions on Early Literacy Improvement in the Dominican Republic (Lisman 2019)	• In Latin America, education decision makers tend to form understandings and base decisions on information from trusted advisors rather than engaging directly with research themselves • Effective dissemination approaches are characterized by 6 elements: being simple, unexpected, concrete, credible, emotional, and able to tell a story (Heath and Heath 2008)	• Gap between researchers (information providers) and practitioners (information receivers) • Lack of common fora for sharing information, research, and feedback groups

RESOURCE	FACILITATORS TO UPTAKE OF INFORMATION	BARRIERS TO UPTAKE OF INFORMATION
	• Socio-cultural and professional networks are important for disseminating educational research • Importance of effective dissemination through interlocutors and the value added from meaningful and continuous dialogue between decision makers and the researchers themselves	
Using Behavioral Economics Concepts to Increase Organizational Learning in an NHS Hospital (Schmidtke 2016)	• Increase the salience of information for users • Increase social currency by having a respected figure communicate information • Try to make accessing and using information a social norm	• Users might not have sufficient time to review written materials and are often inundated with these types of products • Verbal information sharing isn't accessible for future reference
Using Behavioral Insights to Improve Stakeholder Communication (Eszenyi and Peries 2018)	• Write about what the reader wants to know, not just what the writer wants to tell them • Identify feedback about the communication and use feedback to improve products	N/A
Priority Level 3		
Making More Effective Use of Human Behavioral Science in Conservation Interventions (Balmford et al. 2021)	• Information campaigns can be more effective when they target discrete audience segments and account for their values, motives, norms, and social and physical realities	• Knowledge/expertise gaps to utilize information
The Use of Evidence from the Behavioral Sciences in the Organizational Decision-Making Process (Minjina 2015)	• Identify and neutralize elements that distort rational decision-making processes • Person creating products needs to be familiar with the targeted policy issue and that issue must be continuously in focus	• Information overload, logical fallacies, cognitive biases, heuristics

N/A = authors did not elaborate on this in the resource.

TABLE D.2. LITERATURE REVIEW NOTES ON BEHAVIORAL TOOLS AND GUIDELINES IN USE BY OTHER DEVELOPMENT ORGANIZATIONS AND GOVERNMENT AGENCIES

TOOL OR GUIDELINE (ORGANIZATION)	TARGET AUDIENCE	SECTOR	RELEVANCE TO EMD/E
Priority Level 1			
Applying Behavioral Insights to Organisations: Theoretical Underpinnings (2017) (OECD)	OECD seminar participants	General	• Discusses the use of behavioral economics in the workforce within an organization • Describes the define-diagnose-design-test approach to implementing and testing behavioral nudges • Lists 10 psychological insights that directly or indirectly stimulate solutions to organizational challenges
Applying Behavioral Insights to Organisations: Global Case Studies (2017) (OECD)	OECD seminar participants	General	• Presents specific cases of the application of behavioral insights to interventions with organizations and multinational bodies
The BASIC Toolkit (2019) (OECD)	Practitioners and policymakers	General	• Practical instrument for policy officials working in ministries, departments, and public agencies on the process through which behavioral aspects of a problem can be identified • Provides an introductory-level guidebook on how to apply behavioral science from problem diagnosis to evaluation and scale-up • Lists behavioral concepts that could be leveraged to increase Mission staff use of tools/influence the presentation of findings
Behavioral Sciences for Better Health Initiatives (2022) (WHO)	WHO Organization and Member States	Public health	Offers ideas and recommendations for how to include behavioral economics in initiatives: • Provide guidance documents for how to apply behavioral and social science to economic analyses • Test approaches and pilot projects that do incorporate behavioral science • Provide technical assistance on how to incorporate behavioral economics into project design • Collect and share knowledge on the topic internally (webinars, community of practice, etc.)

