

# JEEVIKA FACEBOOK GROUPS EVALUATION



## Problem Statement

A joint initiative of the World Bank and the Government of Bihar to alleviate poverty, JEEViKA strives for social and economic empowerment of the rural poor. JEEViKA employs cadres at various levels to help disseminate knowledge in over 28 thematic areas, inculcating behaviours such as methods of disease prevention, antenatal care, and child nutrition.

CSBC, Meta, and the Bill and Melinda Gates Foundation partnered with JEEViKA to pilot the introduction of a closed JEEViKA Health and Nutrition Facebook group. We worked with three JEEViKA cadres – Main Resource Person (MRP), Community Nutrition Resource Person (CNRP), and Community Mobiliser (CM) – to learn how their participation in this closed Facebook group would change their knowledge about health and nutrition and impact their motivation and job performance.

## Target Behaviour

We hypothesised the following changes in knowledge, motivation, and job performance in the various participating JEEViKA cadres of the various JEEViKA cadres:

- Online peer training in the topic-specific closed FB groups using carefully curated content will improve topical knowledge.
- Fostering conversations across different levels of cadres will increase extrinsic motivation.
- Engaging in work-related discussions and problem-solving will increase intrinsic motivation.
- Increases in ability and motivation through peer learning will lead to improved job performance.

CSBC collected data through phone surveys conducted at baseline (or BL, August 2021) and endline (or EL, March 2022). We registered 287 participants (Treatment = 151, Control = 136) at BL and 250 participants (Treatment = 131, Control = 119) at EL over an intervention period of 16 weeks (November 2021 – February 2022). Project moderators made two new knowledge posts per week.

## Measures and Outcomes

Our team designed the following measures to assess knowledge, motivation and job performance.

- **Knowledge:** 14 questions vetted by the JEEViKA team addressed exclusive breastfeeding, complementary feeding, disease prevention, growing vegetable gardens, COVID-19, etc.
- **Motivation:** 9 questions addressed intrinsic, extrinsic, prosocial, and amotivation; responses ranged from 1-7 on Likert type scale.
- **Job Performance:** 5 questions per type of cadre addressed job performance related to their job descriptions, as vetted by the JEEViKA team.

The following constructed variables represent the primary outcomes of the study:

- **Knowledge Score:** Represents how many of the 14 knowledge-based questions respondents answered correctly.
- **Motivation Score:** Represents the number of motivation questions with responses rated higher than 4.
- **Job Performance Score:** Represents the sum of normalized scores for each question

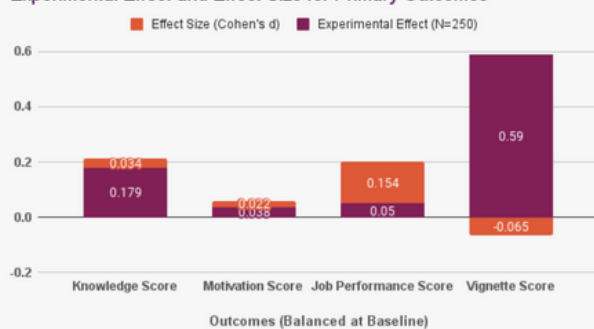
We measured secondary outcomes by assessing impact on specific motivation types (amotivation, intrinsic, extrinsic, and prosocial) and vignette scores at EL.

## Results

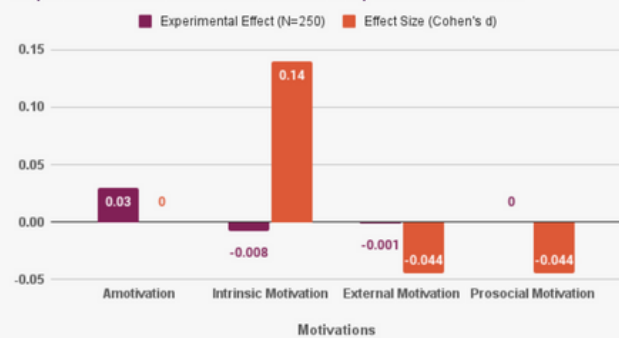
For the primary outcomes, we used Ordinary Least Square (OLS) regression with four models, sequentially adding different variables such as cadre type, demographic features (age, religion, caste, household income, number of household members) and experience with smartphones (smartphone ownership, smartphone comfort, number of apps used). We also investigated the impact on specific types of motivation using a linear probability model.

The effect sizes for the primary outcomes (balanced at BL) of knowledge, motivation, and job performance scores and the secondary outcomes (balanced at BL) regarding specific motivations and vignette score were negligible and, therefore, statistically insignificant. These results are enumerated in the figures below.

Experimental Effect and Effect Size for Primary Outcomes



Experimental Effect and Effect Size for Specific Motivations



## Discussion

Results were consistent with the null hypotheses across all primary and secondary outcomes.

Contamination of the control group substantially affected results. Over 80% of participants who had not been invited to the closed FB group reported that they had seen/heard the posts on the FB group. The spread of information makes precise measurement in the evaluation difficult, but it is a positive sign that the information would naturally spread through cadres at scale in a non-study setting.

Secondary outcomes such as intrinsic and prosocial motivations were extremely high at baseline with 98% of respondents rating both these very high in the BL survey. The minimal impact of the treatment can mostly be attributed to this fact. Non-usage of Facebook posed another key issue, as 34% of the treatment group reported “Never” having used FB, and 26% reported not joining the group at all. However, both control and treatment groups (52% at BL to 63% at EL) reported increased FB usage.

Our study suggests that under the right circumstances, Facebook has the potential to be implemented as an online peer training solution for JEEViKA cadres, but measuring it remains a challenge.

