

Enhancing behavioral health promotion through tailored comic books: *When Nicotine Attacks-Fight the Crave*

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Disclosures

The speakers have no conflicts of interest to disclose

Learning Outcomes

Upon completion, participants will be able to:

1. Describe knowledge translation products for people with mental illnesses
2. Discuss the appeal and impact of comic books as health education products

Risk Communications¹



- Tobacco treatment engagement remains a challenge for people living with mental illnesses.²

- Gaps exist in tobacco use health risk communication among people living with mental illnesses.³

- Visual formats of conveying health risks (e.g., comic books) can reach a wide audience and communicate scientific information on public mental health issues.¹

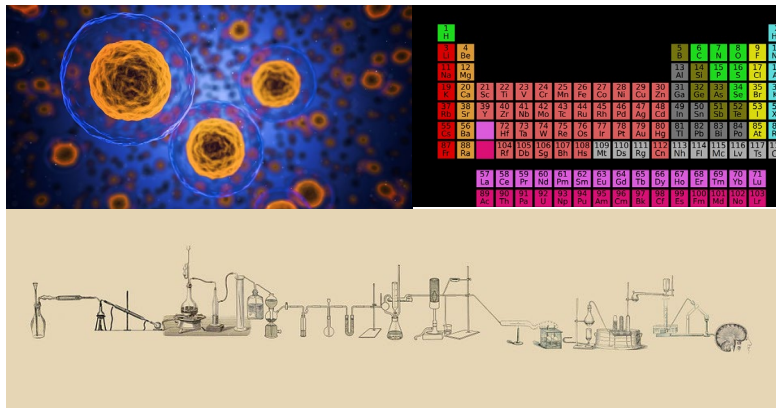
- Few comic books appropriately address health risk behaviors tailored to people living with mental illnesses.⁴

- Comic books may be a means of disseminating evidence-based tobacco treatment information for people living with mental illnesses.⁵

1. Lipkus IM. (2007). Numeric, verbal, and visual formats of conveying health risks: suggested best practices and future recommendations. *Med Decis Making.*, 27(5):696-713. doi: 10.1177/0272989X07307271.
2. Prochaska JJ, Das S, Young-Wolff KC. (2017). Smoking, Mental Illness, and Public Health. *Annu Rev Public Health.* 38:165-185. doi: 10.1146/annurev-publhealth-031816-044618..
3. Higgins, S. T., Kurti, A. N., Palmer, M., Tidey, J. W., Cepeda-Benito, A., Cooper, M. R., ... & Stanton, C. A. (2019). A review of tobacco regulatory science research on vulnerable populations. *Preventive medicine*, 128, 105709.
4. Stoddart, M. C. (2006). "They say it'll kill me... but they won't say when!" Drug Narratives in Comic Books. *Journal of Criminal Justice and Popular Culture*, 13(2), 66-95.
5. Ashwal, G., & Thomas, A. (2018). Are comic books appropriate health education formats to offer adult patients?. *AMA journal of ethics*, 20(2), 134-140.

Knowledge Translation

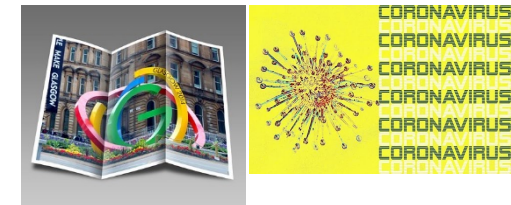
Process whereby scientific or research discoveries are ‘translated’ into applications that can be used in various practice settings



Science



Applications

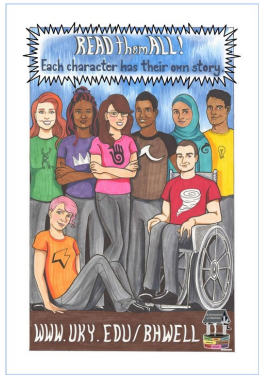
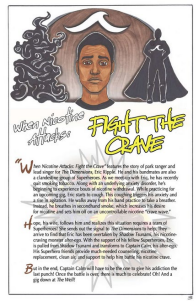
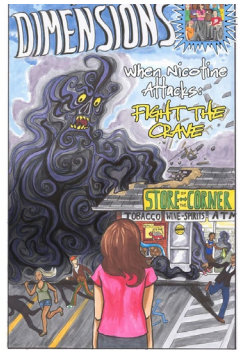


Health information



Robotics

“The Dimensions” Comic Series



Align with SAMHSA endorsed eight dimensions of wellness: emotional, spiritual, intellectual, physical, environment, financial, occupational, and social.

