

Use of Social Media Networks and Perceptions of Firm-Generated Content in the Fitness Industry

Rebecca M. Achen

School of Kinesiology and Recreation, Illinois State University, Normal, IL, 61761
rmachen@ilstu.edu

Research on social media in the fitness industry has focused mostly on the impacts of images on body image and how interventions on social media can impact behavior change. Little research explores the managerial aspects of using social media in the fitness realm. This study explored how fitness facility members valued firm-generated content on Facebook, Twitter, and Instagram. After surveying 467 fitness facility members, descriptive statistics and regression analyses were run to determine if they valued content and what content valuations drove interaction on each network. Overall,

consumers evaluated firm-generated content as relevant, useful, interesting, high quality, appropriate, important, and engaging. Content that was rated as high quality and important drove interactive behaviors on social media in general. Fitness managers should put resources into determining what content members perceive as important and creating high quality photos and videos to drive interaction with content.

Keywords: relationship marketing, social media marketing, interaction, social media engagement

A high obesity rate has led the Centers for Disease Control and Prevention (CDC) to consistently suggest physical activity and healthy eating for disease prevention (CDC, 2020; Ogden et al., 2015). Because physical activity can lower blood pressure and cholesterol, it is essential for health (American Heart Association, 2017). Additionally, being physically active lowers the risk of heart disease, stroke, type 2 diabetes, and depression (World Health Organization, n.d.). In an era where physical activity is essential to disease prevention and health, fitness organizations are positioned for success, if only they can find ways to attract and retain members, while motivating them to exercise.

The fitness industry is characterized by intense competition for members with over 200,000 health clubs existing in 2017 (Rodriguez, 2018). Not only must facilities compete with one another, consumers have other options including fitness DVDs, cable television channels, personal trainers, outdoor fitness classes, and online fitness channels. Thus

long-term success in the fitness industry requires high customer retention (Hurley, 2004; Marandi, 2002), through relationship building with customers. Since social media networks can be used to build and maintain customer relationships, (Grönroos, 2004; Kim et al., 2011; Williams & Chinn, 2010), health and fitness-related businesses should use social media channels (Carrotte et al., 2015), especially as social media can be used to stay in touch and connect with clients outside the gym (Luedtke, 2013; Biscontini, 2012; Fable, 2011). Additionally, social media are an important channel for fitness managers because organizations can motivate behavior change using internet technologies and social media (Laranjo et al., 2014; Marcus et al., 2000).

Use of social media is ubiquitous in the United States; in 2019 72% of the population of American adults used some form of social media (Pew Research Center, 2019). Facebook is still the most widely used social networking site and 75% of its users visit the site every day, while Instagram use continues to rise and 60% of users visit the site every day (Pew Research Center, 2019). Additionally, past research has shown more than 50% of American adult internet users searched for health or fitness information online (Pew Research Center, 2016). Despite the widespread use of social media and their utility in the fitness context, few studies examine the content posted by fitness businesses on social media (Carrotte et al., 2015), or consumers' perceptions of this content. Even though Thackeray et al. (2012) propose social media allow for two-way conversations in health promotion and a forum for health and fitness information and conversation (Polsgrove & Frimming, 2013), much of the research on the use of social media in the fitness industry has focused on fitspiration and body image and the use social media as a social support system for health and fitness (e.g., Carrotte et al., 2017; Deighton-Smith & Bell, 2017; Tiggemann & Zaccardo, 2018). The purpose of this study was to explore the use of social media from the perspective of the consumer to determine what types of content are most valued and how this value impacts interaction intentions.

LITERATURE REVIEW

Theoretical Foundations

Service-dominant (S-D) logic provides a theoretical lens through which to view the workings of organizations. According to S-D logic, the perspective of the organization is

altered, and the focus moves from the goods being produced to the consumers and the process of creating value with them instead of merely marketing to them (Lusch & Vargo, 2006; Merz et al., 2009). For those organizations that use S-D logic to guide their marketing strategy, a marketer becomes a manager of communications and interactions with customers, thus building relationships with them (Ballantyne & Varey, 2008). Thus, organizations that choose to embrace the S-D logic paradigm should also embrace relationship marketing, which focuses marketing activities around building and maintaining customer relationships (Morgan & Hunt, 1994), and emphasizes serving customer needs (Grönroos, 1996), to guide their marketing practices. When relationship marketing is the focus of an organization, customers and organizations actively participate in relationships and derive benefits from doing so (Gummesson, 1999). Relationship marketing is built on the premise that long-term relationships with customers improve retention, thus reducing costs (Buhler & Nufer, 2010; Egan, 2004).

