

Naturally Mined Diamonds Versus. Lab-Grown ones: Consumer Attitudes, Motivations and the role of Sustainability

Caitlin Heim and Talalah Khan



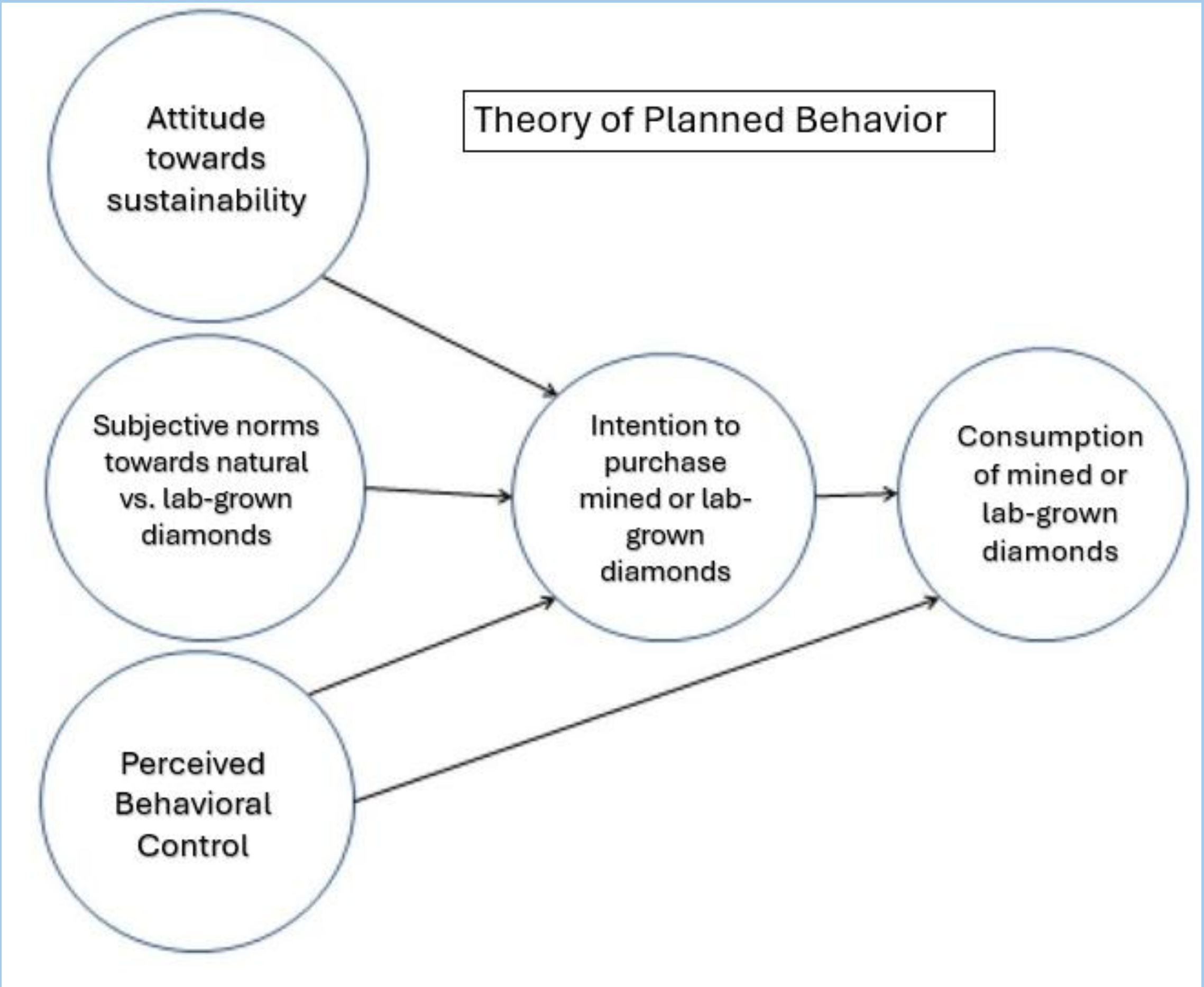
Introduction and Literature Review

- Lab-grown diamonds (LGDs) are synthetic diamonds that exhibit the same optical, chemical, and physical properties as their naturally mined counterparts (George, 2024).
- Initially developed by General Electric in 1954, LGDs have since gained a significant presence in the diamond jewelry industry, creating new opportunities for researchers and entrepreneurs (Zhdanov, 2024). The industry's growth can be attributed in part to LGDs' ability to surpass natural diamonds in size, color, and clarity
- These diamonds are produced through two primary, sustainable methods: High-Pressure High-Temperature (HPHT) and Chemical Vapor Deposition (CVD) (Michailova, 2022).
- Cultural perspectives influence purchasing behaviors regarding lab grown diamonds; Millennials and Generation Z continue to drive demand for lab-grown alternatives (George, 2024).
- Consumer preferences and purchasing behaviors in the mined versus lab-grown diamond industry are still being explored due to the relatively recent rise of lab-grown diamonds. Companies are continuously developing marketing strategies that appeal to a broad range of consumers while also considering the impact these strategies may have on diamond producers (Keech, 2020)
- Historically, lab-grown diamonds have been perceived as inferior to mined diamonds
- The perception of the mined diamond industry as *unethical* is largely driven by the blood diamond conflict (Nyota, 2012)
- It remains uncertain how emerging marketing strategies and international policies will influence diamond-producing countries in terms of economic stability and conflict. While sustainability has become an increasingly important criterion for luxury consumers, this trend remains subject to fluctuation
- A recurring theme in research is that there is no definitive "best" way to market diamonds, as different socioeconomic groups respond to luxury goods in distinct ways

Theoretical Framework

Theory of Planned Behavior and Diamond Consumption

- Ajzen introduced the theory of planned behavior in 1991 to explicate extraneous factors that influence consumer intentions to behave and behavioral outcomes (Ajzen, 1991).
- Application of the theory in the context of consumer behavior: Attitudes towards lab-grown vs. mined diamonds, subjective norms regarding consumption of diamonds and sustainability, perceived behavioral control, particularly efficacy in association with availability and price.
- Sociocultural and economic symbolism associated with naturally mined diamonds: heritage, status, prestige, romantic symbolism (Khokhan & Mehra, 2025).
- Ethical consumption and sustainability associated with lab-grown diamonds (Sun, Jiang & Wang, 2024).
