Individual Differences and Perceptions of Personal Care Products

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Introduction

Potentially harmful compounds such as phthalates, parabens and phenols are found in a variety of everyday products (Ferguson, Colacino, Lewis, & Meeker, 2017; Harley et al., 2016). Unknown to the general population, many of these harmful chemicals are contained within personal care products like body wash, shampoo, toothpaste, and deodorant/antiperspirant (Parlett, Calafat, & Swan, 2014).

Prior research regarding perceived risk of consumer products is limited to warning labels for cigarettes, over-the-counter drugs, and FDA black box warnings. Studies on smoking behavior show that people are more motivated to quit smoking, when warning labels on cigarette boxes display the harmful health effects. However, if warning labels only list the toxic ingredients without providing an explanation of said effects, the responsiveness to quit smoking decreases (Hammond 2006).

Based on the cigarette warning literature, we suggest that the general lack of awareness about the health risks associated with harmful additives in care products may result in poor product choice. The purpose of the study is to investigate the perception of personal care products in individuals after receiving their possible health effects in a fictitious product report.

Methods

Participants: 157 students were recruited from Lynn University with IRB approval, where 149 completed the survey.
Procedure: After recruiting participants, they attended survey sessions in the Library where they completed an online survey and this survey was administrated in the following order:

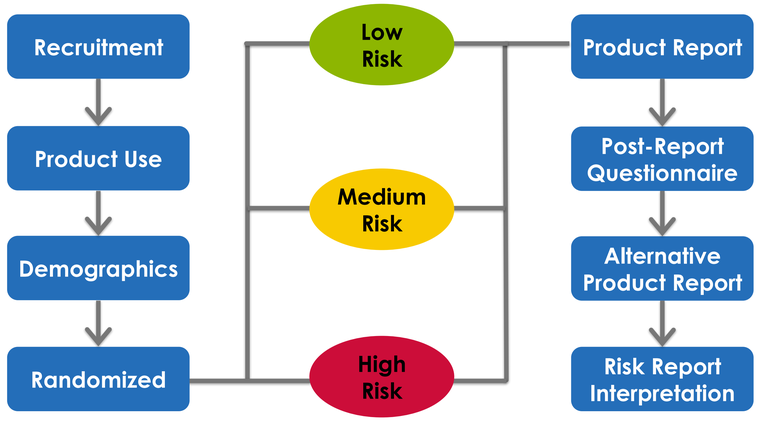


Figure 1. Survey Sessions Process

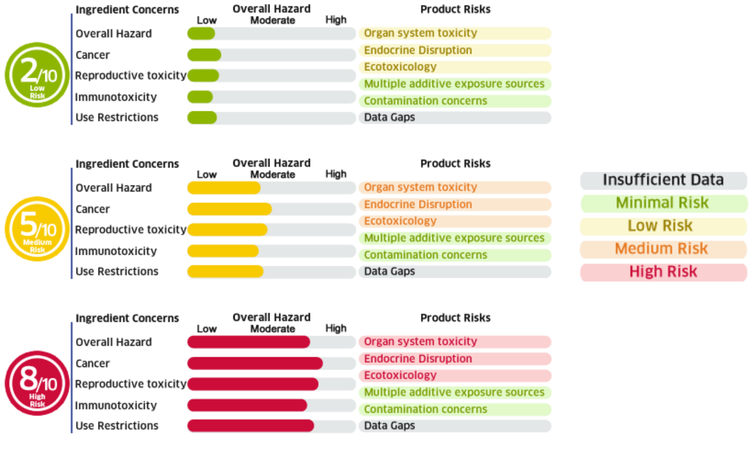


Figure 2. Product Risk Report for the Low, Medium, and High Risk Group

Results

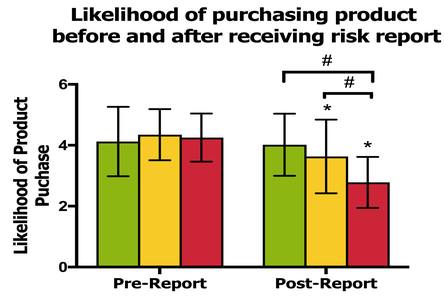


Figure 3.1 Comparison of participant perceptions between risk conditions in the likelihood of purchasing products before and after receiving risk report.

