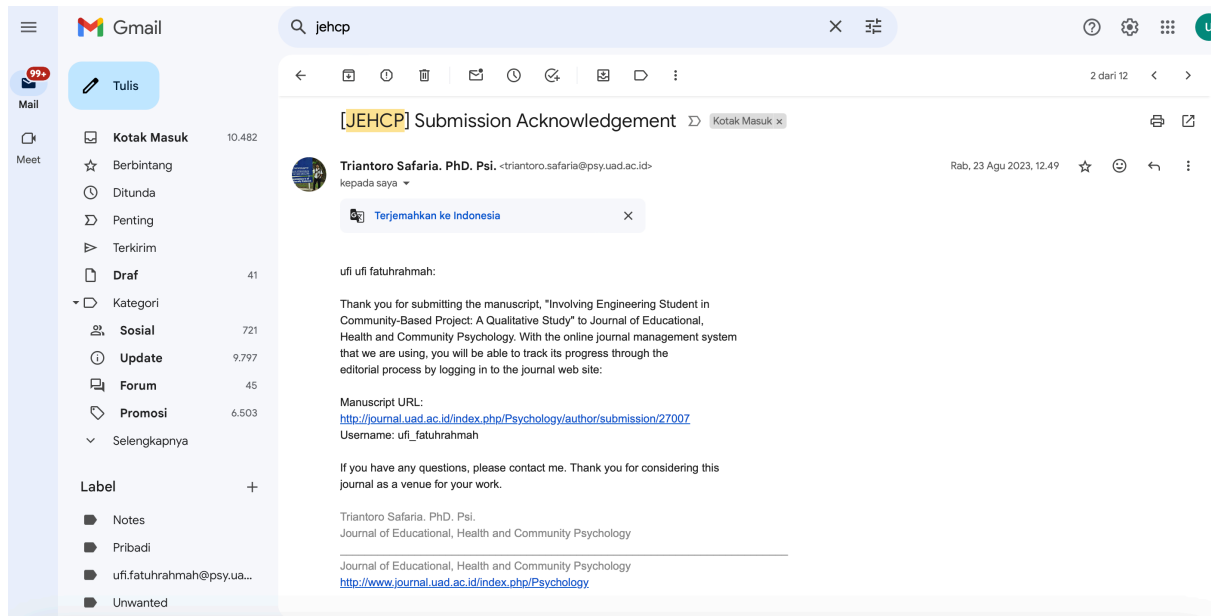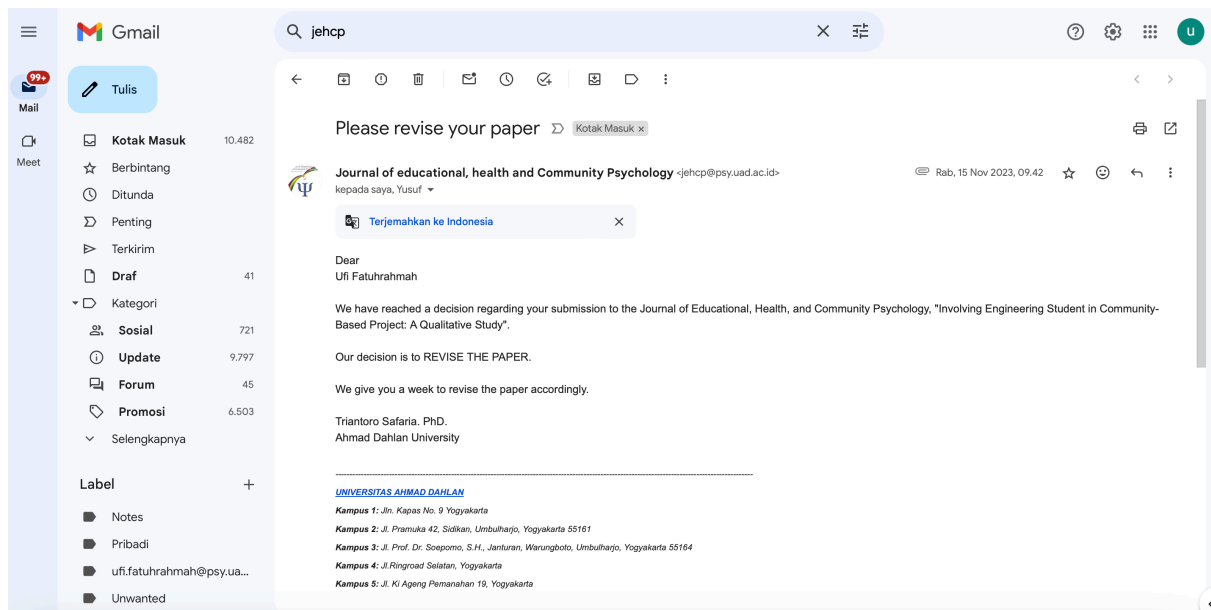Peer Review :
Involving Engineering Student in Community-Based Project: A Qualitative Study

1. Submission Acknowledgement

2. Peer Review Process

educational standard's expectation by implementing community values. If the second type of student project presents more favorable outcomes than the preceding one, we identify an opportunity to improve the design of the student project in the future. Previous research shows that involving these values in student learning increased motivation (Goggins & Hajdukiewicz, 2022) and awareness of the importance of addressing each party's concerns, interests, and needs (Ross et al., 2010). Therefore, this study intends to explore students' experience in engineering community-based projects, including the process, experiences, feelings, and values acquired during and after the project.

Research questions

Method

Paradigm

Method

Paradigm

Participants

Thirty-nine participants were involved in the survey study. The participants consist of graduates and students of undergraduate engineering programs (Table 1). Subsequently, three participants were interviewed to elaborate on deeper information.

Table 1

Participants and educational background

Study Program	Number of Graduates	Number of Students
Electrical Engineering	4	18
Mechanical Engineering	0	17

All participants have completed their final project, which involved engagement with the community. Their project stakeholders come from various backgrounds, e.g., local government, small local enterprises, or farmers; therefore, the project theme is based on their stakeholder needs (the examples available in Table 2)