

A QUANTITATIVE ASSESSMENT OF STATEMENTS COMMUNICATING THE REDUCED RISK POTENTIAL OF ELECTRONIC CIGARETTES AND TOBACCO VAPOR PRODUCTS: IMPACTS ON UK ADULTS' PERCEPTIONS OF VAPING PRODUCTS AND THEIR COMPREHENSION OF THE MESSAGES AND RISK PERCEPTION OF THE PRODUCT

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INTRODUCTION

In recent years, electronic cigarettes (E-vapor) and tobacco vapor products (T-vapor) have been increasingly used worldwide by adult consumers, as there is a growing interest in the potential of these products to reduce the health risks of smoking. In the US, ENDS manufacturers can submit Modified Risk Tobacco Product (MRTP) Applications to the FDA for the potential reduced risks of their products to be assessed. The Draft Guidance for Industry on MRTP Applications contains recommendations on phrasing proposed modified risk claims and testing with consumers to ascertain their perception and understanding of such claims. With reference to this Draft Guidance, JTI developed five fictional reduced risk statements for both E-vapor and T-vapor and quantitatively assessed consumers' perceptions and understanding of them.

METHOD

An online survey was performed in 2019 in the UK where English is the native language. 5,064 adults (>20-years-old) including smokers with intention to quit (CY, n = 1268), smokers without intention to quit (CN, 1273), former smokers (FS, n = 1254) and never smokers (n = 1269). Five fictional statements (combining claim and disclaimer) were prepared for both E-vapor and T-vapor (ten patterns of messages in total). The fictional statements included Reduced Risk (RR-A and RR-B), Reduced Harm (RH-A and RH-B) and Reduced Exposure (RE) messages (Table 1). The messages were combined with product descriptions of E-vapor or T-vapor (Figure 1).

To remove any biases, participants were randomly exposed to one of the ten messages, and subsequently answered questions regarding their understanding of the messages and risk perception of the products, in association with their assigned messages etc.

Table 1 Claim and disclaimer

Message	Reduced Risk Message A (RR-A)	Reduced Risk Message B (RR-B)	Reduced Harm Message A (RH-A)	Reduced Harm Message B (RH-B)	Reduced Exposure Message (RE)
Claim	Research shows that switching completely from cigarettes to [product] can reduce the risks of developing tobacco-related diseases such as lung cancer, respiratory and heart disease.	Research shows that switching completely from cigarettes to [product] may reduce the risks of developing tobacco-related diseases such as lung cancer, respiratory and heart disease.	Research shows that switching completely from cigarettes to [product] can reduce the harm that can cause tobacco-related diseases such as lung cancer, respiratory and heart disease.	Research shows switching completely from cigarettes to [product] can reduce the harm that can cause tobacco-related diseases.	Research shows that switching completely from cigarettes to [product] significantly reduces your body's exposure to toxic substances.
Message specific warning	✓ Reduced risk of developing tobacco-related disease does not mean risk free.	✓ Reduced risk of developing tobacco-related disease does not mean risk free.	✓ Reduced harm does not mean [product] are harmless.	✓ Reduced harm does not mean [product] are harmless.	✓ Reducing your body's exposure to toxic substances does not eliminate the risk of developing tobacco related diseases.
General warning	✓ [Product] contain nicotine. Nicotine is addictive. ✓ [Product] are meant for adult smokers. ✓ [Product] are not meant for non-smokers or smokers who intend to quit. ✓ The best way to reduce your risk of tobacco-related diseases is to completely quit tobacco use.				

* In the original messages, [product] was replaced with 'electronic cigarettes' or 'tobacco vapor products' for E-vapor or T-vapor statements, respectively.

REFERENCES

Food and Drug Administration. Guidance for Industry: Modified Risk Tobacco Product Applications. Draft Guidance. Rockville, MD: Guidance for Industry, U.S. Department of Health and Human Services Food and Drug Administration Center for Tobacco Products; 2012.

