

# What Factors Influence Goal Setting? Insights from Text-Based Task Generation

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## Abstract

Humans set a variety of goals and generate diverse tasks everyday, but the psychological factors underlying this process remain underexplored. To identify the core characteristics influencing individual goal-setting, we conducted a text-based task generation experiment where participants were asked to report activities or games freely using different daily objects. Participants' values and traits were also measured to obtain the personal characteristics. We conducted a pre-registered evaluation experiment to establish the connections between these psychological factors and task attributes. Our results show that human goal-setting behaviors are shaped by personal values and cognitive styles. People with higher openness to change value tend to generate more novel and stimulating tasks, while people with a systematic thinking style perform worse in complex environments compared to simpler ones. Despite the widespread use of large language models (LLMs), our further comparisons reveal that LLMs fail to capture the diversity of human responses, showing a systematic bias towards mental tasks, even when instructed to simulate individual profiles. These results offer new insights into the psychological factors driving individual goal-setting, and highlight the limitations of current LLMs in stimulating human behaviors.