“When Nicotine Attacks: Fight the Crave”:

- Highlights tobacco use and its related burden among people living with mental illnesses
- Main character living with anxiety, tobacco use and nicotine dependence is supported by league of superheroes.

Aims

1. Describe the reach (i.e., distribution) of the knowledge translation product
2. Present evaluation findings from a convenience sample of web-participants

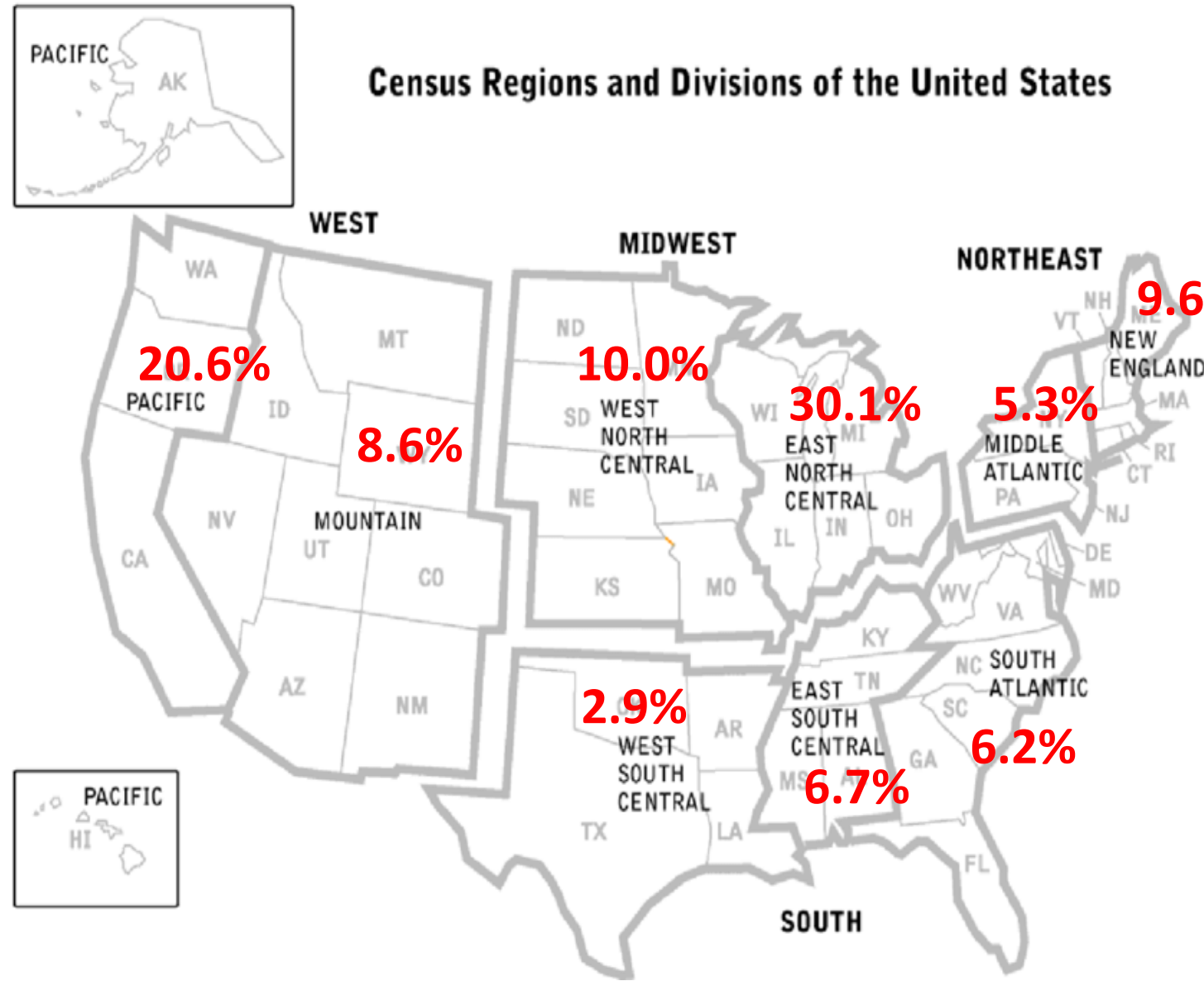
Sample & Design

Design: Cross-sectional analysis of internet survey