CONCLUSION

The results overall show that most of the participants correctly understood that E-vapor and T-vapor products are not risk free. Moreover, after exposure to the messages, correct understanding of the product risks was facilitated, which would suggest that the tested messages have good impacts on educating health risks of the products. Majority of the participants who saw RR messages correctly understood that the products have the potential to reduce the risk of developing smoking-related diseases in comparison to smoking, as intended for the RR messages. However, a certain proportion of the participants could not distinguish reduced harm or exposure claims from reduced risk statements. The perceived risks of E-vapor and T-vapor were generally rated as intermediate; somewhere between conventional cigarettes and nicotine replacement therapy medications. In conclusion, there were tendencies that the tested statements were correctly understood by the adult test population. However results suggested that adaptations are required to some of the statements to enable consumers to distinguish between different types of claims. In addition, one of the major limitation in assessing understanding of the statements was that supportive explanations about tobacco-related disease, exposure to harmful constituents, or harm were not provided in the question. Due to this, the participants might not clearly distinguish the options to answer (i.e. limitation in sensitivity of the assessment). This point should be also considered in the further studies.

RESULTS

Figure 2 Understanding of the disclaimers

Question: What can be the effect of using this product on your health?

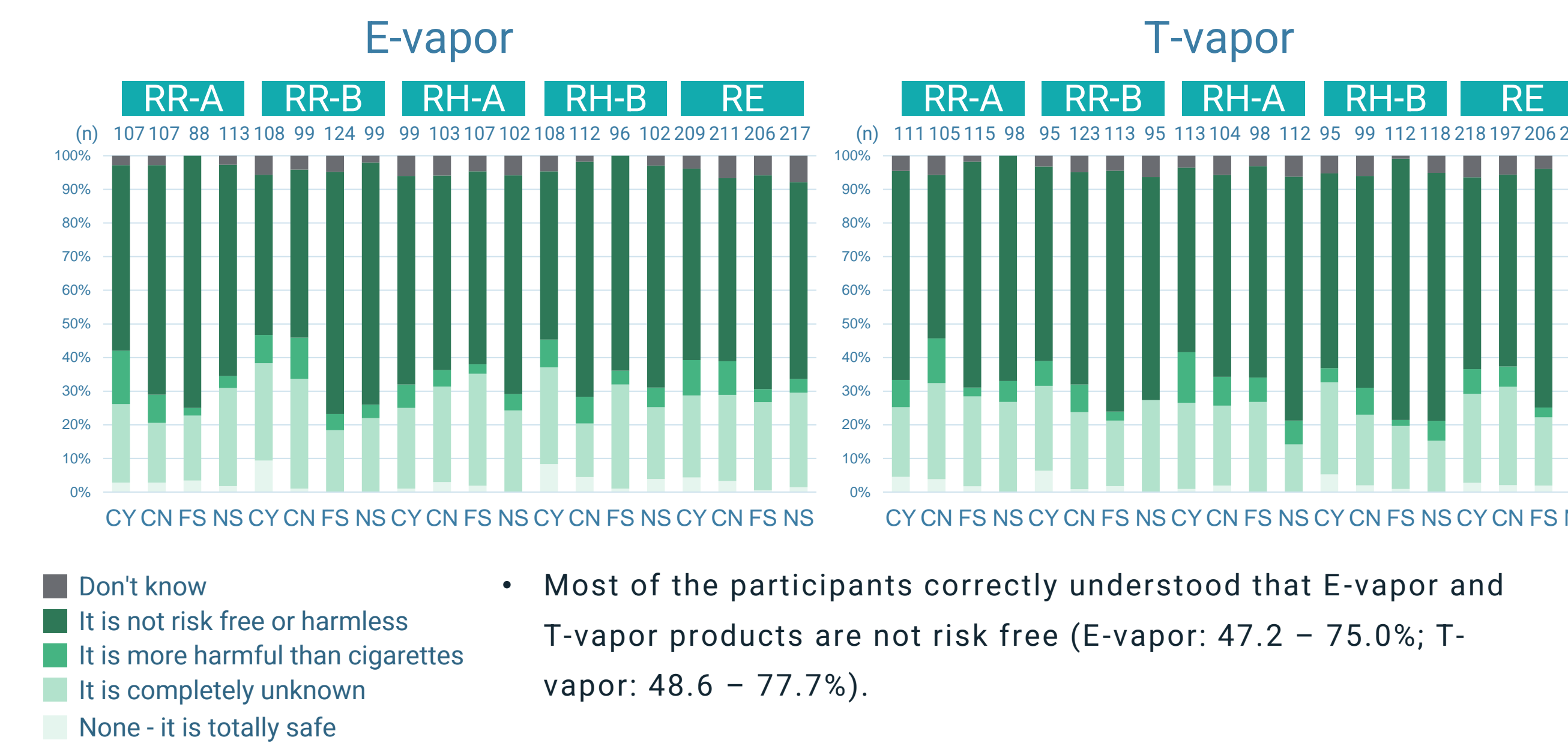


Figure 3 Belief of health risks before and after exposed to messages

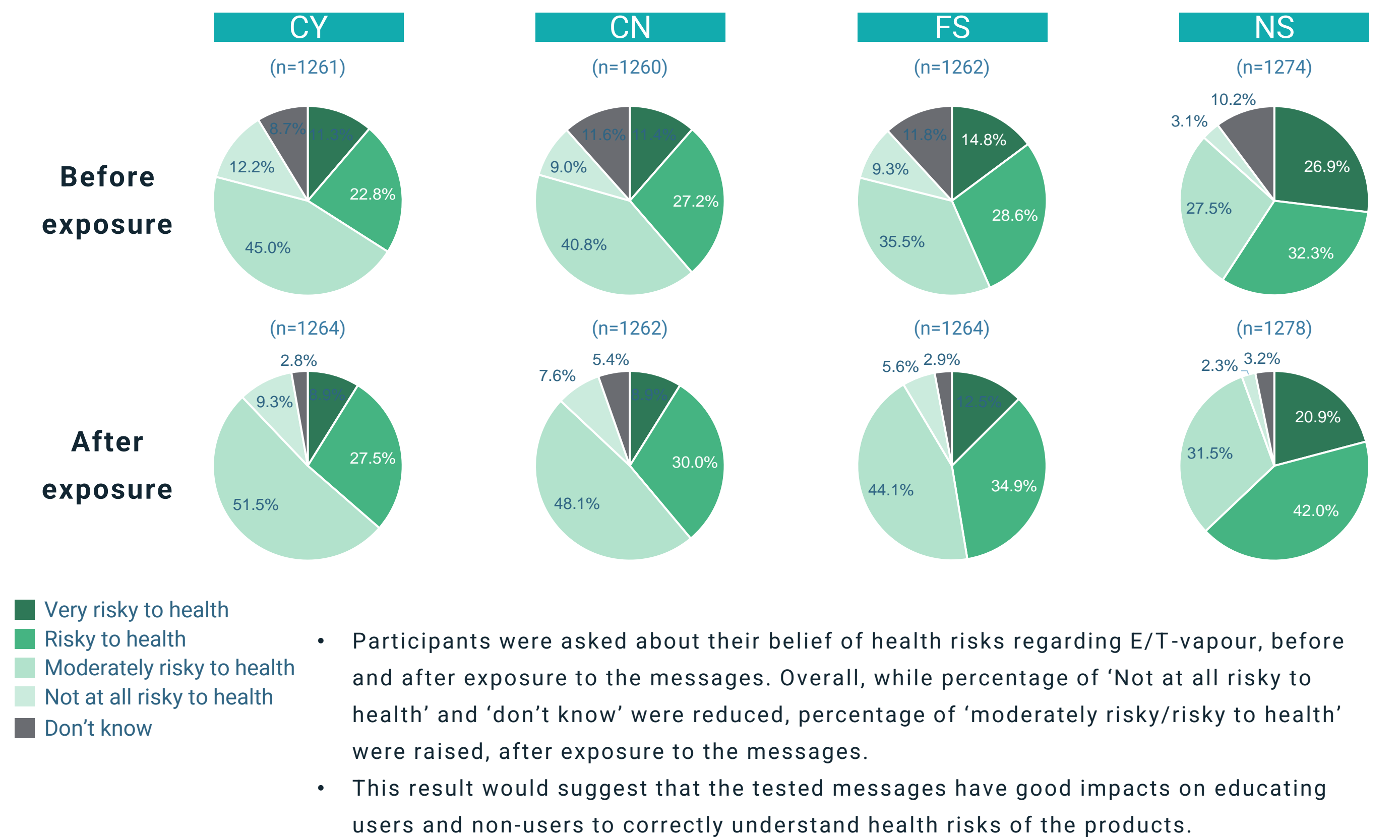


Figure 4 Understanding of the claims

Question: In your opinion, does this message address the risk of tobacco-related diseases, the risk of exposure to harmful chemicals, or the risk of harm?