Relationship marketing makes sense for fitness organizations because they have customers who are highly involved and a need for long-term repeat business (Hurley, 2004). Additionally, relationship marketing has been suggested as a successful marketing strategy in fitness (Kolbeck, 2013). Because relationship marketing increases customer retention (Berry, 1995), it is an important tool for customer retention and engagement in the fitness industry (Hoy, 2013).

Grönroos (2004) proposed that relationship marketing works primarily through creating added value for customers and engaging them in two-way communications and interactions, which further strengthens the connection between relationship marketing and S-D logic. Relationships built through these mutual exchanges accomplish the goals of both parties (Ferrand & McCarthy, 2009). Because of the focus on interaction and communication, researchers have suggested that social media channels are relationship-marketing tools (Williams & Chinn, 2010), especially as trust and relationships can be built through the offering of information and interaction on networks (Askool and Nakata, 2010).

Impacts of Social Media Marketing

Research on social media suggests that social media followers have been found to have higher quality relationships with organizations than those who did not follow social

media accounts (Clark & Melancon, 2013). Specifically in the fitness industry, social media can increase customer satisfaction and lead to more frequent visits, thus positively impacting intentions to repurchase (Ferrand et al., 2010). Overall, social media have a positive impact on organizational success (Askool & Nakata, 2010), and researchers in the fitness realm have suggested organizations use networks to communicate with members and encourage participation (Bayne & Cianfrone, 2013). Marketing on social media has led to specific outcomes in the fitness realm including increasing attendance at a fitness facility (Field et al., 2012) and motivating individuals to exercise (Vaterlaus et al., 2015).

Using Social Media in the Fitness Industry

Social media channels allow participants to have access to advice and support when it works best for them (Pagoto et al., 2016). In this context, social media can be used to facilitate engagement and to provide information (Pagoto et al., 2016). Researchers have found social media can be used to positively impact fitness, exercise, and health. Specifically, Twitter can provide an environment of support, feedback, and accountability for individuals trying to maintain weight, especially when members post about their healthy lifestyles and exercise (Teodoro & Naaman, 2013). Additionally, Park et al. (2016) found users who persistently shared their exercise activity on Twitter were more likely to remain engaged with fitness apps. Finally, Frimming et al. (2011) uncovered that students believed a Facebook discussion group could be useful for novices who wanted a place to go to ask questions about health and fitness and improve their knowledge, thus social media can be used to create “communities of practice” to increase health and fitness knowledge (Polsgrove & Frimming, 2013).

Also, health behavior change can be promoted via social media by using messages promoting physical activity and creating a peer influence network on social media to encourage continued activity (Zhang et al., 2015). In a meta-analysis of the broad literature on health behavior change using social networking sites, Laranjo et al. (2014) found a small positive effect of interventions on these sites on health behavior change. Specifically, using a fitness specific social media platform led to increases in physical activity in users (Santtila et al., 2014). In a social media intervention program, promotional messages increased engagement in exercises classes initially (Zhang et al.,

2015). Over time, peers within the social media network improved engagement with physical activity (Zhang et al., 2015).

In the practitioner literature, strategic suggestions for social media use abound. For example, Clark (2014) outlined that fitness organizations should use social media to get to know members, define social media goals, understand how people talk online, set up analytics, utilize different social spaces, plan content, and monitor and respond to customers. Additionally, practitioners have suggested using social media to post videos or information about the fitness classes they offer (Biscontini, 2012), or offer information about classes and facilities, members, current events, or expertise-related content (Clark, 2014). It is also suggested that fitness facilities design content to elicit interaction (Thackeray et al., 2012) and connect with customers, which can start conversations that translate into sales (Woodcock et al., 2011). Overall, it is important for fitness organizations to vary their content and get to know what members or clients want on these networks to effectively utilize them as marketing channels (Clark, 2014).

However, little empirical work has examined content in the context of fitness. In one study, Carrotte et al. (2015) determined that fitness motivation/inspiration pages were the most commonly followed types of fitness social media pages. Williams and Wright (2016) found eight types of content posted by fitness magazines on Twitter including interactivity, promotional, organizational, nutrition, modes of exercise, public health, communication through fitness, and other. Most often, fitness magazines studied posted interactive or in-house promotional content. Fitspiration on Instagram most often includes pictures of attractive men and women dressed in fitness gear and motivational quotations (Tiggemann & Zaccardo, 2018). Unfortunately, images of women were mostly of thin and toned women, and muscular men dominated the messaging, demonstrating messages were focused on appearance-related benefits instead of health-related benefits of eating well and exercising.