Dissemination: 1000 hard paper copies disseminated to 14 Community Mental Health Centers and 2 Mental Healthcare Organizations (June 2021)

Online evaluation: July 7th -Sept 30th, 2021 (n=209*).

Convenience sample: Participants provided incentive of entry into drawing for one of 6 \$20 e-gift card



- **Measures**

- Demographics
- 9-item rating scale of components of comic book**
- 1-item recommendation of comic book
- 1-item Star Rating of comic book

- **Data Analyses:**

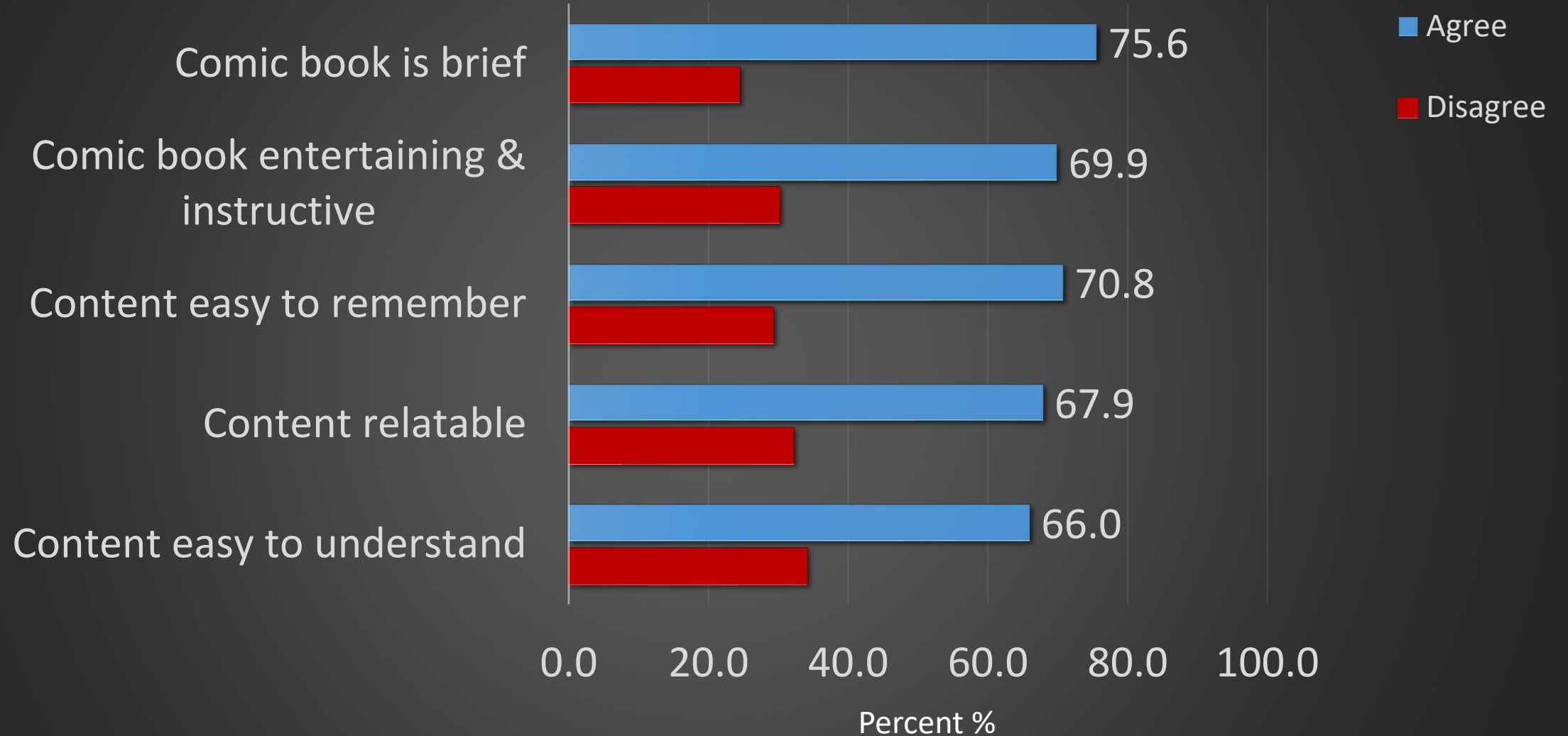
- Logistic regression analyses to assess associations between demographics and key outcome measures

