



Conversation AI and behavioural science: An experiment in future-oriented concept testing

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BACKGROUND

In the fast-paced consumer packaged goods (CPG) industry, innovation is a critical driver of growth and competitive advantage. CPG brands are continually on the lookout for fresh product ideas that can capture the market’s attention and satisfy evolving consumer needs.

However, a persistent challenge in product development is obtaining reliable consumer insights, particularly when it comes to predicting future behaviours and preferences. Consumers often struggle to provide accurate answers to questions about their future choices and actions. These challenges can be attributed to several well-documented in Behavioural science psychological phenomena:

- **Intention-Behaviour Gap:** This gap highlights the inconsistency between what consumers say they intend to do and what they actually do. Intended purchases often fail to materialise in real-life behaviours.
- **Optimism Bias:** Consumers tend to overestimate the likelihood of positive outcomes and underestimate risks when considering future scenarios, which can skew their responses to questions about future product adoption.
- **Planning Fallacy:** When forecasting their future, consumers often exhibit unrealistic expectations regarding the time, costs, and benefits associated with new behaviours, which can lead to overly optimistic predictions.

Future Thinking Priming (FTP) is a promising technique derived from behavioural science. FTP involves prompting individuals to vividly envision their future selves and circumstances, which helps bridge the gap between current preferences and future behaviours.

HYPOTHESIS

FTP encourages participants to be more engaged and future-oriented in their responses reacting to new product ideas compared to a control group not exposed to FTP.

METHOD

- **Sample:** N=404 UK consumers
- **Design:** Online quantitative chatbot concept test survey
- **Concept:** A functional chocolate infused with mushrooms designed to aid sleep, currently with low awareness among consumers
- **Experimental Conditions:**
Cell 1 (Control): Standard online survey via a chatbot
Cell 2 (Experimental): Future Thinking Priming + Standard online survey via a chatbot. Participants in this cell were asked to imagine it is the year 2029 and visualize their future selves, typical day, and important aspects of their lives before being introduced to the concept idea.



CELL 1 – Standard chatbot concept test

CELL 2 – Future Thinking Priming + Standard chatbot concept test



n = 404

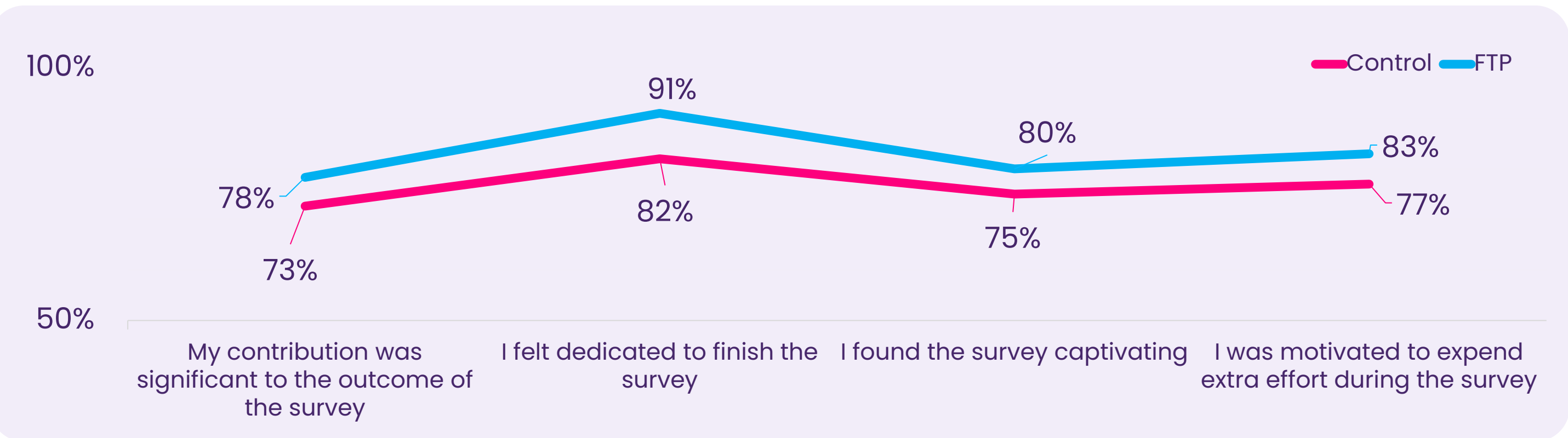
OUTCOMES

ENGAGEMENT RESULTS

Self-reported Engagement: The FTP cell had a slightly longer survey duration due to the added FTP section.



However, participants did not mind the increased length, with self-reported engagement consistently higher across all metrics compared to the control cell.



N=404. Q: Now, please rate whether you agree or disagree with the following statements. Adapted version of the Engagement Questionnaire (EQ) used to measure participant self-reported engagement. Hannum & Simons, 2020

Response length: The future thinking priming cell yielded 4 more words on average, indicating higher engagement.



FUTURE-ORIENTATED VERBATIM QUALITY

- **Co-occurring Themes:** This is a step that follows thematic analysis and looks at how the themes are connected in an open-ended response. Doubling the number of co-occurring themes provided a deeper understanding of the complexities of consumer experiences, revealing connections between themes as conceptualized by participants.



- **Future-Oriented Mentions:** The FTP cell had four times the number of future-oriented mentions, indicating participants not only engaged with the concept but also considered how it would fit into their future lives, aligning with their health and wellness goals.



- **Engagement with Younger Audiences:** FTP led to an additional 7 words on average from younger participants, suggesting it is a useful tool for engaging this demographic.



Age: 18-34 | +44% words on average

- **Male Audience Engagement:** FTP helped male respondents, who traditionally are less verbose as research participants, to provide more open and detailed responses, leading to richer data and better understanding of their preferences and decision-making processes.



Gender: Male | +90% words on average

SUMMARY OF LEARNINGS

x2
co-occurring themes

x4
future-oriented mentions

+90% words on average from Male participants

+44% words on average from Male participants

CONCLUSIONS

This experiment supports the hypothesis that FTP encourages participants to be more engaged and future-oriented in their responses compared to a control group not exposed to FTP. FTP increases engagement, with participants willing to spend more time and provide more useful feedback. It helps shift mindsets towards future-oriented thinking, fostering foresight and ideation, and better engagement with new concept ideas.

This approach aids in testing early concept ideas, optimizing product development, and focusing on the most viable concepts for activation. Additionally, FTP can enhance the optimization of product communications by providing deeper insights into consumer perspectives and preferences. While FTP is not a perfect predictor of future product success, it enhances the connection with participants, bringing us closer to understanding their future behaviours and preferences.