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Using Pathfinder Networks to Discover Alignment between Expert and Consumer Conceptual Knowledge from Online Vaccine Content

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Abstract

This study demonstrates the use of distributed vector representations and Pathfinder Network Scaling (PFNETS) to represent online vaccine content created by health experts and by laypeople. By analyzing a target audience's conceptualization of a topic, domain experts can develop targeted interventions to improve the basic health knowledge of consumers. The underlying assumption is that the content created by different groups reflects the mental organization of their knowledge. Applying automated text analysis to this content may elucidate differences between the knowledge structures of laypeople (health consumers) and professionals (health experts). This paper utilizes vaccine information generated by laypeople and health experts to investigate the utility of this approach. We used an established technique from cognitive psychology, Pathfinder Network

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