

Introduction

- Social media use is increasing with 890 million daily users of Facebook alone (2014 Facebook's 4th quarter earnings)
 - Over social media, college students spend an average of 27 minutes a day communicating with friends, sharing information and events, for entertainment, and to pass time (Pempek et al., 2009)
- While the benefits of social relationships for well-being have been established (Cohen, 2004), less is known about social relationships via social media
 - Exchanges have been associated with improved social capital and well-being (Ellison, Steinfield, & Lampe, 2007)
- Social media has been used as a tool in health promotion interventions (Cavello et al., 2014; Hamm et al., 2014)
 - Research has yet to explore how exchanges on social media are related to a specific behavior such as physical activity (PA)

The purpose of this study was to explore social interactions over social media in regards to PA

Methods

Participants:

- $N = 244$; Mean Age = 24.5 years ($SD = 24.5$ years)
- Female ($n=118$, 48.4%); Male ($n=108$, 44.3%); Not reported ($n=18$, 7.4%)
- Ethnicity: Caucasian ($n=105$, 43%), Latino/Hispanic ($n=56$, 23%), Asian/Pacific Islander ($n=33$, 13.5%), Multiracial ($n=20$, 8.2%)

Procedures:

- Participants were recruited in person or through class announcements
- Completed an in person or online survey that took ≈ 10 min

Survey:

- Series of open ended questions (OE) and closed ended questions that were either a Yes/No or list of social media types
- **General social media use:** Use of social media (Yes/No), type of social media (list), minutes per day (OE) and times per day checked (OE)
- **Sharing PA over social media:** Use of social media to post about PA on social media (Yes/No), commonly used networks (list), information posted (OE) and reasons for sharing (OE)
- **Reactions to PA specific posts:** Response by others to the participants' posts (OE) and how participant reacts to other's PA posts (OE)
- **Physical Activity:** Godin Leisure Time Exercise Questionnaire (Godin & Shepard, 1985)

Analysis:

- Thematic analysis of open ended questions about reasons for posting, not posting, and responses to posts
- Independent t-tests: Compare PA levels of those who share and do not share PA

“Show what I do/what I love to do. Show people that I am active and love being outdoors”

“Because I am proud of what I accomplish”

“Because of the compliments/ feedback [I] receive motivate me daily”

“I value my privacy and I would rather not let the whole world what my daily schedule is like.”

“Not important to share my physical activities with others “

“I'm not too active at the moment”

“Never really thought about sharing PA.”

“Always positively with questions and encouragement”

“Likes. Ohh, those sweet sweet likes.”

“I encourage them, congratulate them, and like their comment”

“I ask where they performed that activity”

Reasons for Sharing about PA over Social Media

Theme	Frequency
	n (%)
Keep people in the loop/informed	51 (36.4%)
Inspire others	19 (14.4%)
Gain recognition/Boost ego	17 (12.9%)
Invite others to join in an activity	17 (12.1%)
Be motivated themselves	13 (9.3%)
Get tips and task feedback	4 (3%)

“I am passionate about it and like to inspire others. Maybe change their perspective on exercise”

“Social media allows easier organization and communication to get enough bodies out there to play a larger scale game.”

“You get to share your progress with the fitness [communities] along these social media networks. By doing so, you can get advice from others”

Reasons for Not Sharing PA on Social Media

Theme	Frequency
	n (%)
Privacy	33 (35.5%)
Not Interested/Unnecessary	29 (31.2%)
Lack of Confidence and Support	16 (17.2%)
Lack of Posting	14 (15.1%)
Not Currently Active	8 (8.6%)
Annoying/Don't Want to Annoy	8 (8.6%)
Other	11 (11.8%)

“I feel like showing off about how much physical activity is a form of insecurity. So I don't do it to avoid a double standard”


“I do not share much on social media. I read it but rarely post things myself”

“I find it irritating when people post their gym activities daily so I don't reproduce that behavior”

“Sorry I missed it, next time I will go.”