Pinto and Yagnik (2016) found fitness tracker brands used social media networks to sell products and engage consumers in supportive communities. Different fitness trackers also appeared to be targeting different consumer markets based on how they positioned themselves on social media. Very few used sales or promotions in their posts, and there was not much cause-related marketing. Images of the fitness trackers were prominent in

their posts. Most often, brands used emotional appeals, most commonly motivational messaging, as opposed to rational appeals in their marketing posts. Fitness tracker brands were more likely to use text and photos than graphics and videos in their Facebook posts. An additional content analysis of fitness centers found they were most likely to post “feel-good” posts (40.1%) followed by general information posts (27.9%) (Corthouts et al., 2019).

Research Questions

Social media allow marketers to build their brands and improve their marketing communications in a cost-effective way (Pinto & Yagnik, 2016). While a few studies have examined how marketers in fitness are posting content online, little is known about the value of the content or perceptions of it from the consumers’ standpoint. Utilizing Grönroos (2004) relationship marketing theory, which states that relationships are built through two-way communications, interactions, and added value, this study sought to better understand how perceptions of content value could facilitate interaction and two-way communications on social media. First, for practicality, organizations should understand which networks are used by members. Thus, the first research question asked: Which networks do fitness facility members use to follow their facilities? Next, if organizations are embracing S-D logic and using social media to build relationships with customers by providing added value, then organizations should evaluate the consumers’ perceptions of value of content posted on networks. Therefore, the second research question asked: Do consumers’ in the fitness industry value content posted by their fitness facilities on Facebook, Twitter, and Instagram? Finally, if organizations are utilizing social media to build relationships, then content that adds value should also drive interaction and two-way communication. Thus, the final research question asked: Does the value of content posted by fitness facilities impact consumers’ likelihood to interact with and consume that content?

METHODS

The study used survey research methodology to examine the perceptions of fitness consumers. Data were part of larger study on relationship quality and social media interaction in the fitness industry in the United States.

Table 1

Demographic Characteristics of the Sample

Characteristic	Percent	Characteristic	Percent/Mean
Sex		Age (years)	32.85 (10.03)
Male	53.3%	Marital Status	
Female	46.3%	Single/Never married	53.1%
Ethnicity		Married/Domestic part.	41.5%
White	76.4%	Separated	0.2%
Black/African American	7.3%	Divorced	3.9%
Hispanic/Latino	5.8%	Widowed	0.9%
Asian	7.5%	Children under 18	
Native American/American Indian	1.1%	Yes	30.6%
Other	1.5%	No	68.7%
Education		Household Income	
Less than high school	0.2%	\$0 – 25,000	15.6%
High school/GED	9.0%	\$25,001 – 50,000	33.4%
Some college	25.3%	\$50,001 – 75,000	22.7%
Trade/Technical/Vocational	1.5%	\$75,001 – 100,000	13.3%
Associate's degree	11.3%	>\$100,000	12.9%
Bachelor's degree	36.0%	Liked Facebook Page	43.7%
Master's degree	13.5%	Membership length (years)	2.66 (2.66)
Doctoral/Professional degree	3.3%		

Sample

Participants were recruited using Amazon Mechanical Turk (MTurk), a platform that allows researchers to provide compensation for participants. MTurk was used to provide a geographically- and organizationally-diverse sample, instead of focusing on recruiting members of one or two local fitness facilities. To complete the survey, participants were required to indicate that they were members of a fitness facility and social media. The questionnaire was completed by 467 participants. Table 1 lists the demographics of participants. Participants also were asked to classify the fitness facility

they used into a broad type of fitness facility. Participants reported being members of franchised facilities, such as Gold's Gym or Lifetime Fitness, (59%), privately-owned facilities (12%), express facilities (10%), city-owned facilities (6%), specialty facilities (2%), personal training gyms (1.5%), and Crossfit gyms (1%).