TOOL OR GUIDELINE (ORGANIZATION)	TARGET AUDIENCE	SECTOR	RELEVANCE TO EMD/E
			• Establish partnerships with expert external organizations to continue to strengthen this work
Behavioral Insights Toolkit (2017) (IRS)	Practitioners at IRS	Taxation, but also references other fields	• Provides a detailed catalogue of behavioral concepts and how to leverage them to improve interventions • Offers examples how to show recommendations clearly, particularly when there are multiple options (p. 9)
The EAST Framework (2014) (BIT)	Policymakers	Unspecified	• Presents four simple rules for applying behavioral insights in policy work
Mind, Society, and Behavior (2015) (World Bank)	Development practitioners and researchers	Poverty, early childhood development, household finance, productivity, health, climate change	• Highlights behavioral science concepts relevant to the development field (Part 1) • Provides concrete examples of behaviorally informed interventions in a range of sectors (Part 2)
UN Behavioural Science Guidance Note (2021) (UN)	UN staff	General	• Emphasizes using behavioral science to improve the clarity of information and to reduce bureaucracy and administrative burden • Recommends the development of behaviorally informed monitoring and evaluation tools, indicators, and indexes
UN Behavioural Science Report (2021) (UN)	UN staff	General	• Emphasizes clarity in presentation and reducing bureaucracy and administrative burden
UN Behavioural Insights for Policymaking (2017) (UN)	Policymakers	Developing countries and sustainability/ climate focus	• Describes behavioral science and how it is being used to improve policymaking • Provides examples of leveraging behavioral concepts in the development context related to energy, water, transportation and mobility, food and diet, and waste and disposal

TOOL OR GUIDELINE (ORGANIZATION)	TARGET AUDIENCE	SECTOR	RELEVANCE TO EMD/E
Priority Level 2			
Behavioral Design: A New Approach to Development Policy (2014) (Ideas42)	Program designers and those working in anything related to program design	Agriculture, labor, technology adoption, literacy, education	• Discusses the role of behavioral insights in shaping development programs and policies • Provides examples of how behavioral economics can help design more effective programs and interventions in development contexts
Behavioral Government: Using Behavioral Science to Improve How Governments Make Decisions (2018) (BIT)	Policymakers, practitioners, academics	Draws from UK experience, but pulls from various sectors and geographies	• Provides a table of strategies (pp.11–13) to address common behavioral issues/bottlenecks that can be considered to increase awareness of EMD/E supports and tools
Guidelines for Developing Behavioural Change Intervention in the Context of Avian Flu (AI) (2008) (WHO)	All those involved in AI prevention and control at the planning, implementation, evaluation, and policy levels	Public health	• Offers considerations on different elements of intervention design (e.g., communication, government policy, planning implementation, capacity building, social and community mobilization, partnerships, alliance and networks, resource mobilization) that implementing partners can consider for incorporating behavioral science • Lists suggestions for how to make communication more effective
Practitioners Playbook for Applying BE to Labor Programs (2017) (Ideas42)	Program administrators and managers at the U.S. Department of Labor (DOL) and other social programs	Labor programs	• Toolkit provides information for how to diagnose behavioral concepts • Defines common behavioral bottlenecks • Provides specific recommendations for incorporating behavioral strategies into communication processes

TOOL OR GUIDELINE (ORGANIZATION)	TARGET AUDIENCE	SECTOR	RELEVANCE TO EMD/E
Priority Level 3			
Behavioural Insights and New Approaches to Policy Design: The Views from the Field (2014) (OECD)	OECD seminar participants	General	• Summarizes key findings of behavioral science and new approaches to policy design • Advocates for knowledge sharing of results of behaviorally informed experiences
How to Improve Gender Equality in the Workplace: Evidence-Based Actions for Employers (2021) (BIT)	Employers	Unspecified	• Limited utility, but possible resource for USAID when considering hiring practices in-country to promote gender equity