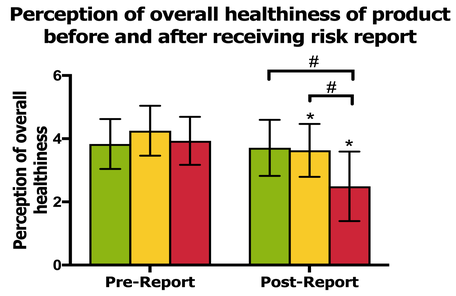


Figure 3.2 Comparison of participants change in perception of overall healthiness before and after receiving risk report by condition.

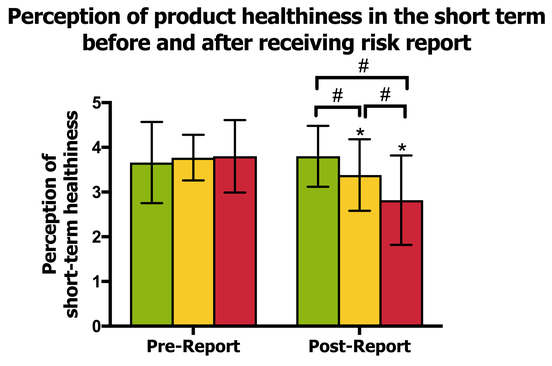


Figure 3.3 Comparison of participants change in perception of healthiness in the short-term before and after receiving risk report by condition.

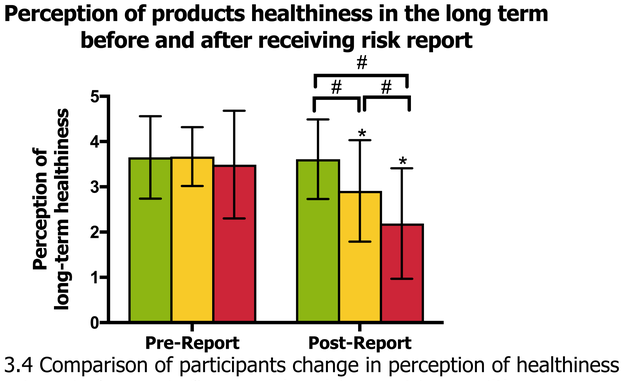


Figure 3.4 Comparison of participants change in perception of healthiness in the long-term before and after receiving risk report by condition.

Analyses by repeated measures with post-hoc Bonferroni test. * = mean difference is significant at p < .001 for within risk groups before and after the report. # = mean difference is significant at p < .001 between risk groups after receiving report.

Low risk
Medium risk
High risk

Results

Hypothesis test summary using Independent-Samples Kruskal-Wallis Test for Product Report, Product Use, and Product Health Perception

	Null Hypothesis	Sig.
Report	Level of concern	.000*
	Level of agreement	.474
Product use	Likelihood of repeat product use	.000*
	Likelihood of repeat product purchase	.000*
Health perception	Perception of product health	.000*
	Product health in the short term	.000*
	Product health in the long term	.000*

Figure 4. Hypothesis Test Summary.
Note * = p < .001. statistically significant

Non-parametric pair-wise post-hoc comparisons showed significant differences between the low and high risk groups and the medium and high risk groups for all measures except level of agreement with the accuracy of the report (data not shown).

Discussion

The findings of the study were consistent with the hypotheses. Regarding purchasing behavior, participants in the high risk condition were less likely to indicate future purchase or use of their product after viewing the report compared to the other conditions. The results demonstrate that when consumers have access to such information, consumers could be more likely to avoid products with harmful chemicals that pose high risk.

The product risk reports also affected how participants perceived the level of healthiness when using their products, with both the medium and high risk groups significantly reporting their products as being unhealthy to use. It was originally hypothesized that only participants in the high risk condition would have a substantial change in perception on the unhealthiness of their products. However, since the medium risk group also indicated a change in perception of healthiness, the findings suggest that even products with moderate health effects may concern consumers.

This study has limitations; it is unclear whether consumers would be motivated to access safety reports before purchasing their products.

References

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