BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Niu, Zhaomeng

eRA COMMONS USER NAME (credential, e.g., agency login): ZHAOMENGN

POSITION TITLE: Assistant Professor

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing,

include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

| INSTITUTION AND LOCATION | DEGREE | END | FIELD OF STUDY |
|---|--------------|---------|---|
| | (if | DATE | |
| | applicable) | MM/YYYY | |
| Tianjin Normal University, Tianjin | BA | 06/2011 | Broadcasting and Television Journalism |
| City University of Hong Kong, Hong Kong | MA | 07/2012 | Communication and New Media |
| Washington State University, Pullman, WA | PHD | | Mass Communication (Health Communication) |
| Rutgers Cancer Institute of New Jersey, New Brunswick, NJ | Postdoctoral | 01/2023 | Cancer Prevention and Control |

A. Personal Statement

My research lies at the intersection of media psychology and behavioral science, particularly in the context of eHealth and mHealth interventions. I am committed to exploring the psychological mechanisms behind emerging media and designing effective and persuasive health messages utilizing new media platforms. More broadly, my work focuses on the use of emerging media technologies to design and deliver accurate and persuasive health information that will promote behavior change in the general public or a targeted population. At the societal level, my aim is to achieve social change among different communities. I have experience in designing in-person and online factorial experiments, pilot testing text messages in mobile interventions, and conducting mobile interventions with multimedia messaging services.

My background in health communication message design and experience and training in cancer prevention and control are well suited for leading the proposed intervention project. My doctoral dissertation focused on examining how different types of interactivity on webpages influenced college students' engagement in sun protection behaviors. Since starting at Rutgers Cancer Institute of New Jersey, I worked with Dr. Jerod Stapleton on his R01 grant (CA218068) from October, 2017 to October, 2019. Some of the R01 grant-related research activities included developing survey instruments, helping with qualitative and quantitative data collection, developing Facebook posts for the intervention group, performing preliminary data analysis, and searching and reviewing relevant literature. I also worked with Dr. Elliot Coups to develop an online program for skin cancer patients called "MySmartCheck". This program helped skin cancer patients learn how to comprehensively check their skin for suspicious moles and identify potential melanoma. We also worked on a project entitled "Skin Cancer Prevention, Risk, and Surveillance Behaviors among Puerto Rican Adults" funded by Rutgers Cancer Institute, and I led data analysis and wrote research manuscripts on examining skin cancerrelated risk and behaviors among Puerto Rican adults. Since the end of 2019, I started working with Dr. Carolyn Heckman and contributed to some research activities of her R01 grant (R01CA244370) and other grant-related activities. I also received two competitive research grants (as PI) from the New Jersey Commission on Cancer Research. The first one is is a Post-Doctoral Cancer Research Fellowship Awards, Identifying Optimal Educational Methods to Teach Early Detection Skills for Melanoma during Skin Selfexamination, allowed me to gain mentored training and knowledge in key areas related to this proposal including intervention development and implementation, the refinement of intervention content, and longitudinal data collection. The second one is a pilot grant using a mixed method (including both qualitative and quantitative methods) design to identify potential factors and correlates associated with skin cancer prevention practice among Hispanics. This pilot grant can enhance my understanding and experience on skin cancerrelated issues among Hispanics and provide significant preliminary data for the proposed K99 grant. I have

carefully selected a research team made of mentors and collaborators who have been instrumental in my work and provide complimentary expertise in critical aspects of the proposed project.