Questionnaire Design

The survey was created based on literature on content types and platforms used in the fitness industry and coded into Qualtrics. Questions for the larger study included previously used scales on relationship quality, purchase and referral intentions, and social media interaction. The scale measuring interaction on social media networks was previously used by Achen (2016) to measure Facebook interaction. This five-item Likert-type scale asked participants to evaluate how often they engaged in interaction behaviors on an 8-point scale that included never, once a year, a few times a year, once a month, a few times a month, once a week, a few times a week, once a day, and a few times a day. For this study, it was expanded to Twitter and Instagram. This scale demonstrated adequate reliability in previous studies ($\omega = .97$). Since no previous studies have examined perceptions of content from customers' perspectives, the author perused practitioner literature, specifically articles on social media published in the *IDEA Fitness Journal*, and drew on her experience as a social media manager in the fitness industry to ascertain how the industry evaluated the value of content. From this, seven adjectives to describe the content posted by fitness facilities were chosen including relevant, high quality, important, useful, engaging, appropriate, and interesting. Thus, participants were asked to evaluate the firm-generated content on each social network in terms of whether it was relevant, useful, interesting, high quality, appropriate, important, and engaging on a scale of 1 (strongly disagree) to 7 (strongly agree). To improve the face validity of the questionnaire, four professionals with experience working in social media marketing in fitness reviewed the survey prior to data being collected.

Three social media networks were chosen for analysis including Facebook, Twitter, and Instagram. All were chosen because they promoted interaction and were the most widely used social networking sites for American adults in 2016, according to the Pew Research Center (68%, 21%, and 28% respectively) (Greenwood et al., 2016). Since these networks have different primary purposes, it is possible that differences will exist across

networks. According to the company's website, Facebook's mission is, "to give people the power to build community and bring the world closer together." While Twitter's mission statement is, "to give everyone the power to create and share ideas and information instantly without barriers." Finally, the mission statement of Instagram is, "to strengthen relationships through shared experiences" (Frier, 2018). Industry experts suggest that, from a marketing perspective, different channels can be used differently. Twitter provides immediacy and a channel for dialogue between customers and organizations (Jackson, 2015), while Instagram is more focused on sharing photos and customer use tends to revolve around the content the organization posts (Foreman, 2017; Jackson, 2015). Finally, the focus of Facebook is helping people connect and build relationships (Foreman, 2017).

Procedure and Data Analysis

Once approval from the institutional review board (IRB) was received, a message about the study including an anonymous survey link was posted on MTurk. To be included in the study, potential participants were required to be at least 18 years of age, social media users, and fitness facility members. Also, participants were blocked from taking the study more than one time. Participants were offered \$.87 for their participation if they completed the entire survey. They were only awarded the reward after the researcher confirmed they completed the entire survey, passed the quality control questions, and had no noticeable patterns in their survey responses. Data were cleaned again prior to data analysis and cases with out-of-bounds responses or inaccurate quality control question responses were eliminated. Data were downloaded into SPSS Version 22 and descriptive statistics were run. Multiple linear regressions were run to determine if evaluations of value significantly impacted the likelihood fitness center members would interact with content. Because of the large sample size, significance was tested at $p = .01$.

RESULTS

Participants were asked to indicate which social media platforms they used. In the sample, the most commonly used platform to follow their fitness facility was Facebook (43.7%) followed by Instagram (11.3%), Twitter (10.7%), and Snapchat (3.2%). Participants evaluated firm-generated content on each social network in terms of whether

it was relevant, useful, interesting, high quality, appropriate, important, and engaging. Their evaluation for each network is presented in Table 2. To provide a global understanding of customers' perceptions of content value, a content value score was created for each of the platforms by adding up individual scores on all content and averaging them. The reliability for the seven items used to measure overall content value were adequate with Cronbach's alpha values of .87 for Facebook, .84 for Twitter, .83 for Instagram, and .88 for Snapchat.

Table 2

Means and Standard Deviations of Content Valuation Scores across Platforms

	Facebook	Twitter	Instagram	Snapchat
Relevant	4.46 (1.52)	3.95 (1.47)	3.97 (1.37)	5.13 (1.13)
Useful	4.49 (1.47)	3.90 (1.45)	3.92 (1.39)	5.00 (1.36)
Interesting	4.32 (1.51)	3.87 (1.41)	3.97 (1.40)	5.27 (0.96)
High Quality	4.37 (1.41)	3.93 (1.35)	4.05 (1.40)	4.87 (1.73)
Appropriate	5.55 (1.48)	5.13 (1.52)	5.07 (1.51)	5.07 (1.75)
Important	4.15 (1.43)	3.76 (1.42)	3.78 (1.38)	5.13 (1.55)
Engaging	4.74 (1.53)	4.44 (1.49)	4.45 (1.52)	4.93 (1.94)
Overall content value	4.58	4.17	4.14	5.06

Participants were asked to indicate on a scale of 1 (never) to 8 (more than once a day) how often they engaged in interaction behaviors with firm-generated content on Facebook, Twitter, and Instagram. Means and standard deviations for each behavior and network are reported in Table 3.

