

Preventing the usage of Whitening Beauty Products by manipulating Cognitive Dissonance: a cross cultural study between France and India

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Abstract:

The exploitation of the beauty industry through magazine covers, advertisements, tabloids, etc. has set varying 'beauty' standards befitting different socio-economic and cultural backgrounds for women. The notion of 'ideal beauty' and 'being attractive' as 'white' and 'flawless' has been propagated since colonial times and is further exacerbated by the glamour industry and entertainment media. A lot of beauty and health campaigns that try to make women feel good about their own skin color and spread the message of the risks of using skin whitening products (SWP) have failed to persuade a certain section of women to prevent its usage. A recent concern finding health is being compromised as the dangerous side effects of using whitening beauty products are compounding. The dissonance that is created in the minds of these women when it comes to taking risks to attain a lighter skin shade offers a promising research direction to investigate the effectiveness of intensified message framing. The present study examines the persuasive effects of intensified preventive messages by manipulating cognitive dissonance with perceived severity and perceived vulnerability. The study discusses the relevance of cognitive dissonance for understanding the prevention of whitening beauty products within the domain of beauty and health. Specifically, we have developed a new approach to 'increasing cognitive dissonance' that influences a woman's behavior in the context of using whitening beauty products. In this study, Cognitive Dissonance is manipulated with health versus beauty claims and gain versus loss frames mediated by perceived severity and perceived vulnerability to check the effectiveness of the intentions of using SWP. Furthermore, we propose a cross-cultural study between France and India to check the impact of culture and self-construal moderation on the intensified messages. The key contribution is in inducing increased cognitive dissonance in preventive messages to increase its persuasiveness towards the following recommendation.

Introduction

India is a leading market for skin whitening, with skin complexion operating as an important boundary marker for a person's caste and status (Philips, 2004). Constituting almost half of the overall skincare market, the skin whitening segment alone was estimated at \$535 million in 2013 (Karnani, 2014). Yet the sector continues to be mired in controversy, with questions being raised by academics, media, activists, and policy makers. Academic debates related to skin whitening products have typically focused on the controversial, yet relatively mild, cosmetic creams marketed for skin whitening (Karnani, 2007). Particularly prominent among these is "Fair & Lovely" from Unilever, a household brand name that commands almost 60% of the industry revenues in India (Karnani, 2014). In France Immigrant communities often import their practice from their original country (Mahe A, 2014). Skin lightening (bleaching) cosmetics and toiletries are widely used in most African countries. The active ingredients in these cosmetic products are hydroquinone, mercury and corticosteroids. Several additives (concoctions) are used to enhance the bleaching effect, since these products are used for long duration, on a large body surface area,

and under hot humid conditions, percutaneous absorption is enhanced (Olumide, Y.m, et.al, 2008).

Why do we perform certain activities even after knowing that it is harmful for us? Why do we still feel satisfied in practising certain things even after we know the long term risks of such practices? We all want to look beautiful and be healthy at the same time. This leads us to study an interesting rift between beauty and health and exploring the concept of 'cognitive dissonance' (Festinger, 1959) in the context of whitening beauty products. Past research has focused on how to reduce cognitive dissonance when it came to influencing behaviour via preventive messages. Because cognitive dissonance is uncomfortable, individuals experiencing it are motivated to reduce the discomfort through a variety of cognitive and behavioural strategies. Prior research on dissonance intervention program for eating disorder habits by (Green, Scott, Diyankova, Gasser, & Pederson, 2005) states that participants assigned to a high dissonance-induction version reported lower eating disorder symptoms compared to a low dissonance-induction group. The level of dissonance induced in the program varied from high to low indicating participants having choices to being progressively forced into a "recommended" behaviour. Although most researches are focused on reducing cognitive dissonance, the work (Green, Scott, Diyankova, Gasser, & Pederson, 2005) shows that 'Free choice' of a behaviour can be more persuasive than a 'forced' recommended behaviour. Giving choices in message framing for preventive communication has seen success in health sector applications. A change in action or an alternate belief or executing an alternate stance within the action belief is followed with the assist of messages to reduce cognitive dissonance. For instance, someone addicted to smoking and aware of the reality that it is harmful for fitness reduces dissonance by thinking "It is okay to smoke since all people die one day". Likewise, "Using whitening beauty creams from time to time makes me fair and beautiful as I do not see side effects on my skin" or "The chemicals in the whitening creams that I use are not very harmful, so I can continue using them" are examples of thoughts that reduce a woman's cognitive dissonance.