TABLE D.3. LITERATURE REVIEW NOTES ON INCORPORATING GENDER AND OTHER INCLUSION-ORIENTED CONSIDERATIONS IN TOOLS

RESOURCE	BEHAVIORAL CONCEPTS LEVERAGED/HIGHLIGHTED	KEY TAKEAWAYS
Priority Level 1		
An Equity Lens on Behavioral Science for Conservation (Crosman et al. 2022)	• Salience • Defaults • Social norms • Cultural influences • "Green nudges" • Cognitive load, scarcity, and related behavioral responses	• Focus on the inequities between those who design and implement behavior interventions and the targets of those intervention and distributional inequities within population targeted by behavioral interventions • Equity should serve as touchstone for the complex reality of applied behavioral science applications to conservation • Anticipate multiple issues that could arise from a naive conception of the field: inequitable selection of intervention subjects and behaviors, inequitable mismatch between existing behavioral research contexts and applied contexts, and inequitable distribution of costs and benefits of interventions • These issues can be overcome with deliberate attention, which will require organizations using behavioral approaches to commit time and resources to address the equity issues
Priority Level 2		
A Feminist Review of Behavioral Economic Research on Gender Differences (Sent and Staveren 2019)	• Confirmation and publication biases • Self-serving bias • Risk aversion • Socialization, beliefs, institutions, and stereotypes	• Uses Eagly and Wood's biosocial constructionist framework and integrates feminist economics insight to provide a complete feminist analytical framework for analyzing behavioral economic literature on gender differences • Simple reporting of gender difference without assessment of statistical significance and size effects leads to confirmation bias and publication bias in behavioral research • Gender differences in risk appetite seem to be small but are often influenced by socialization, beliefs, institutions, and stereotypes • Altruistic behavior is affected by the cost of altruism, which may hold more, on average, for men than women—no substantive gender difference when it comes to trust
"Bringing Canadian Women on Board": A Behavioural Economics Perspective on Whether Public Reporting of Gender Diversity Will	• Unconscious gender bias • Implicit prejudice or inter-group bias • Blind spot problem	• Proposes a "debiasing-through-law" versus a "debiasing law" framework in the Canadian context to promote gender parity in corporate Canada • Studies suggest that racial biases are malleable and may change depending on the existence of tacit social influence and that unconscious bias can be reduced through non-traditional, tailored attempts to address biases

RESOURCE	BEHAVIORAL CONCEPTS LEVERAGED/HIGHLIGHTED	KEY TAKEAWAYS
Alter the Male-Dominated Composition of Canadian Public Company Boards and Senior Management (Willey 2017)	• Stereotyping • Gendered priming	• Use of role models/authority figures, mandated disclosure, perspective taking, and demanding objectivity can help increase gender parity to corporate Canada • Implementing gender quotas can be a short-term fix, but pose challenges if used as long-term solutions
Cultural Norms, Economic Incentives and Women's Labour Market Behaviour: Empirical Insights from Bangladesh (Heintz et al. 2018)	• Substitution effect for higher costs of foregoing work • Income effect for men's wages reducing the need for women's earnings	• Several factors shape the type of work done by women in the survey (age, education, domestic responsibilities, etc.) and are generalizable to other countries • Recent changes including rising levels of female education, access to electricity and mobile phones, emergence of garment industry, and possibility for migration have increased younger women's participation in wage work and self-employment outside of the home • Married women continue to face greater pressure to adhere to cultural norms, which restrict their labor market options • Overwhelming preference for work within the home could be interpreted as a response to the tangible and intangible costs associated with the main wage opportunities available to women as it is an active preference for work within the home
Using Behavioral Economics to Fix Gender Inequality (Fairchild 2017)	• Implicit bias • Gender stereotypes • Status quo bias	• Book review of What Works: Gender Equality, by Iris Bohnet • Instead of debiasing the mind, Bohnet suggests that we attempt simple changes to our environments and systems to eliminate bias choices and behaviors • Diversity training for corporations and employees, and encouraging women to attend leadership programs are ineffective • Need to first collect and analyze data on subgroup of interest • **DESIGN** change through collecting **D**ata, **E**xperimenting with changes, and **SIGN**-posting to make it easier to make less-biased choices
Priority Level 3		
The ConNECT Framework: A Model for Advancing Behavioral Medicine Science and Practice to Foster Health Equity (Alcaraz et al. 2017)	• Health inequities are entrenched in complex interactions of social, cultural, behavioral, biological, and environmental factors • Attention to context can enhance understanding of	Studies of how behavioral, cognitive, psychosocial, inter- and intra-personal factors and policies contribute to health behavior and inequities are prevalent in the literature The ConNECT framework: 1. Integrating **CON**text: appreciate situational and interactive influences on health