**Questions adapted from the Mobile Application Rating Scale (MARS): Stoyanov, S. R., Hides, L., Kavanagh, D. J., Zelenko, O., Tjondronegoro, D., & Mani, M. (2015). Mobile app rating scale: a new tool for assessing the quality of health mobile apps. *JMIR mHealth and uHealth*, 3(1), e27. <https://doi.org/10.2196/mhealth.3422>

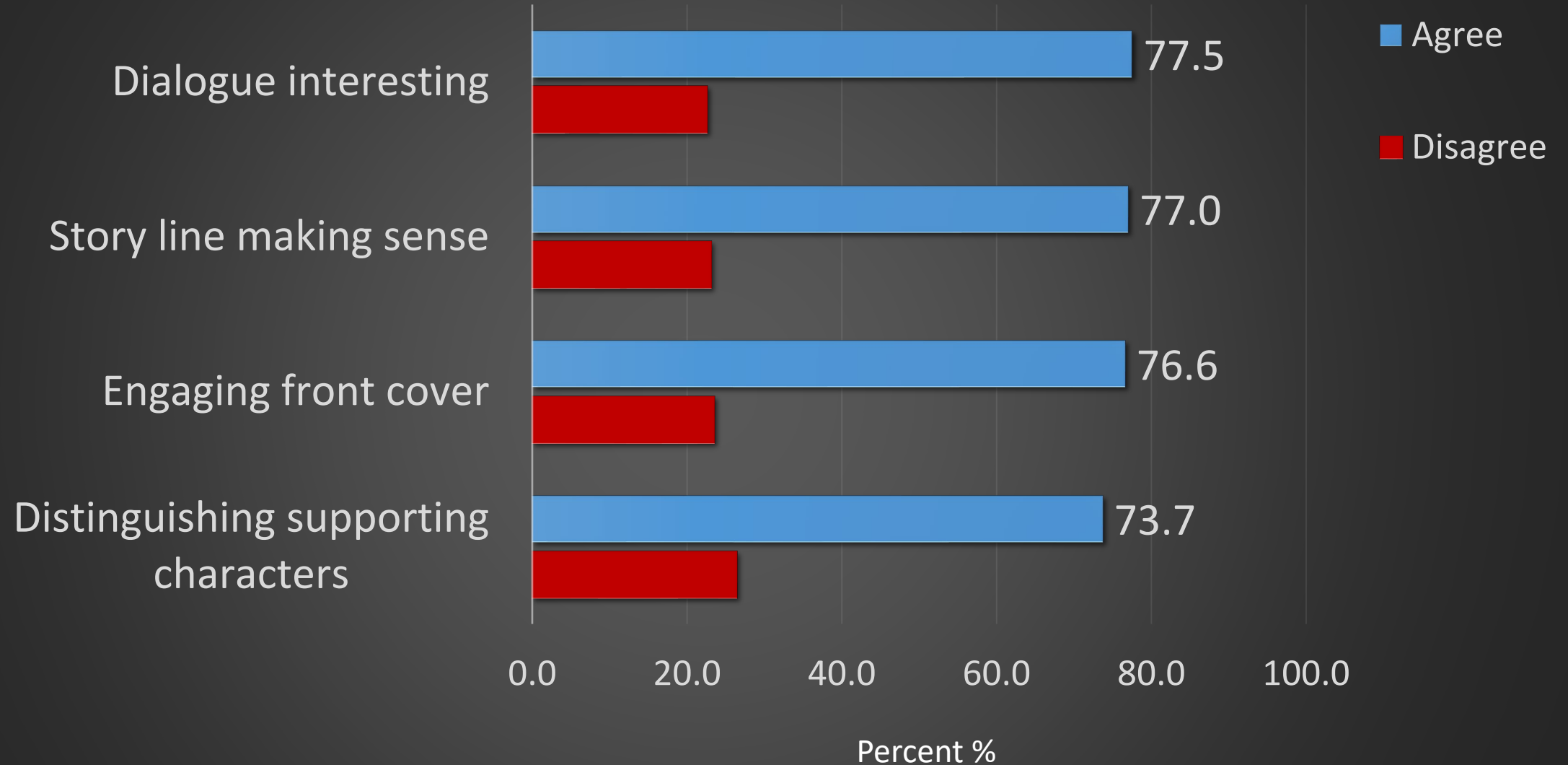
- **Sample characteristics**

	%
Viewed online version (yes)	72.2%
Gender (male)	62.7%
Ethnicity (White Non-Hispanic)	60.3%
Education (High school graduate or higher)	76.1%
Have Mental health condition (Yes)	50.7%