Prior study concluded that belief will usually alternate if someone performs an action that goes in opposition to their first idea. Dissonance can increase due to our lack of ability to rationalize and "explain away" the difficulty at hand, and how strongly the dissonant thoughts struggle inside us (Festinger, 1959). The cognition of threat existence by an individual is sufficient for an individual to perceive a threat. Message characterizations on threat focus on its severity, for example ("AIDS leads to death") and on its susceptible nature to influence the targeted population, for example ("You are at risk for AIDS because you share needles while using intravenous drugs"), (Rogers, 1975, 1983). A comparative study on emotional appeal puts print advertisement as a major success. An online article stated the major attributed reasons are the effective use of written language and the attractive images that stimulate the intention to buy skin whitening products (SWP) (Hirsch, 2012). Correspondingly perceived severity is an individual's beliefs about the seriousness of the threat, while perceived vulnerability is an individual's beliefs about his or her chances of experiencing the threat, (Kim Whitte, 1992, 1994). In this study we consider perceived severity and perceived vulnerability as mediators to manipulate high and low cognitive dissonance moderated by culture and self-construal level on the intention to use SWP.

Proposed

Evidence from theoretical study supports the hypothesis that increased cognitive dissonance enhances women's perceptions of the vulnerability and the severity of the health risks caused by SWP, preventing the intention to use the same. We extend the theoretical implications with a quantitative data collection and analysis methodology to suggest measures and manipulation checks.

Framework

The hypotheses are to be tested through 3 studies via creating messages about the risks involved by using whitening products. In **Study-1**, refer Fig 2, cognitive dissonance increased/reduced is manipulated with health and beauty claims mediated with perceived severity and vulnerability supported by the Protection Motivation Theory (Rogers 1983). Study-1 has independent variables as attributes reducing dissonance vs attributes increasing dissonance mediated through perceived vulnerability and perceived severity it leads to attitude change and then to the intention of the recommendation. In **Study-2**, refer Fig 3, cognitive dissonance is manipulated with gain/loss message framing supported by the Expectancy Value Theory (Cohen, J.B., Fishbein, M. and Ahtola, O.T., 1972). John William Atkinson developed the expectancy-value theory in the 1950s and 1960s in an effort to understand the achievement motivation of individuals.

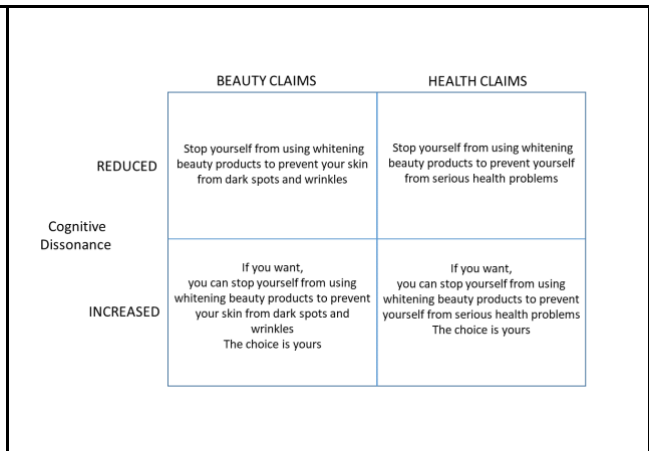
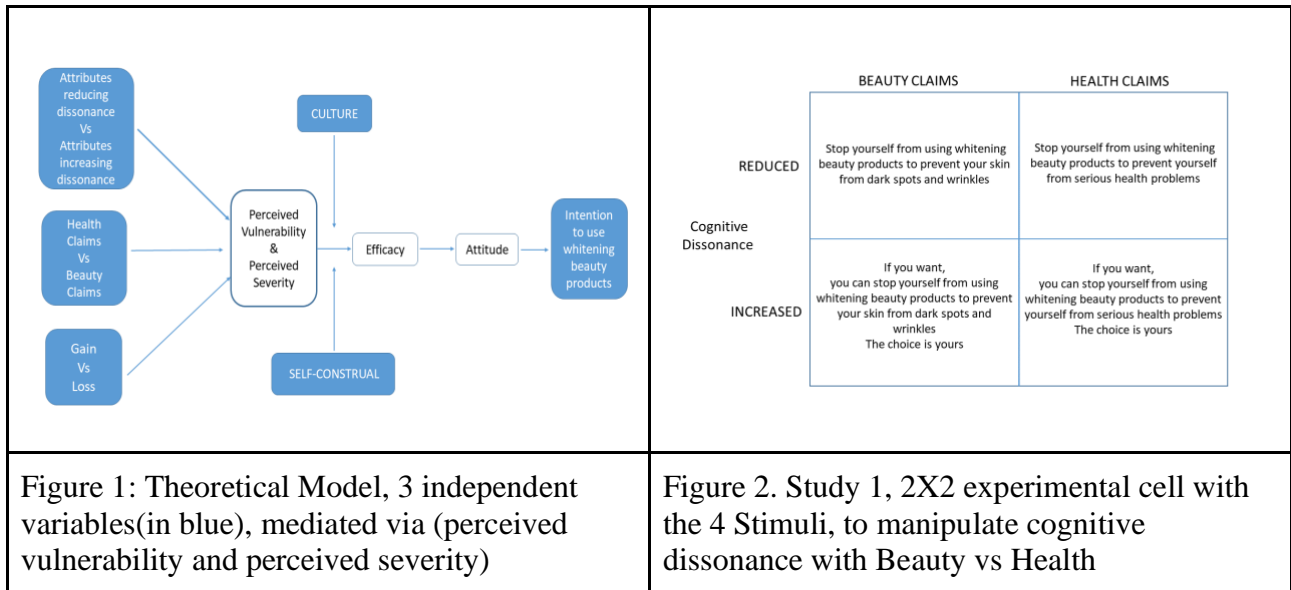