- Niu, Z., & Heckman, C. J. (2023). Digital Educational Strategies to Teach Skin Self-examination to Individuals at Risk for Skin Cancer. *Journal of Health Communication*, 1-11. DOI: 10.1080/10810730.2022.2157910
- 2. **Niu, Z.**, Riley, M., Stapleton, J. L., Ochsner, M., Hernandez, G., Kimmel, L., Giovenco, D.P., Hudson, S.V., O'malley, D., Lozada, C. and Pabellón, M.C., Heckman, C.J., & Coups, E. J. (2022). Sunburns and Sun Protection Behaviors among Male Hispanic Outdoor Day Laborers. *International journal of environmental research and public health*, 19(5), 2524. DOI: 10.3390/ijerph19052524
- 3. **Niu, Z.,** Willoughby, J. F., Coups, E. J., & Stapleton, J. L. (2021). Effects of Website Interactivity on Skin Cancer–Related Intentions and User Experience: Factorial Randomized Experiment. *Journal of medical Internet research*, *23*(1), e18299. PMID: 33439131 PMCID: PMC7840277 DOI: 10.2196/18299
- 4. **Niu, Z.**, Jeong, D. C., Coups, E. J., & Stapleton, J. L. (2019). An experimental investigation of human presence and mobile technologies on college students' sun protection intentions: Between-subjects study. *JMIR mHealth and uHealth*, 7(8), e13720. PMID: 31452523 PMCID: PMC6732976 DOI: 10.2196/13720

Research projects I would like to highlight include:

Ongoing

COCR22PPR007

Niu (PI)

07/01/2021-06/30/2023

Understanding sun protection and skin examination practices among Hispanics

K99MD016435-01A1

Niu (PI)

04/15/2022-01/31/2024

Developing and testing a mobile health intervention to promote sun protection behaviors and skin examination among Hispanics

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

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|--------------------|---|
| 2013-2017 | Graduate Teaching Assistant, the Edward R. Murrow College of Communication, Washington State University |
| 2017 | Instructor of Record, the Edward R. Murrow College of Communication, Washington State University |
| 2017 2023 | Postdoctoral Associate, Population Science, Rutgers Cancer Institute of New Jersey Assistant Professor, Department of Health Informatics, Rutgers School of Health Professions |
| HONORS 2017 | Top Student Award from Association for Chinese Communication Studies Division, National |

| HONORS | |
|---------------|---|
| 2017 | Top Student Award from Association for Chinese Communication Studies Division, National |
| | Communication Association, |
| 2017 | Top Student Paper Award (3rd place) from Communicating Science, Health, Environment |
| | and Risk Division, Association for Education in Journalism and Mass Communication |
| 2016 | Top-four Graduate Student Interest Group Paper from Association for Education in |
| | Journalism and Mass Communication |
| 2010-2011 | Tianjin Normal University Third- level Scholarship |
| 2009-2010 | Tianjin Normal University First- level Scholarship (Top 2%) |
| 2008-2009 | Tianiin Normal University First- level Scholarship (Top 2%) |

2007-2008 Tianjin Normal University Second-level Scholarship, Second-level Stipend