Table 3

Means and Standard Deviations for Interaction Behaviors

	<i>M</i>	<i>SD</i>
How often do you visit your favorite fitness facility's Facebook page	2.03	1.40
How often do you read content posted by the fitness facility on Facebook	2.19	1.53
How often do you share content posted by the fitness facility on Facebook	1.71	1.36
How often do you like content posted by the fitness facility on Facebook	2.04	1.57
How often do you comment on content posted by the fitness facility on Facebook	1.78	1.39

How often do you visit your favorite fitness facility's Twitter page	1.60	1.37
How often do you read content posted by the fitness facility on Twitter	1.61	1.33
How often do you retweet content posted by the fitness facility on Twitter	1.52	1.29
How often do you favorite content posted by the fitness facility on Twitter	1.53	1.29
How often do you mention the fitness facility on Twitter	1.48	1.16
How often do you visit your favorite fitness facility's Instagram page	1.68	1.36
How often do you share content posted by the fitness facility on Instagram	1.48	1.18
How often do you like content posted by the fitness facility on Instagram	1.69	1.39
How often do you comment on content posted by the fitness facility on Instagram	1.58	1.34

Regression analysis was conducted for each interaction behavior on each network to determine if different evaluations of content value impacted likelihood to engage in different interaction behaviors. Skew and kurtosis values were examined for all variables and were within the -2 to 2 range that is acceptable as an indication that data are normally distributed and correlations were less than .90, so multicollinearity was deemed not a concern. Tables 4, 5, and 6 list regression results for each behavior by network. On Facebook, if content was judged as high quality and important it was more likely to be liked, commented on, and shared. If organizations posted high quality, important, and engaging content, members were more likely to visit the Facebook page. Finally, high quality, important, and engaging content significantly impacted reads.

Table 4

Regression Results for the Effects of Content Value on Facebook Outcomes

	B	β	S.E.	t-value	p-value
Like ($R^2 = .300$, Adjusted $R^2 = .289$, $SE = 1.32$, $F = 28.12$, $df = 7$, $p < .001$)					
Intercept	-1.007		.312	-3.229	.001
Relevant	-.190	-.184	.085	-2.233	.026
Useful	.095	.089	.098	.973	.331
High quality	.283	.255	.086	3.304	.001
Interesting	.029	.028	.089	.329	.743
Appropriate	.016	-.015	.047	-.337	.737
Important	.357	.324	.076	4.76	< .001
Engaging	.113	-.110	.047	-2.383	.018

Use of Social Media Networks and Perceptions of Firm-Generated Content

Comment ($R^2 = .272$, Adjusted $R^2 = .261$, $SE = 1.19$, $F = 24.56$, $df = 7$, $p < .001$)

Intercept	-.247		.281	-.879	.380
Relevant	-.177	-.194	.077	-2.309	.021
Useful	-.052	-.055	.088	-.587	.558
High quality	.349	.356	.077	4.520	< .001
Interesting	-.016	-.017	.080	-.200	.841
Appropriate	-.060	.064	.042	1.435	.152
Important	.367	.378	.069	5.339	< .001
Engaging	.086	-.094	.043	-2.003	.046

Share ($R^2 = .229$, Adjusted $R^2 = .217$, $SE = 1.20$, $F = 19.49$, $df = 7$, $p < .001$)

Intercept	.007		.283	.025	.980
Relevant	-.065	-.073	.077	-.838	.403
Useful	-.093	-.101	.089	-1.051	.294
High quality	.274	.286	.078	3.525	< .001
Interesting	.065	.072	.081	.808	.420
Appropriate	-.098	-.108	.042	2.327	.020
Important	.237	.250	.069	3.426	.001
Engaging	.104	.117	.043	2.422	.016

Visit ($R^2 = .330$, Adjusted $R^2 = .320$, $SE = 1.16$, $F = 32.30$, $df = 7$, $p < .001$)

Intercept	-.930		.273	-3.410	.001
Relevant	.111	.121	.075	1.492	.136
Useful	-.032	-.034	.085	-.378	.706
High quality	.221	.223	.075	2.950	.003
Interesting	-.058	-.062	.078	-.745	.457
Appropriate	.013	.014	.041	.323	.747
Important	.316	.321	.067	4.724	< .001
Engaging	.107	.116	.042	2.577	.010