Perceived Agreement on General Elements of Comic Book

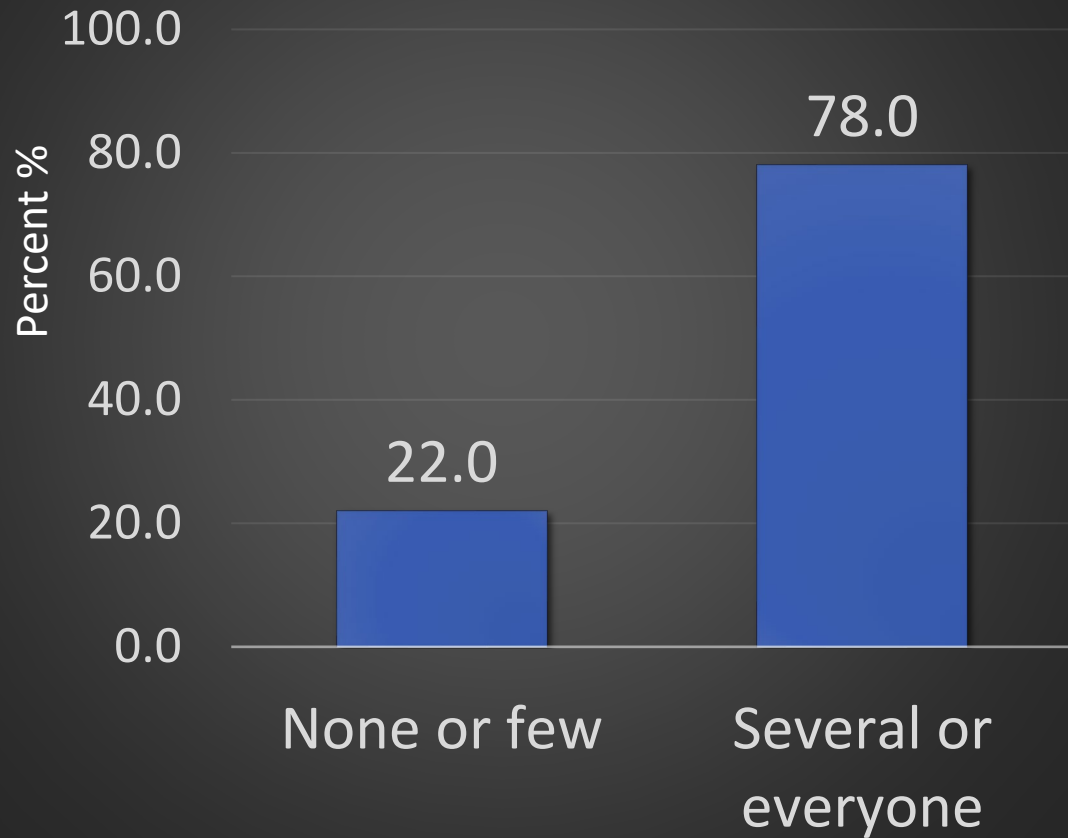


Perceived Agreement on Specific Elements of Comic Book