C. Contribution to Science

- 1. I have experience conducting research on skin cancer and sun safety, including my dissertation. I have several other papers under review and in preparation.
 - a. **Niu, Z.,** Tortolero-Luna, G., Lozada, C., Heckman, C. J., & Coups, E. J. (2021). Correlates of Sun Protection Behaviors Among Adults in Puerto Rico. *International Journal of Behavioral Medicine*, 1-10. PMID: 33928477 DOI: 10.1007/s12529-021-09991-z
 - b. **Niu, Z.**, Willoughby, J. F., Coups, E. J., & Stapleton, J. L. (2021). Effects of Website Interactivity on Skin Cancer–Related Intentions and User Experience: Factorial Randomized Experiment. *Journal of medical Internet research*, 23(1), e18299. PMID: 33439131 PMCID: PMC7840277 DOI: 10.2196/18299
 - c. **Niu, Z.**, Jeong, D. C., Coups, E. J., & Stapleton, J. L. (2019). An experimental investigation of human presence and mobile technologies on college students' sun protection intentions: Between-subjects study. *JMIR mHealth and uHealth*, 7(8), e13720. PMID: 31452523 PMCID: PMC6732976 DOI: 10.2196/13720
 - d. Niu, Z., Parmar, V., Xu, B., Coups, E. J., & Stapleton, J. L. (2018). Prevalence and correlates of intentional outdoor and indoor tanning among adolescents in the United States: Findings from the FLASHE survey. *Preventive medicine reports*, 11, 187-190. PMID: 29992085 PMCID: PMC6034571 DOI: 10.1016/i.pmedr.2018.06.014
- 2. Several of my previous studies examined cultural perspectives of different ethnic groups and the effects of acculturation on health behaviors. The results have shown that individuals with different cultural values such as collectivism and individualism have different health behaviors.
 - a. **Niu, Z.**, Riley, M., Stapleton, J. L., Ochsner, M., Hernandez, G., Kimmel, L., Giovenco, D.P., Hudson, S.V., O'malley, D., Lozada, C. and Pabellón, M.C., Heckman, C.J., & Coups, E. J. (2022). Sunburns and Sun Protection Behaviors among Male Hispanic Outdoor Day Laborers. *International journal of environmental research and public health*, 19(5), 2524. DOI: 10.3390/ijerph19052524
 - b. **Niu, Z.,** Tortolero-Luna, G., Lozada, C., Heckman, C. J., & Coups, E. J. (2021). Correlates of Sun Protection Behaviors Among Adults in Puerto Rico. *International Journal of Behavioral Medicine*, 1-10. PMID: 33928477 DOI: 10.1007/s12529-021-09991-z
 - c. **Niu, Z.**, Willoughby, J. F., Mei, J., Li, S., & Hu, P. (2020). A Cross-Cultural Comparison of an Extended Planned Risk Information Seeking Model on Mental Health Among College Students: Cross-Sectional Study. *Journal of Medical Internet Research*, *22*(5), e15817. PMID: 32441654 PMCID: PMC7275260 DOI: 10.2196/15817
 - d. **Niu, Z.**, & Willoughby, J. F. (2018). Examining cultural identity and media use as predictors of intentions to seek mental health information among Chinese. *Asian Journal of Communication*, 28(4), 360-376. DOI: 10.1080/01292986.2018.1441319
- 3. I have research experience in conducting qualitative research studies including using focus groups, individual interviews, and photovoice methods among diverse populations.
 - a. Willoughby, J. F., Brickman, J., **Niu, Z.**, & Liu, S. (2017). Focus Groups and Experiments for Health Message Development: Creating a Text Message Program for College Women About Alcohol and Hook-Ups. SAGE Publications Ltd.
 - b. **Niu, Z.**, Liu, S., & Zhu, Y. (2017). The meaning of drinking and its relationship with health for Chinese: An investigation from a cultural perspective. Paper presentation at the annual conference of the National Communication Association, Association for Chinese Communication Studies Division, Dallas, TX. (**Top Student Paper Award**)
 - c. **Niu, Z.** & Peterson, J.C. (2016). Photographic storytelling: exploring the acculturation process and mental health of international students in the USA through photovoice. International Communication Association, Intercultural Communication Division; Fukuoka, Japan.
- 4. I also worked on text message intervention development, designing multimedia health messages for mobile interventions, pilot testing health messages in mHealth text-message interventions, and investigating social influences and effective media features on social media.

- a. **Niu, Z.**, & Heckman, C. J. (2023). Digital Educational Strategies to Teach Skin Self-examination to Individuals at Risk for Skin Cancer. *Journal of Health Communication*, 1-11. DOI: 10.1080/10810730.2022.2157910
- b. Niu, Z., Jeong, D. C., Brickman, J., Nam, Y., Liu, S., & Stapleton, J. L. (2020). A Picture Worth a Thousand Texts? Investigating the Influences of Visual Appeals in a Text Message-Based Health Intervention. *Journal of Health Communication*, 25(3), 204-213. PMID: 32096455 DOI: 10.1080/10810730.2020.1731631
- c. **Niu, Z.,** Jeong, D. C., & Willoughby, J. F. (2021). Friends over doctors? The influences of source and perceived customization on College drinking. *Health communication*, *36*(6), 671-681. PMID: 31920113 DOI: 10.1080/10410236.2020.1712034
- d. **Niu, Z.**, Hu, L., Jeong, D. C., Brickman, J., & Stapleton, J. L. (2020). An Experimental Investigation into Promoting Mental Health Service Use on Social Media: Effects of Source and Comments. International journal of environmental research and public health, 17(21), 7898.

Complete List of Published Work in My Bibliography:

https://www.ncbi.nlm.nih.gov/myncbi/16SBeVFCC7Tsh7/bibliography/public/