Read ($R^2 = .373$, Adjusted $R^2 = .363$, $SE = 1.22$, $F = 38.99$, $df = 7$, $p < .001$)

Intercept	-1.563		.287	-5.442	< .001
Relevant	.063	.063	.079	.805	.421
Useful	-.021	-.020	.090	-.231	.817
High quality	.227	.210	.079	2.878	.004
Interesting	-.011	-.011	.082	-.134	.894
Appropriate	.111	.108	.043	2.582	.010
Important	.391	.366	.070	5.564	< .001
Engaging	.080	.080	.044	1.838	.067

In regards to Twitter outcomes, there were fewer significant effects. If content was judged as important, it was more likely to be favorited and receive mentions. Additionally, content that was appropriate drives visits to the Twitter page. Finally, if content was judged as appropriate and important it was likely to be read.

Table 5

Regression Results for the Effects of Content Value on Twitter Outcomes

	B	β	S.E.	t-value	p-value
Retweet ($R^2 = .199$, Adjusted $R^2 = .183$, $SE = 1.17$, $F = 12.68$, $df = 7$, $p < .001$)					
Intercept	-.425		.318	-1.335	.183
Relevant	-.124	-.140	.095	-1.301	.194
Useful	.034	.038	.108	.316	.752
High quality	.229	.239	.100	2.276	.023
Interesting	.118	.129	.111	1.063	.288
Appropriate	.044	.052	.047	.944	.346
Important	.183	.201	.092	2.011	.046
Engaging	.006	.007	.047	.127	.899
Favorite ($R^2 = .210$, Adjusted $R^2 = .195$, $SE = 1.16$, $F = 13.57$, $df = 7$, $p < .001$)					
Intercept	-.649		.318	-2.043	.042
Relevant	-.074	-.084	.095	-.782	.435
Useful	-.025	-.028	.108	-.234	.815
High quality	.232	.241	.100	2.317	.021
Interesting	.067	.073	.111	.607	.544
Appropriate	.066	.078	.047	1.411	.159
Important	.254	.278	.091	2.778	.006
Engaging	.024	.027	.047	.512	.609
Mention ($R^2 = .182$, Adjusted $R^2 = .166$, $SE = 1.06$, $F = 11.33$, $df = 7$, $p < .001$)					
Intercept	-.204		.289	-.707	.480
Relevant	-.069	-.087	.086	-.796	.426
Useful	-.072	-.090	.098	-.734	.463
High quality	.062	.072	.091	.676	.500
Interesting	.175	.213	.101	1.737	.083
Appropriate	.032	.042	.043	.759	.449
Important	.257	.315	.083	3.094	.002
Engaging	.040	.052	.042	.950	.343
Visit ($R^2 = .216$, Adjusted $R^2 = .201$, $SE = 1.23$, $F = 14.04$, $df = 7$, $p < .001$)					
Intercept	-1.019		.335	-3.046	.002

Use of Social Media Networks and Perceptions of Firm-Generated Content

Relevant	.009	.010	.100	.091	.928
Useful	.112	.119	.114	.986	.325
High quality	.078	.077	.106	.742	.459
Interesting	.043	.044	.117	.370	.712
Appropriate	.136	.152	.049	2.764	.006
Important	.225	.232	.096	2.334	.020
Engaging	.029	.031	.049	.589	.556
Read ($R^2 = .281$, Adjusted $R^2 = .267$, $SE = 1.14$, $F = 19.90$, $df = 7$, $p < .001$)					
Intercept	-1.341		.311	-4.313	< .001
Relevant	-.061	-.067	.093	-.644	.513
Useful	.173	.188	.106	1.634	.103
High quality	.039	.040	.098	.397	.691
Interesting	.050	.053	.109	.548	.647
Appropriate	.171	.195	.046	3.720	< .001
Important	.300	.319	.090	3.347	.001
Engaging	.038	.043	.046	.841	.401

Content that consumers perceive to be important on Instagram was likely to be shared. If it was perceived as appropriate and important it was likely to be liked. Comments were driven by high quality and important content. High quality, important, and engaging content drove visits to the Instagram page. Finally, high quality and important content resulted in views.

