Online Social Norms as Predictors of Self-Efficacy and Physical Activity: The Role of Sharing about Physical Activity on Social Media

Maria M. Beitzel  •  Katherine Balfany  •  Kathleen S. Wilson
Department of Kinesiology, California State University, Fullerton

INTRODUCTION

• Social norms have been described as social rules that guide peoples actions (Goldstein & Cialdini, 2007; Rimal & Real, 2005)
  • Two types of norms:
    • Descriptive Norms – perception of what others are doing
    • Injunctive Norms – perceptions of what others approve or disapprove of
• Social norms have been associated with:
  • Physical activity (PA) behavior for both descriptive norms (Priebe & Spink, 2011) and injunctive norms (Wally & Cameron, 2017)
  • Self-efficacy for PA (Priebe & Spink, 2014; Lu et al., 2014)
• Based on the Theory of Normative Social Behavior, group identity is thought to be a predictor or moderator of the norm-behavior relationship (Rimal & Real, 2005)
  • Norms have a stronger influence when associated with a relevant group identity and when the norm relates to the group (Christensen et al., 2004)
• Social media (SM) sites are growing in popularity with 2.234 billion Facebook users, 1.5 billion YouTube users, 813 million Instagram users, 330 million Twitter users, and 255 million Snapchat users per month (statista.com)
• People share information about PA over these social media sites such as what PA they are doing as well as information to inspire others (Pinkerton et al., 2017)
  • This communication may be used to form norms about physical activity behavior
• Norms from in-person social networks have been associated with online behaviors (Baumgartner et al., 2011)
• Although there is some overlap, online social networks often involve different people than in-person social networks (Subrahmanym et al., 2008)
  • These online social networks may provide normative expectations for behaviors like PA that occur offline
• However, the effect of online social norms for an offline behavior such as PA have not yet been explored

Participants

• Participants consisted of a convenience sample of 113 undergraduate Kinesiology students
  • Age: 19-39 years (M = 22.1, SD = 3.0)
  • Gender: 62 males (54.9%) and 44 females (38.9%)
  • Ethnic breakdown: 36 Hispanic (31.9%), 30 Asian (26.5%), 27 Caucasian/White (23.9%), 6 Pacific Islander (5.3%), 6 Other ethnicities (5.3%)
  • Sharing Status: Sharers of PA on SM: n = 39, 34.5%; Non-Sharers of PA on SM: n = 66, 58.4%

Purpose

To examine the role of online social norms in predicting moderate to vigorous PA (MVPA), coping SE, and scheduling SE for those who share about PA on SNS and those who do not share

It is hypothesized that the relationship of norms with MVPA and self-efficacy will be greater for those who share on social network sites than those who do not based on a more relevant group identity

METHODS

• Kinesiology students completed a cross-sectional questionnaire in their introduction to statistics class
  • Procedure: Self-efficacy (6 items; Rodgers & Sullivan, 2001) – How confident are you that you can:
    • Coping SE: “Do physical activity when you don’t have time”
    • Scheduling SE: “Arrange your schedule to include regular physical activity”
      • 0% (Not confident at all) to 100% (Completely confident)
  • Godin Leisure Time Exercise Questionnaire (Godin & Shepard, 1985)
    • Frequency of strenuous and moderate physical activity
  • Social norms:
    • Descriptive Norms: “Members of my online social network regularly participate in physical activity”
    • Injunctive Norms: “Members of my online social network approve of me participating in physical activity”
      • Items were measured on a scale of: 1 (strongly disagree) to 7 (strongly agree)
  • Means and Standard Deviations (M±SD) for MVPA, coping and scheduling SE, descriptive and injunctive norms by sharing status

RESULTS - Continued

• The type of self-efficacy appeared to matter as the norm-sharing status interaction was seen for coping SE but not for scheduling SE
• Drawing on self-efficacy theory (Bandura, 1997), it might be that modeling of coping or dealing with challenges (e.g., when tired) is more visible online than scheduling
• Another possibility is that students viewed coping as more difficult than scheduling as indicated by the lower mean values for coping SE than scheduling SE
• This may have provided a greater opportunity for the influence of norms with coping SE than with scheduling SE
• Physical activity participation was not related to online social norms despite those who share reporting more activity than those who did not share
  • This might be related to the active sample of Kinesiology students who participated in this study which may have limited the variability of physical activity levels

DISCUSSION

• The relationship between coping SE and both descriptive and injunctive norms was stronger for those who shared about PA on SM than those who did not share
  • This aligns with our hypothesis as well as previous research looking at the role of group identity and relevance of the norms (Christensen et al., 2004; Rimal & Real, 2005)
  • Those who are sharing on SM might have a natural similarity and want to emulate people they interact with on SM; whereas non-sharers might not have that same group identity
  • Supports other research that shows relationship between social norms and self-efficacy (Priebe & Spink, 2011)

• Cross-sectional design limits interpretation of directionality of the relationships observed

Limitations

• The sample was a convenience sample of Kinesiology students; thus, limiting generalizability to other populations (e.g., less active groups)
• The small sample size did not provide enough power to add more variables into the regression model and as such separate models were performed for descriptive and injunctive norms

Future Directions

• Continue to explore the relationship between online and in-person social norms and how they relate to physical activity behavior
• Explore ways to mobilize our existing online social networks to promote physical activity