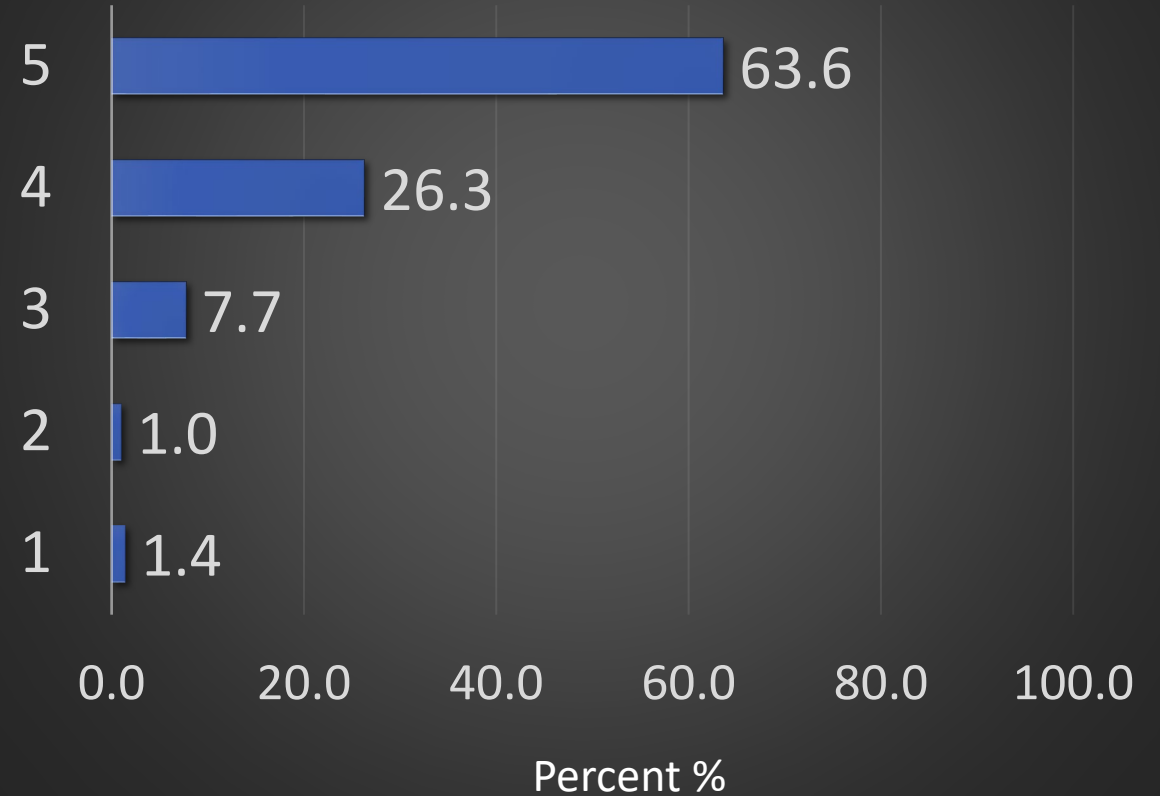


Recommendations and Star Rating

Would you recommend the comic book?



What star rating would you give the comic book?