Figure 1: Theoretical Model, 3 independent variables (in blue), mediated via (perceived vulnerability and perceived severity)

Figure 2. Study 1, 2X2 experimental cell with the 4 Stimuli, to manipulate cognitive dissonance with Beauty vs Health

The expectancy value of this study is ‘beauty’. Expectancies refer to how confident an individual is in his or her ability to succeed in a task whereas task values refer to how important, useful, or enjoyable the individual perceives the task. Expectancies are specific beliefs individuals have regarding their success on certain tasks they will carry out in the short-term future or long-term future (Eccles, J. S. & Wigfield, A. 2002). Independent variables are health claims vs beauty claims mediated by gain and loss frame which leads to attitude change and the dependent variable intention to use whitening beauty products.

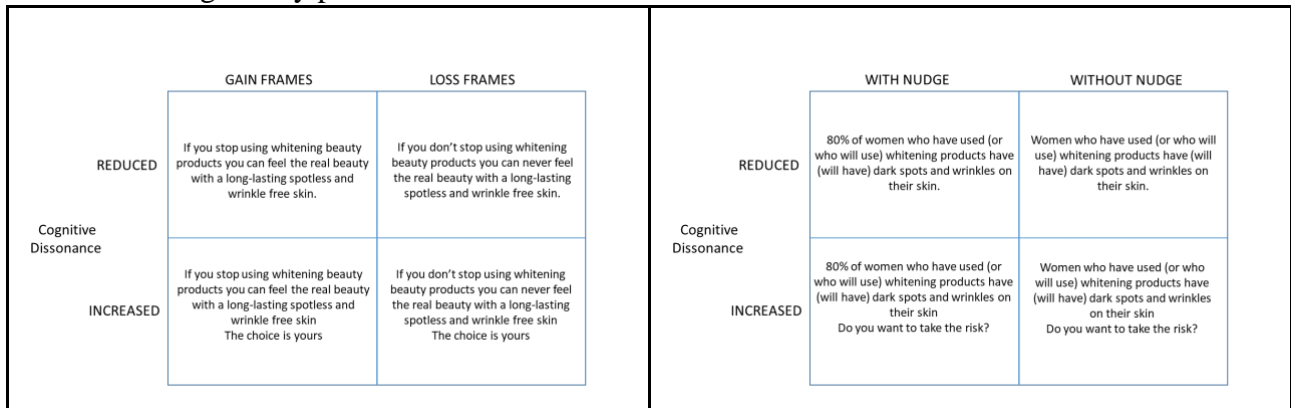


Figure 3: Study 2, 2X2 experimental cell with the 4 Stimuli, to manipulate cognitive dissonance with Gain vs Loss