RESOURCE	BEHAVIORAL CONCEPTS LEVERAGED/HIGHLIGHTED	KEY TAKEAWAYS
	determinants of health disparities	2. Fostering a **N**orm of Inclusion: consistently engage and examine diverse groups 3. Ensuring **E**quitable Diffusion of Innovations: facilitate real-world benefit for all 4. Harnessing **C**ommunication Technology: optimize e-communication for wide reach 5. Prioritizing Specialized **T**raining: integrate education, training, and mentoring
Trust, Fairness and Cooperation in Times of Conflict: A Behavioral Economics Approach to Measuring Intergroup Norms of Behavior in the Palestinian-Israeli Conflict (Binur 2011)	• Intergroup norms of cooperation, trust, and fairness • Ingroup bias • Collective identity • Power dynamics	• Behavioral experimental games can provide better understanding of underpinnings of intergroup interaction, connection between individual attitudes and behavior, help adjudicate between different theories of intergroup relations, and enhance methodological approach toward the study of intergroup relations
Can Social Preferences Explain Gender Differences in Economic Behavior? (Kamas and Preston 2015)	• Gender and social preferences for trust and generosity	• Women give significantly more to charity than men, even after accounting for our measure of social preferences • Women prefer egalitarian payment systems both because they are inequity averters and because low self-confidence may lead them to believe they will earn more with equal sharing
Sex Differences and Occupational Choice: Theorizing for Policy Informed by Behavioral Science (Stern and Madison 2022)	• Social structures including expectations, stereotypes, and cultural presumptions • Risk preferences and competitions	• Simply focusing on nudges ignores the psychological traits that differ between men and women • Men and women have different preferences, and therefore even in an egalitarian society there would be differences in labor market choices between men and women
Contribution of Behavioral Economics to Explanation of Gender Wage Level Differences (Brozova 2019)	• Relationship to risk • Relationship to competition—intrinsic and extrinsic motivation and rewards • Motivation (drive behavior) • Cognition (mental processes of gathering and processing information) • Emotions (subjective mental feelings)	• Women preferred lower risk but gender does not matter for people with a university education; level of accepted risk increased by education, career preferences, pride, and partnership; having children did not affect level of accepted risk • Preference for intrinsic reward higher among women than men; women preferred intrinsic rewards compared to higher wages more than men • Preference for non-monetary rewards and motivation increased with higher education; proposed solutions: teach women (education and training) to tolerate more risk and effectively compete and negotiate or create a new institutional design of wage formation to minimize wage gaps

RESOURCE	BEHAVIORAL CONCEPTS LEVERAGED/HIGHLIGHTED	KEY TAKEAWAYS
Behavioral Economics: The Key to Closing the Gap on Maternal, Newborn, and Child Survival for Millennium Development Goals 4 and 5? (Buttenheim and Asch 2012)	• Nudges • Framing effects • Present bias • Zero price effect • Bandwagoning and social norms	• Loss-framed messages are often more persuasive but gain frames may be more compelling for preventative behavior, while loss frames may motivate screening or detection behavior • To counter present bias intervention can provide a financial incentive to make immediate benefits more salient and help design commitment devices • Conditions under which zero prices (or negative prices/financial incentives) make sense: when widespread uptake is required to achieve benefits, when the product is clearly cost-effective, when desired behavior or technology is preventative requiring an upfront investment for long-term benefit • Individuals often do what they are told other people do • Loss aversion can be used to encourage behaviors by putting assets at risk
The Gender Pay Gap: Can Behavioral Economics Provide Useful Insights? (Heilman and Kusev 2017)	• Social norms	• Researchers trying to improve quality of life should conduct scientific projects and find new ways to capitalize behavioral science research for the general use of a community • Studies suggest that people have a sense of fairness that guides behaviors in social interactions and division of a benefit • Decisional situations depicted by the ultimatum game could be used to test and investigate the factors that contribute to the fact that women are offered less and accept lower salaries than men, while controlling for education and professional training levels, total number of working hours during a week, or similar job requirements