- Personal attitudes towards diamonds based on the purpose they fulfil, conscious consumption and investment-based orientation (Ajzen, 1991; Shah, 2025).
- The role of price sensitivity and availability (Shah, 2025).
- Resale value of naturally mined diamonds compared to lab-grown ones.



Methodology and Data Collection

- 4 qualitative Focus Groups conducted. 2 from the Global North and 2 from the Global South.
- Participants included both genders (12 females, 8 males) and nationalities like Pakistan, China, India, Bangladesh, Mexico, US, Britain and Poland.
- Participants belonged to socioeconomic stratum A in their countries, aged between 25 and 40.
- Thematic analysis conducted.
- Groupthink was witnessed in a focus group conducted in the Global South.
- First stage of data collection. Follow-up study would include a quantitative survey procedure.

Results, Discussion and Implications

- Gen Z consumers in the Global South like Pakistan, India and Mexico are more inclined towards naturally mined diamonds compared to lab-grown ones for consumption due to social contexts, status signaling and dignity symbolization.
- An Indian female participant stated, “I do try to buy environmentally friendly products like shoes and clothes, however, for my engagement ring, I just can’t accept a lab-grown diamond. That ring is a sign of my relationship and love... it just has to be a natural, more expensive one”. Dissonance between attitudes and purchases exists for sustainability within the context of cultural pressures and special occasion expectations.
- Some Gen Z consumers in the US accept lab-grown diamonds even for special occasions. A participant said, “the kind of miner conditions in Africa are atrocious and naturally mined diamonds are not actually rare. They are shown to be rare....A lab-grown one has the same chemical and physical composition so it doesn’t matter. We must move towards ethical consumption.”
- Some participants from the Global North were aligned in their views with those from the Global South that an engagement or wedding band must have a natural, more expensive diamond due its symbolic value.
- Implications for brands like Tiffany, Graff and Bvlgari were discussed with regards to strategic marketing and promoting sustainable consumption apart from just the status value of diamonds.
- Celebrities and social media influencers can play a salient role in orienting society towards more ethical, lab-grown diamonds and lifting social pressures.

Limitations and Future Research

- Results are not generalizable. Surveys could increase ecological validity and generalizability.
- Low internal validity. An experiment must be conducted for more robust, empirical results.
- Future research must approach the consumption of diamonds from a gratification perspective; Uses and Gratification Theory could direct research around motivations and post-consumption attitudes.
- Ethnic and sub-cultural differences may be explored.

Resources

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