Table 6

Regression Results for the Effects of Content Value on Instagram Outcomes

	B	β	S.E.	t-value	p-value
Share ($R^2 = .209$, Adjusted $R^2 = .190$, $SE = 1.06$, $F = 11.04$, $df = 7$, $p < .001$)					
Intercept	-.384		.323	-1.186	.237
Relevant	-.017	-.020	.099	-.170	.865
Useful	-.115	-.136	.113	-1.014	.311
High quality	.161	.191	.095	1.694	.091
Interesting	-.007	-.008	.114	-.061	.951
Appropriate	.051	.066	.051	1.000	.318
Important	.382	.447	.095	4.027	< .001
Engaging	.011	.015	.050	.225	.822
Like ($R^2 = .299$, Adjusted $R^2 = .282$, $SE = 1.18$, $F = 17.76$, $df = 7$, $p < .001$)					
Intercept	-1.531		.360	-4.254	< .001

Relevant	.003	.003	.110	.032	.975
Useful	-.047	-.047	.126	-.373	.710
High quality	.269	.271	.106	2.544	.011
Interesting	-.066	-.067	.126	-.523	.601
Appropriate	.154	.167	.057	2.705	.007
Important	.412	.409	.105	3.908	< .001
Engaging	.051	.056	.056	.916	.360
Comment ($R^2 = .291$, Adjusted $R^2 = .274$, $SE = 1.14$, $F = 17.10$, $df = 7$, $p < .001$)					
Intercept	-.771		.348	-2.214	.028
Relevant	-.182	-.187	.107	-1.703	.090
Useful	.116	.121	.122	.953	.341
High quality	.300	.315	.102	2.941	.004
Interesting	-.261	-.275	.122	-2.139	.033
Appropriate	.091	.103	.055	1.654	.099
Important	.533	.550	.102	5.228	< .001
Engaging	-.009	-.010	.054	-.163	.871
Visit ($R^2 = .309$, Adjusted $R^2 = .293$, $SE = 1.15$, $F = 18.69$, $df = 7$, $p < .001$)					
Intercept	-1.289		.350	-3.679	< .001
Relevant	-.119	-.120	.108	-1.111	.268
Useful	.136	.139	.123	1.113	.266
High quality	.362	.371	.103	3.519	.001
Interesting	-.220	-.227	.123	-1.792	.074
Appropriate	.143	.158	.055	2.581	.010
Important	.403	.408	.103	3.926	< .001
Engaging	.016	.018	.054	.297	.766
View ($R^2 = .309$, Adjusted $R^2 = .293$, $SE = 1.15$, $F = 18.68$, $df = 7$, $p < .001$)					
Intercept	-1.357		.352	-3.853	< .001
Relevant	-.028	-.028	.108	-.259	.796
Useful	.077	.078	.123	.626	.531
High quality	.441	.450	.103	4.263	< .001
Interesting	-.265	-.272	.124	-2.140	.033
Appropriate	.139	.153	.056	2.492	.013
Important	.336	.337	.103	3.250	.001
Engaging	.041	.045	.054	.744	.457

DISCUSSION

According to Grönroos (2004), relationships between firms and customers can be built through interactions, communications, and added value. While research on social media engagement has focused heavily on exploring interaction, little research on how consumers value content generated by the firm has been conducted, thus necessitating this study. Using social media effectively in the fitness industry is predicated on the fact that members of your fitness facility value your content, thus leading them to interact with it, contributing to building relationships with them. This study endeavored to explore whether fitness facility members valued firm-generated content on social media, and whether their different valuations of the content impacted their likelihood to interact with content. Additionally, this study expanded research by exploring three networks including Facebook, Instagram, and Twitter.

Participants indicated they followed their fitness facility most often on Facebook. Four times more participants indicated this than the number for Instagram, Twitter, or Snapchat. While some have suggested that the popularity of Facebook is declining, this finding supports fitness organizations utilizing Facebook as a means to market to and communicate with facility members. It would seem that this network should receive the greatest investment in time and resources as well. However, as the younger generation ages and has more buying power, fitness managers should be aware that preferred networks might change and periodically assess where the majority of members are consuming and interacting with content. Additionally, while Snapchat was followed the least, the content received a higher value score than all other types of content, indicating that the value of content posted to Snapchat is high and fitness managers might consider expanding their use of this network.

Overall, it appears people value the content posted by their fitness facilities on all social networks, with all networks receiving mean scores above 3.5 on all content valuations including high quality, interesting, relevant, useful, appropriate, important, and engaging. Overall, appropriateness of content received the highest score. Facility members appear to see congruency between their facility and the type of content posted, which is likely a sign that fitness facilities have a general understanding of the type of content that should be posted on their social media networks.

