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Communicating tobacco product harm: Compared to what?

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Abstract

With the expansion of tobacco product options, a better understanding is needed of how information about the known and unknown risks of products is communicated to the public. Engaging in comparative processes is an common way for people to understand novel products, but the referent of comparison matters and can influence perceptions and behavior. This paper builds awareness of research from other disciplines, including decision science, marketing, and psychology, which can help inform research and tobacco control efforts.

Keywords

Communication; Comparison; Product harm; Harm reduction

The proliferation of types and varieties of tobacco products has enlivened the debate about tobacco harm reduction (Parascandola, 2011). Harm reduction advocates maintain that some alternative tobacco products, such as non-combustible products (e.g., chew, dissolvables, snus, and e-cigarettes), may reduce health risks and serve as pathways to cessation (see: Campaign for Tobacco Free Kids, 2010; Zeller, Hatsukami, & Strategic Dialogue on Tobacco Harm Reduction Group, 2008). Harm reduction critics, however, argue that alternative products—particularly novel products (e.g., e-cigarettes) whose actual health consequences will not be known for some time—may carry a risk of nicotine addiction for those who do not already smoke cigarettes and promote continuation of addiction in those who do (Olalekan & Burns, 2012; Tomar, Alpert, & Connolly, 2010). Only research will address this debate and the implications for tobacco policy. Preferences for tobacco products may change over time as novel products are introduced to the market and may be based on factors different than those for cigarettes (Simonson, 2008; Wood, Witt, & Tam, 2008). In

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Conflict of interest

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this constantly changing environment, tobacco control may consider how nicotine options are described and how the tobacco harm continuum is communicated to tobacco users and prospective tobacco users.

Harm can be conceptualized in terms of the design and composition of products as well as their patterns of use. Typically, both advertisements and public health communications explicitly or implicitly suggest there is a single harm reduction continuum corresponding to overall morbidity or mortality rather than specific illness end points. It often is unstated that these specific risks vary by product: cigarette smoking may pose higher lung cancer risk but lower oral cancer risk relative to smokeless tobacco. Ultimately, it is how people perceive the risks and benefits of these products that will contribute to their adoption (Choi & Forster, 2011; Overland, Hetland, & Aaro, 2008).

Cigarettes are currently the default comparison. But, what if we were to change the referent category? Reframing the comparison to the *least* harmful referent—no tobacco products— should lead to judgments of greater harm associated with use of any tobacco product and also should be less misleading. If all products are compared to the "no tobacco" product default referent, all products will be perceived as "harmful": they cause *more* harm, *more* addiction, and *more* negative health consequences. With cigarettes as the referent, the public may believe that the health consequences of tobacco use can be managed through switching (or substitution) behavior.

Research in decision science, marketing, and psychology demonstrates that people often make choices based on how a product is presented relative to other products. Comparative thinking is prompted when habitual judgments are challenged and/or new yet-to-be experienced products are introduced (Simonson, 2008). Comparative judgments depend importantly on what serves as the referent category and along what evaluative dimension (Klein & Oglethorpe, 1987; Markman & Loewenstein, 2010; Strack & Mussweiler, 1997). Changing the referent of comparisons can inflate or deflate perceived differences and merely comparing a product against alternatives can increase (or decrease) its attractiveness (Dhar & Simonson, 1992; Kruger & Vargas, 2008).

Advertisements often invoke comparisons to reinforce the differences among products or to describe a novel product relative to a familiar default (Gregan-Paxton & John, 1997; Snyder, 1992). Cigarettes may be presented as the referent because they are the most prevalent form of tobacco, there is overwhelming evidence about their negative health consequences, and these consequences are well known. Cigarettes may also be the standard referent with which to judge alternative tobacco products in an effort to reinforce harm reduction perceptions (British American Tobacco, 2014; Reynolds & Reduction, 2014). This can be a problem because of the distinction bias—the tendency to view two options as more unique when evaluating them simultaneously than when evaluating them separately (Hsee & Zhang, 2004; Popova & Ling, 2013). In this case, alternative products may be viewed more positively relative to cigarettes than when judged alone. Indeed, anything less harmful than cigarettes will become the favored alternative when cigarettes define the high end of the harm continuum. Comparing two options side-by-side (rather than in isolation) makes even small differences salient (Hsee & Zhang, 2004).

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Judging the harm associated with novel tobacco products in the absence of documented evidence is problematic. Instead, potential consumers are forming harm judgments based on available and often inadequate or misleading information (e.g., news, marketing). When evaluating options, especially under uncertainty, people may compare to available reference information (Hsee & Leclerc, 1998). Information about alternative tobacco products may highlight the similarities (e.g., physical) and/or differences (e.g., safer) with cigarettes (Huber, Payne, & Puto, 1982; Tversky, 1977). Some research has shown that people use prior knowledge about the known risks of a product to judge the unknown risks of other products with similar properties (Visschers, Meertens, Passchier, et al., 2007).^a The "known risk" of cigarettes may be perceived as greater than the potential (unknown) risk associated with a novel product. Some studies have shown that the marketing and communication of alternative products as less harmful than cigarettes may be leading to initiation among current tobacco users and non-users (Adkinson, O'Connor, Bansal-Travers, et al., 2013; Corey, Wang, Johnson, et al., 2013; Regan, Promoff, Dube, et al., 2013).

In this era of increasing tobacco product options and variety, it is essential that researchers and practitioners be mindful of the way information about the known and unknown risks of products is communicated to the public as they form impressions and preferences about these products. It may be that comparisons across products (or within product categories) should be minimized. If comparisons must be made, we need to better understand what comparisons will influence behavior for the benefit of individual and public health. Research paradigms from other fields, such as judgment and decision making, indicate that preferences change depending on how products are arrayed and compared. With this in mind, it is clear that researchers, marketers, and clinicians must be thoughtful when making comparative product references in media channels, treatment settings, and interventions. Considerable evidence indicates that the use of any tobacco product is more harmful to health than using no tobacco product. The referent of comparison is important, but also the consideration of the salient evaluative dimension when making a judgment (e.g., overall health, lung cancer, heart disease). The introduction of novel products represents an opportunity when behaviors are potentially disrupted and preferences may be reconsidered. The tobacco control community might consider the potential unintended consequences of comparisons and communications about the harms of tobacco and how judgment and decision-making science can be leveraged to maximize public health.

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^aThis may be a motive for renaming or reframing novel products, such as electronic cigarettes, excluding the term "cigarette" (e.g., vapepens). The use of the term "cigarette" may lead individuals to associate the harms of cigarettes with that of novel products.

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HIGHLIGHTS

- Cigarettes are currently used as the default comparison for other tobacco products.
- People often make decisions based on how product choices are arrayed.
- Potential harm of products may be conveyed best by comparisons with "no tobacco."