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Proposed Model for Categorizing Consumer Digital Behavior Responses towards Health and Nutrition Information Over a Continuum of Technology

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The Diet UX Research Study

Introduction

Millennials and Generation-Z mobile users encounter and interact with digital health and nutrition artifacts daily. This model conceptualizes digital behavior response towards health and nutrition information into four categories across a technology-mediated continuum centered around user experiences while accounting for age, geographical area, wellbeing status, and technology adoption propensity indices. Individual and population digital behavior responses can be differentiated by their directions and intensities to move from "resistant" to "thinker" categories, and from "impulsive" to "verifier" categories across a technology-mediated continuum.

Methodology

The model is based on findings from a recent randomized controlled trial that shows how augmented reality (AR), an emerging technology, has the potential to trigger users to move from "resistant" to "thinker" categories, and from "impulsive" to "verifier" categories. The application of the model supports designing interventions for healthy digital behavior response towards health and nutrition information through effective segmentation and targeting of individuals and populations based on their digital behavior response.

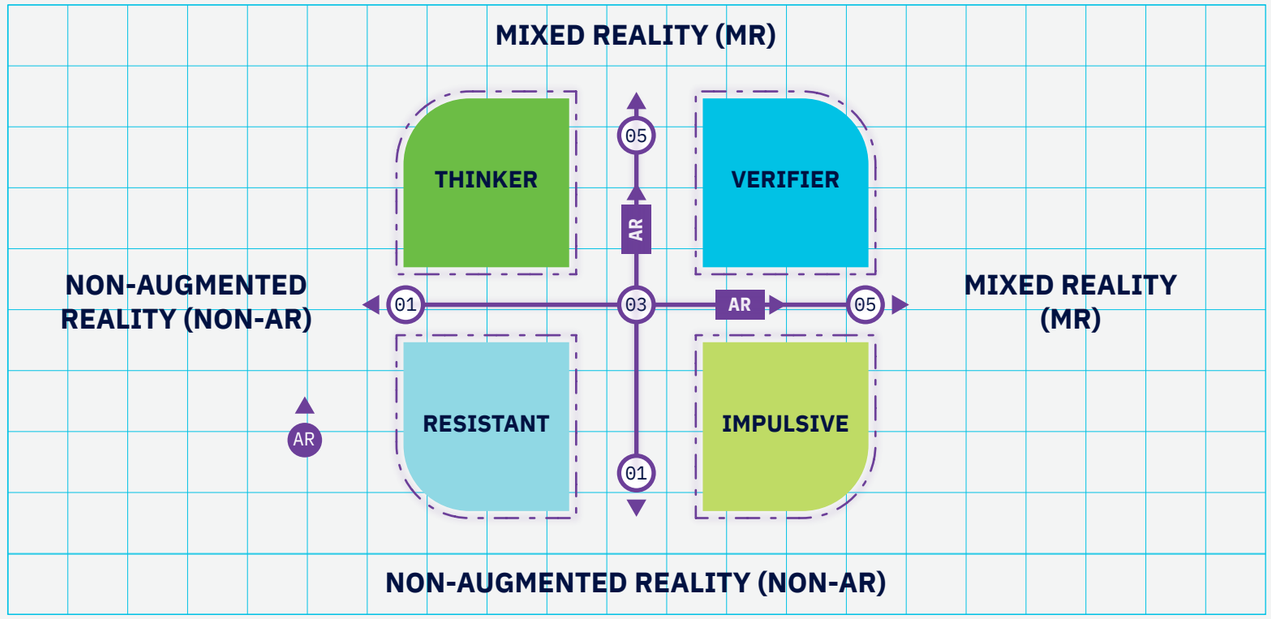
What is Digital Behavior Response (DBR)

Digital behavior response is the average score of the one-item five stages of behavior change theory model and the 9-item perceived persuasiveness scale, with and without augmented reality.

$$\text{Digital Behavior Response} = \frac{[\text{TTM Score} + (\text{Average of PPS Score})]}{2}$$

Corresponding Digital Behavior Response Measure	Code
Low	1
Low to Moderate	2
Moderate	3
Moderate to High	4
High	5

Proposed Conceptual Model Categorizing Digital Behavior Response to Digital Nutrition Information over the continuum of technology



Future Practice Implications

AR has a greater likelihood to achieve equity by including participation of men, women, girls, and boys, people of different ages, with and without disabilities, and people of color.	SOCIETAL
AR has the potential to support communities in segmenting and targeting community members based on the proposed model of digital behavior response.	COMMUNITY
AR-mediated Smartphones can potentially promote peer to peer and inter-generational support, and can support parents and educators regarding how to target effective social and behavior change in millennials and Gen Z.	RELATIONSHIP
AR-mediated messages are effective in disseminating and engaging individuals with correct messages in support of health promotive lifestyles. AR allows listening, engagement and verification (triangulation of sources).	INDIVIDUAL