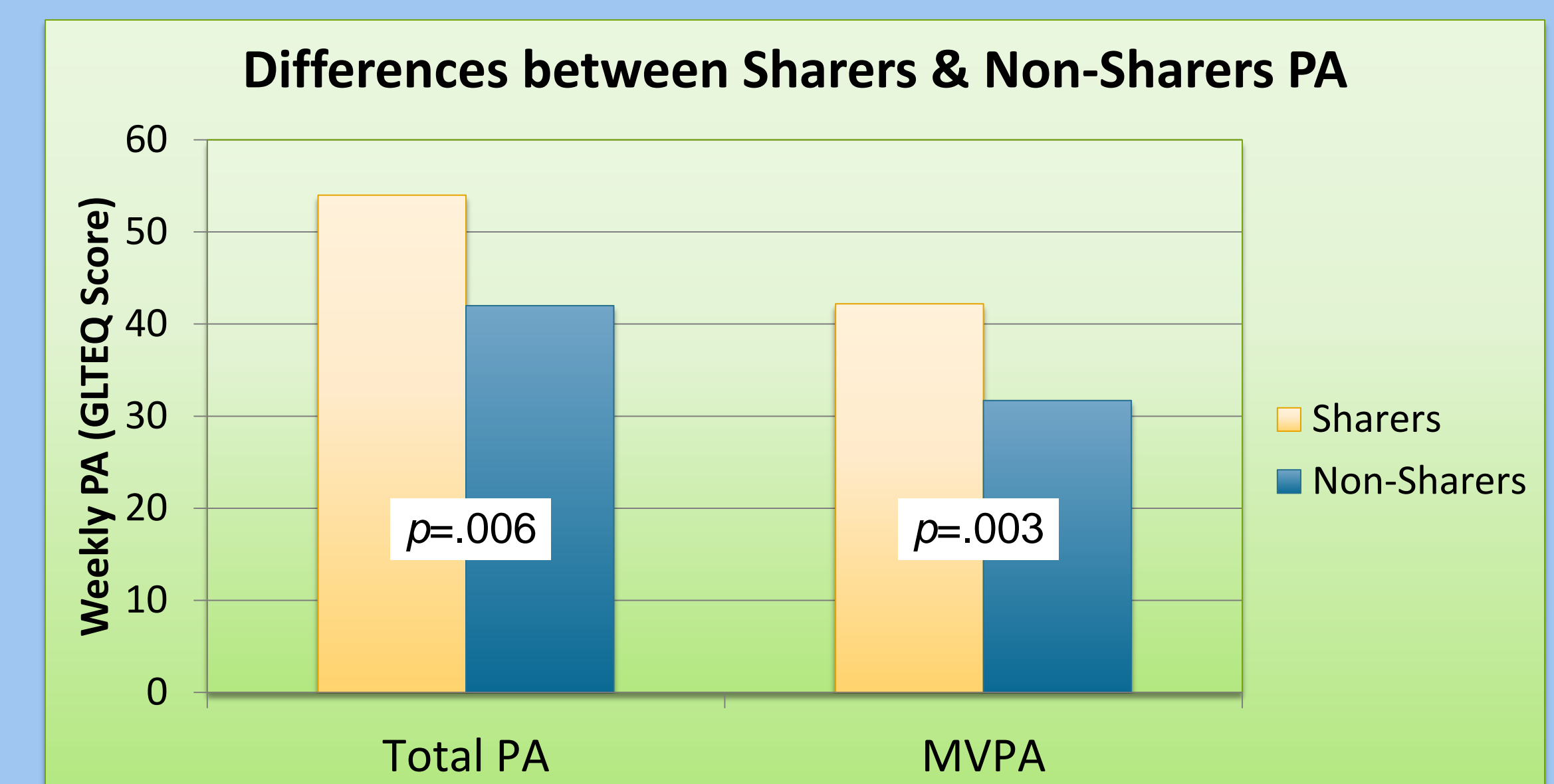
“If it comes off as self-righteous or gaudy I will make a sarcastic comment about it”

Reactions to Social Media

Reactions to participants posts	
Theme	Frequency
	n (%)
Encouragement/ support	61 (46.6%)
Likes 	52 (39.7%)
Invites to other activities	5 (3.8%)
Other (e.g., “send pics back”)	13 (9.9%)
Reactions to others' posts	
Encouragement (“liking”/inspired by it”)	161 (66.0%)
Negative/annoyed	51 (20.9%)
Don't care/ignore	47 (19.3%)
Other	16 (6.6%)

Use of Social Media in General and for Physical Activity

Use of Social Media in General and for Physical Activity		
<ul style="list-style-type: none"> • Spent an average of 76.0 min/day ($SD = 66.1$) on social media • Checked social media an average of 9.3 times /day ($SD = 9.9$) 		
	Overall Social Media Use ($N=224$)	Physical Activity Social Media Use ($N=134$)
Facebook	203 (90.6%)	102 (76.1%)
Instagram	152 (67.9%)	85 (63.4%)
Twitter	58 (25.9%)	14 (10.4%)
YouTube	150 (67.0%)	10 (7.5%)
Snapchat	108 (48.2%)	9 (6.7%)
Tumblr	26 (11.6%)	6 (4.5%)
Other (e.g. Pinterest)	21 (9.4%)	9 (6.7%)



Discussion

- Responses for sharing and reactions match types of social support seen in literature:
 - Aligned with 3 of 6 social support provision (Weiss, 1975):
 - Social integration: *Keep others in the loop and Invite others to join in an activity*
 - Opportunity for nurturance: *Inspire others*
 - Reassurances of worth: *Gain recognition, Inspire others, Likes*
 - Match support reported by participants of a PA intervention (Cavallo et al., 2014):
 - Companionship: *Invites to activities*
 - Esteem support: *Encouragement and support, likes, be motivated, gain recognition*
 - Informational support: *Get tips and task feedback*
- Individuals who share their PA information over social media had significantly higher total PA and MVPA
 - Aligns with previous research stating high levels of social support are associated with higher activity levels (Beets et al., 2010; McNeill et al., 2006).

Strengths

- Large sample ($N=224$) with diverse backgrounds
- Included a wide variety of social media types

Limitations

- Self-reported data
- Cross-sectional design: Directionality can not be established

Future Direction

- With a potential negative response and some people not feel comfortable sharing (privacy issues), more research needed these unique findings