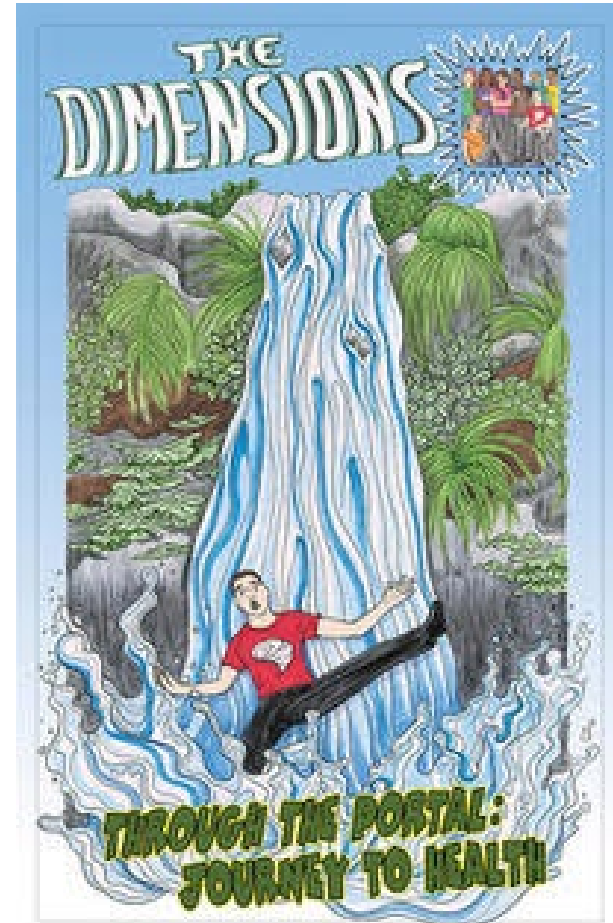
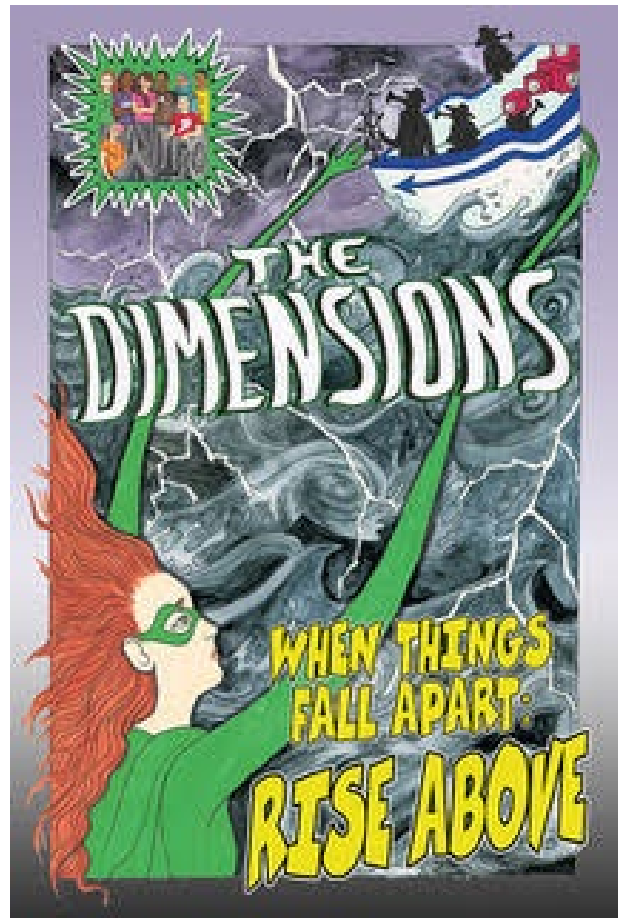
Logistic Regression Analysis of Demographic Associations with Main Outcomes

	Understand	Remember	Relatable	Brief	Dialogue	Recommend
	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)
Age						
25-35 (18-25 ref)		.6 (.3-1.4)				
36 > (18-25 ref)		.2* (.1-.7)				
Gender						
Male (Female ref)	2.5**(1.3-4.8)			.4* (.2-.9)		
Education						
HS> (< HS ref)		2.8**(1.4-5.7)			2.6* (1.3-5.5)	7.5** (3.5-16.3)
Ethnicity						
Non-White (White ref)		2.2*(1.1-4.5)				
Mental Health Condition						
Yes (No ref)	.4*(.2-.8)		.4* (.2-.8)	.4* (.2-.9)	.4* (.1-.8)	.4* (.1-.8)
Tobacco user						
Yes (No ref)			.3* (.1-.8)			

Note: OR= Odds Ratio, 95%CI= 95% Confidence Interval; HS=High School*p<.05; **p<.01

Summary Findings & Implications

- Comic books may be a generally accepted knowledge translation tool for conveying tobacco treatment information
- Demographic differences in main outcomes suggest that personalized approaches should be considered when designing such knowledge translation products
- Future studies are needed for:
 - Qualitative evaluation of comic books with different groups with mental health conditions
 - Quantitative assessment of knowledge of content before and after reading the coming books.
- Psychiatric-mental health nurses should be aware of and involved in developing resources to enhance treatment engagement for those living with mental illnesses



Other editions

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