APPENDIX E: LIST OF ORGANIZATIONS AND AGENCIES THAT PARTICIPATED IN KIIS

The following lists the organizations and agencies, apart from USAID, that participated in our KIIs. To ensure confidentiality, we do not name the academic or particular USAID Missions or operating units that participated in KIIs.

TABLE E.1. KII RESPONDENT TYPES AND ORGANIZATIONS

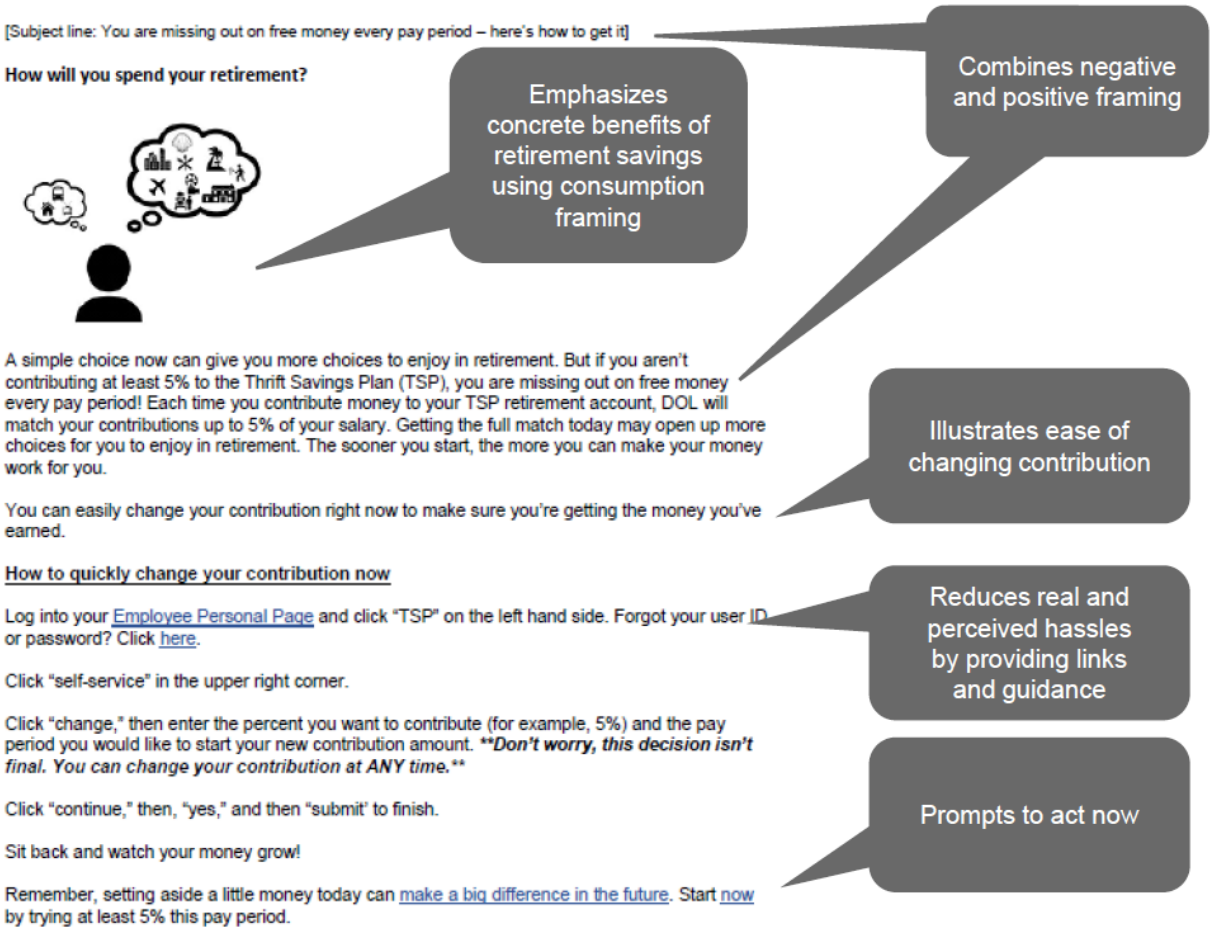
RESPONDENT TYPE	NAMES OF ORGANIZATIONS AND AGENCIES
International development or US Government agencies	• Millenium Challenge Corporation • World Bank/eMBeD • United Nations/Innovation Network/Behavioral Science Group • U.S. Government Services Administration, Office of Evaluation Sciences • U.S. Department of Health and Human Services, Office of Planning, Research, and Evaluation
Behavioral science organizations	• Ideas42 • Busara Center