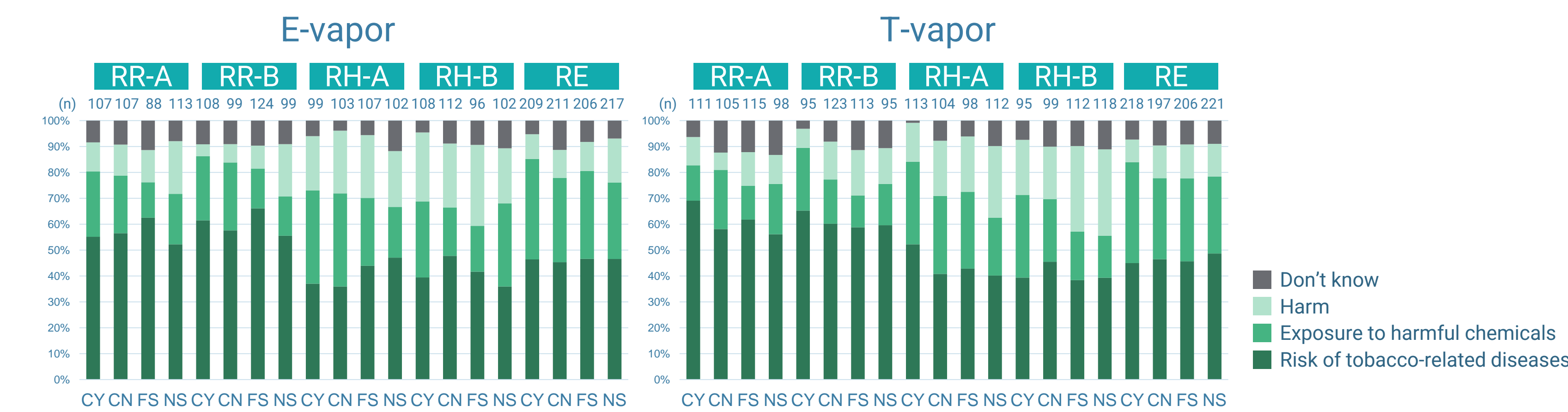
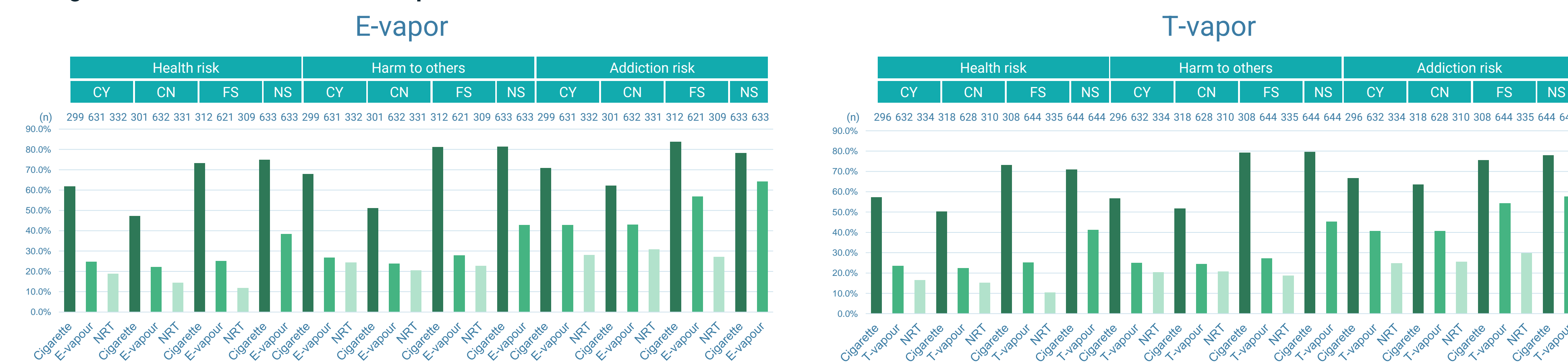


Figure 5 Perceived risks of the products



Participants rated their perception of risks to the products with scale including no risk, low risk, moderate risk, high risk, very high risk and don't know. The above figure shows average percentage of participants who showed their perception as high risk and very high risk, in association with health risk, harm to others and addiction risk questions. Due to the nature of the questionnaire, NS were not asked about their perception to NRT.

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 Reference: Chrea et al. The perceived risk instrument (PRI) to measure perceived risks associated with the use of nicotine and tobacco products. SRNT – 21st Annual Meeting, 25 – 28 February 2015.