Figure 4. Study 2, 2X2 experimental cell with the 4 Stimuli, to manipulate cognitive dissonance with Nudge vs No Nudge

Figure 3. Study 2, Study 1, 2X2 experimental cell with the 4 Stimuli to manipulate cognitive dissonance , Gain frame vs Loss frame

Figure 4. Study 3 Study 1, 2X2 experimental cell with the 4 Stimuli to manipulate cognitive dissonance , with nudge vs without nudge

In **Study-3**, refer Fig 4, messages are created by applying ‘nudge’ with manipulating cognitive dissonance. As nudge directly changes behaviour instead of attitude we directly try to influence the behaviour, which is the ‘intention to use whitening beauty products’. For all the above 2x2 experimental designs, a control group is included where the controlled message is not exposed to any priming manipulation.

Methodology

Qualitative Approach : The study shall include a sample total 100 participants out of which 50 are to be expected to reside in France but have Arabic, Asian and African origins while the other 50 is from India origins. To mitigate possible arrangements for potential participants, the ‘Snowball’ method is suggested where research participants recruit other participants for a test or study. This sampling method involves primary data sources nominating other potential primary data sources to be used in the research (Dictionary, Cambridge. ["A snowball effect"](#)). In other words, the snowball sampling method is based on referrals from initial subjects to generate additional subjects connected via chain referral. They are to be provided with a set of semi-direct questionnaires to understand their perspective on the idea of beauty, for example “What does beauty mean to you?”, “Does health and beauty go together?”. Then they shall be presented with pictures of some whitening beauty products of different known brands and some non-whitening beauty products and asked to arrange the pictures by ascending order of preference and to identify any particular product which they are not at all interested in. The questionnaire shall support the snowballing by requesting a respondent to forward the survey email to other potential respondents by stating, “I would be very grateful if you can forward the e-mail to other employees/friends/acquaintances in your circle who have used/bought/would like to buy/use beauty products/etc and participate in the survey”. Participants shall be led to believe that they are being questioned for a market survey on an upcoming branded new beauty product. A feedback regarding promotions and preference of the quality of beauty products from customers is valuable to avoid any kind of in-congruency in the answers.

Quantitative Approach: The study shall include a sample total 450 women for the quantitative approach out of which 150 participants are to reside in France but are from African, Arabic and Asian origin and 150 participants from India. A sample of 150 participants is kept aside as the control group. Data shall be collected through a series of questionnaires in an online survey method like Google Forms, Qualtrics etc. The items measuring perceived susceptibility, perceived seriousness, perceived threat, and behavioural intention were derived from HBM (Health Belief Model). Attitude measures the positive perception of risk with the use of SWP. Behavioural intention measures the intent and willingness to stop using SWP. Participants will be asked to rate their agreement with the following 5 statements to measure Attitude.

Analysis of Data (Manipulation check): For Study-1, a 2 (cognitive dissonance: reduced vs. increased) x 2 (claims: beauty vs. health) analysis of variance (ANOVA) on the reduced cognitive

dissonance manipulation check item will reveal the main effect. A 2 (cognitive dissonance: reduced vs. increased) x 2 (claims: beauty vs. health) ANOVA on the beauty claim manipulation check item will show the main effect. Similar analysis on the health claim manipulation and for the increased cognitive dissonance manipulation check.

Conclusion: Despite a lot of successful dissonance based intervention research in the food and health sector, cognitive dissonance has not been explored much in the beauty sector. Especially when it comes to spreading awareness about whitening beauty product usage where there is a serious threat to health. This study sheds light on the role of cognitive dissonance (increased vs reduced) as an instrument in the trade-off between 'beauty and health'. Perceived severity and perceived vulnerability is designed as a catalyst to enhance the threat levels in the messages. A cross cultural experiment is designed to explore a vast arena to compare how the messages are perceived by two different cultures based on collectivism and an individualistic mindset.

This study opens up several opportunities for future research in the field of 'beauty'. A major upcoming contribution shall be to incentivize mass merchandisers like super-markets and drug-stores who sell beauty products by renowned brands to take up the measures advising its customers about the consequences of long term use of ingredients present in the beauty products. A set of future work also lies in gauging self-efficacy, perceived optimism and emotional intelligence when used as moderators. Message framing with metaphors, visual language and cognitive dissonance is another promising line of research.

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