APPENDIX F: GLOSSARY OF BEHAVIORAL SCIENCE TERMS

TABLE F.1. GLOSSARY OF BEHAVIORAL SCIENCE TERMS

TERM	DEFINITION
Availability bias	Availability bias refers to people's tendency to estimate the importance, prevalence or size of a phenomenon based on how easily it comes to mind (Tversky and Kahneman 1974). Sunstein (2005) hypothesizes that this effect can distort people's cost-benefit analyses during decision making, when the magnitude of a specific cost or risk is assessed based on how easily it comes to mind.
Identity mismatch	Identity mismatch occurs when someone perceives that their identity is not consistent with the social perceptions of a group (Rodríguez-García et al. 2021). Bettman et al. (1991) link the evaluation of social categories (Fiske and Pavelchak 1986) to decision making heuristics. Specifically, they hypothesize that decisionmakers draw on recognizable social categories as part of a heuristic that allows them to evaluate each option based on the category it belongs to, rather than assessing the characteristics of each option.
Information overload	Information overload comes into play in situations where there is so much relevant information available to a decision maker that it exceeds their capacity to process it, leading to reduced quality of decisions (Eppler and Mengis 2004).
Limited attention	For the purposes of this report, we adopt the working definition proposed by Karlan et al. (2016): the phenomenon of people paying less attention to present opportunities (such as a savings program) that can benefit them in the future. When this phenomenon is at play, a simple reminder that brings the opportunity to their attention can make enrollment more likely.
Loss aversion	Per Kahneman et al. (1990), the phenomenon during decision making when losses are weighted more than equal-sized gains.
Planning prompts	We define planning prompts as invitations to plan and schedule the specific tasks that are required to complete a desired behavior. As noted by Abel et al. (2019), "there is evidence that planning and scheduling tasks help people follow through on a variety of behaviors" (p. 284).
Social proof	Per Cialdini et al. (1999), "According to the principle of social proof, one way that individuals determine appropriate behavior for themselves in a situation is to examine the behavior of others there, especially similar others" (p. 1243).
Status quo bias	The tendency of decision makers to systematically prefer "doing nothing or maintaining one's current or previous decision" in ways that violate a conventional model of rational choice (Samuelson and Zeckhauser 1988).

