

Potential Predictors of Intended Use of a Novel Heat-Not-Burn Tobacco Product



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Introduction

Cigarette initiation and use is associated with various psychological and social factors. Among the most important pro-use factors are peer pressure and advertising. Among the most important anti-use factors are health education and clean indoor air regulation.

There have been no studies to date on factors which predict use of heat-not-burn tobacco products.

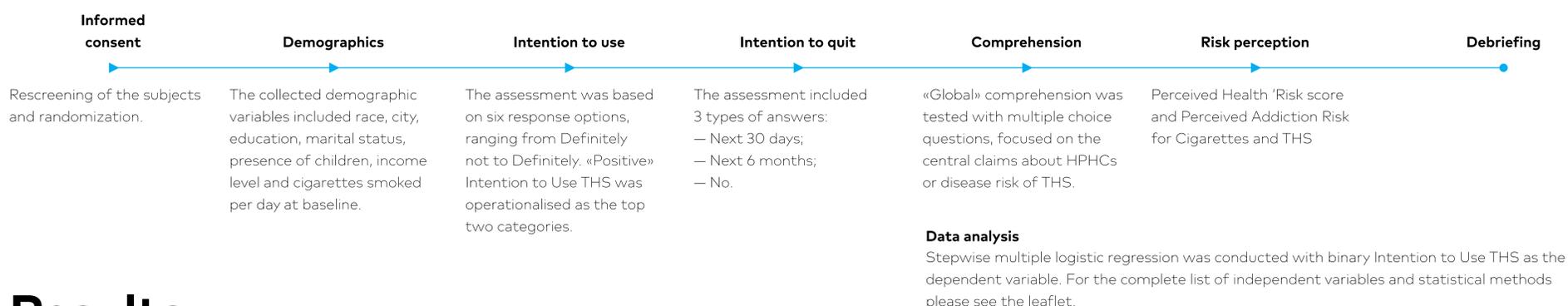
The Tobacco Heating System (THS, commercialized as «IQOS») is a heat-not-burn tobacco product associated with reductions in / elimination of many of the Harmful and Potentially Harmful Constituents (HPHCs) found in cigarette smoke. It may therefore be a candidate product to support Tobacco Harm Reduction.

Objective: To assess the potential predictors of Intention to Use of THS within US smokers.

For more detailed information please see the leaflet.

Methods

This analysis combined data from three studies in the US, differing with respect to the warnings and claims in the THS stimulus materials.



Results

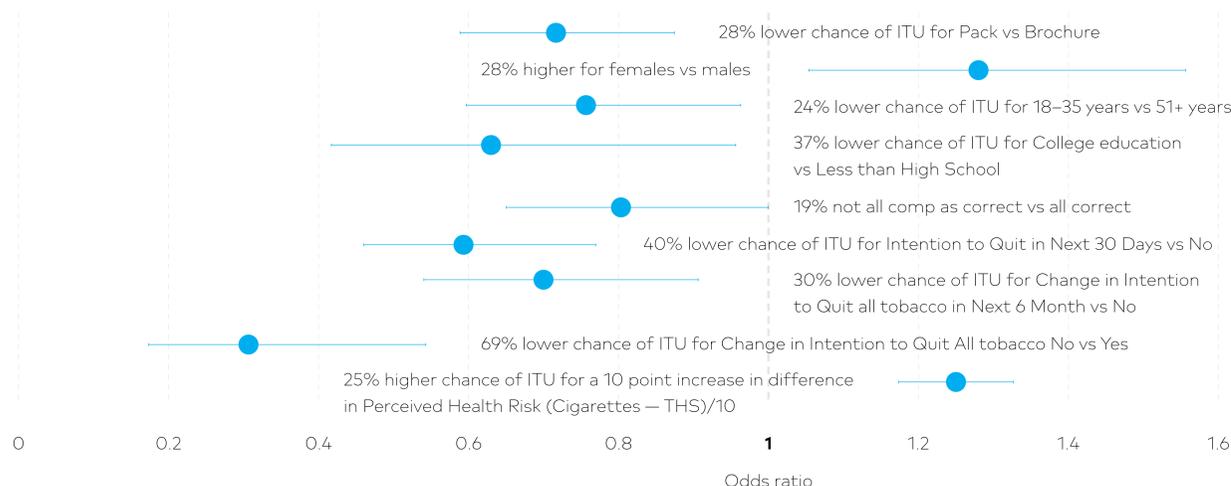
The logistic regression model identified pack vs. brochure, sex, age, education comprehension, intention to quit smoking/all tobacco, and perceived health risks as predictors of intention to use THS. The model's max rescaled R squared of 8% indicates that some predictors of intention to use THS were not measured in the present study. Average smoking duration of participants was 23 years.

50% of the participants had an intention to quit cigarettes (21% within the next 30 days and 29% within the next 6 months). 50% of subjects answered both global comprehension questions correctly. Absolute Change in Intention to Quit Smoking (from yes to no) was observed in 7% of those with the intention to quit smoking at baseline. Mean difference in Perceived Health Risk (cigarettes – THS) was 18.

Table 1: Positive Intention to Use by demographics and arm

ARM	1 (n=567)	2 (n=570)	3 (n=567)	4 (n=573)	All (n=2277)
Male	29%	27%	30%	24%	27%
	82 of 202	76 of 286	85 of 283	68 of 287	311 of 1138
Female	36%	36%	25%	31%	32%
	104 of 285	101 of 284	70 of 284	88 of 286	363 of 1139
18–35 years	32%	27%	26%	28%	28%
	61 of 188	51 of 190	49 of 191	53 of 192	214 of 761
35–50 years	34%	32%	29%	22%	29%
	6 of 191	60 of 190	56 of 190	41 of 190	221 of 761
50+ years	32%	35%	27%	32%	32%
	61 of 188	66 of 190	50 of 186	62 of 191	239 of 755

Figure 1: Independent variables deviating from 1 (p < 0.05) included in the final regression model of positive Intention to Use THS



Conclusions

The logistic regression model indicated that multiple factors are potential predictors of Intention to Use THS. In addition to demographic factors, material type, Intention to Quit smoking and relative Perceived Health Risk (Cigarettes vs. THS) appear to be of importance. The large part of the variability in Intention to Use THS that could not be explained by the analysis variables indicates that other unknown factors are still to be identified.