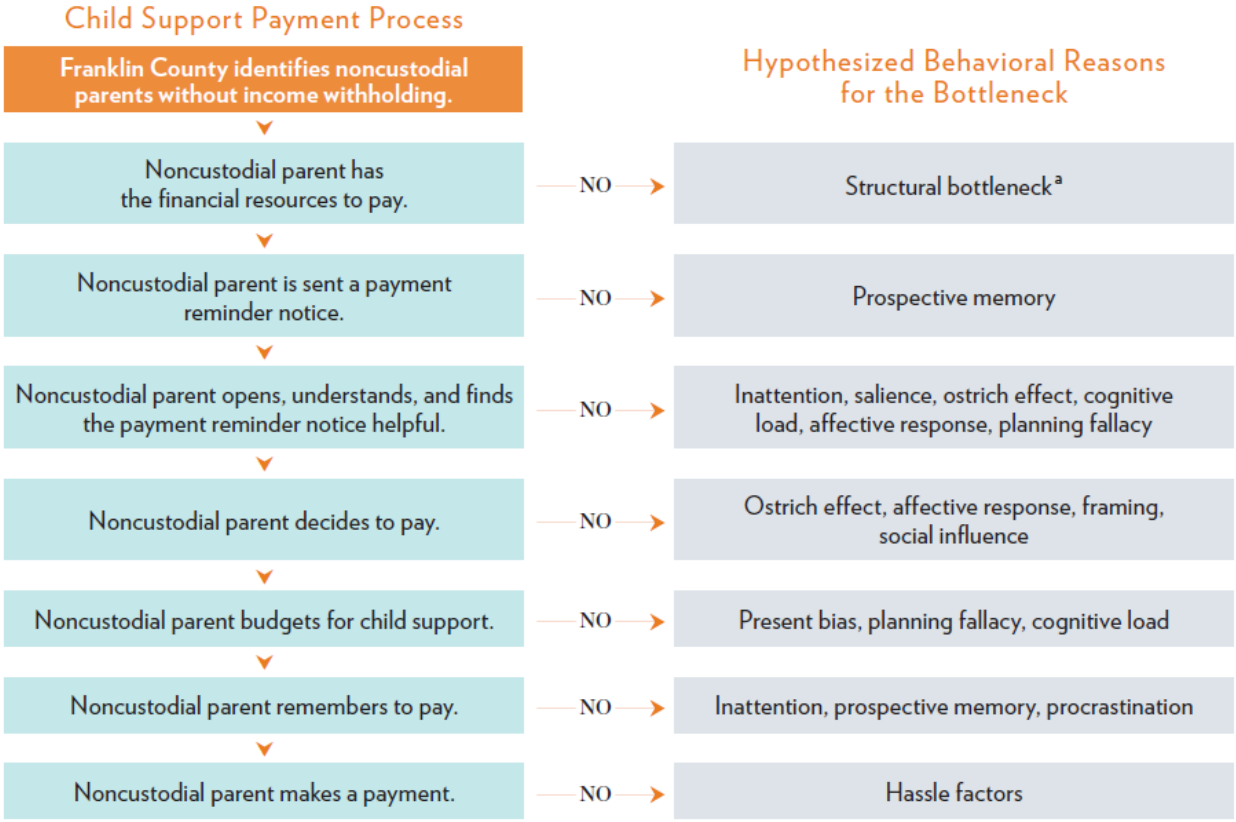
APPENDIX G: EXAMPLE MESSAGE THAT USES LOSS AVERSION AND CLEAR NEXT STEPS



Source: Amin, Samia; Greg Chojnack; Aravind Moorthy; Irma Perez-Johnson; Matt Darling; and Jaclyn Lefkowitz. "Using Behavioral Insights to Increase Retirement Savings: Trial Design and Findings." Washington, DC: Mathematica Policy Research, 2017.

APPENDIX H: JOURNEY MAP TEMPLATE

The following provides an example journey map that Mission staff can use as a template when creating their own. The map depicts the child support payment process for some noncustodial parents and the bottlenecks associated with the process.



Source: Richburg-Hayes, Lashawn, Caitlin Anzelone, and Nadine Dechausay. "Nudging change in human services: Final report of the Behavioral Interventions to Advance Self-Sufficiency (BIAS) project." OPRE Report 23, 2017.

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