For each network, the valuation of the content was entered into a regression model for each individual interaction behavior. Content that is judged as relevant and high-quality drives likes, comments, and shares on Facebook. High quality, important, and engaging content results in visits to Facebook and high quality, appropriate, and important content drives consumers to read that content. On Twitter, important content results in favorites and mentions, and appropriate content results in visits to the Twitter page. Appropriate and important content encourages consumers to read the content posted on Twitter. Finally, on Instagram, content that is seen as important is shared, appropriate and engaging content leads to likes, and high quality and important content leads to comments. High quality, appropriate, and important content encourages consumers to visit the facility's Instagram page and high quality and important content is likely to be viewed. Depending on which behaviors a fitness manager wants to drive, they can focus on creating content that will be evaluated in the ways listed above. For example, if a facility manager wants content on Instagram to be shared, then they need to post content that is important to facility members. In general, most behaviors on social media networks are most likely to be driven by high quality content that is evaluated as important to fitness facility members.

While this study did not directly compare networks to one another, there were some differences in how content perceptions drove interaction behavior, which may be related to how organizations were utilizing networks and the tools of networks. For example, Twitter is often seen as a news source where photo and video are less important. Thus, engaging content might not drive interaction here, but content evaluated as important is essential to driving interaction. However, the quality of photos and videos matters more on Instagram because visual elements are embedded into the purpose of the network, which started to primarily share photos.

It should be noted that interaction with content was low overall, a finding that may indicate fitness facility members are not likely to interact with content on social media in general. Practically, this might indicate that fitness center managers do not yet understand what types of content their members value and could benefit from market research that helps them better understand customer needs, which could in turn increase interaction behaviors. It could also mean that using social media to build relationships

with customers does not match how customer use social media, and thus, it is possible that strategy should be built around providing information and driving transactions.

Results provide evidence that can help fitness managers determine how to approach their social media strategy from a broad standpoint. Fitness managers should focus on creating high quality content by investing time and money into high quality photo and video. Additionally, resources should be utilized to determine what types of content are important to members, as this likely differs depending on the market the facility serves. Thus, if a fitness manager knows that content perceived as appropriate and important is of value to customers, they could create a member survey that phrases questions about social media content utilizing these words. For example, a question might be “what types of posts are important to you?”

Limitations and Future Research

This study has three major limitations. The first is related to the sample, which while large, was gathered using Amazon MTurk. Although questions were used to make sure respondents were qualified and data was cleaned multiple times, it is still possible that some of the sample were not actual fitness facility members. For future research, it might be useful to partner with fitness facilities to be certain actual members are being accessed.

The second limitation is the survey instrument itself, which was created for this study specifically and not based on previous scales developed to measure content value, which were not found when this study was conceptualized. Replication of this study with differing measures for content value would help strengthen the results.

Finally, this study only asked if participants valued content, and did not address why or what types of content they valued. Future qualitative research should be conducted to help fitness organizations determine which types of content are of value to consumers and why, to better create strategy that meets consumer needs. Additionally, future research should consider segmenting customers based on which types of content they value.

References

- Achen, R. M. (2016). The influence of Facebook engagement on relationship quality and consumer behavior in the National Basketball Association. *Journal of Relationship Marketing, 15*, 247-268.
- American Heart Association. (2017, August 15). *The American Heart Association's diet and lifestyle recommendations*. Retrieved August 30, 2019, from http://www.heart.org/HEARTORG/HealthyLiving/Diet-and-Lifestyle-Recommendations_UCM_305855_Article.jsp#.WdP9tRNyLOR
- Askool, S., & Nakata, K. (2010). A conceptual model for acceptance of social CRM systems based on a scoping study. *AI & Society, 26*, 205-220. <https://doi.org/10.1007/s00146-010-0311-5>
- Ballantyne, D., & Varey, R. J. (2008). The service-dominant logic and the future of marketing. *Journal of the Academy of Marketing Science, 36*, 11-14.
- Bayne, K. S., & Cianfrone, B. A. (2013). The effectiveness of social media marketing: The impact of Facebook status updates on a campus recreation event. *Recreational Sports Journal, 37*(2), 147-159.
- Berry, L. L. (1995). Relationship marketing of services—growing interest, emerging perspectives. *Journal of the Academy of Marketing Science, 23*(4), 236-245.
- Biscontini, L. (2012). Building fitness relationships. *American Fitness, 30*(3), 12-14.
- Buhler, A., & Nufer, G. (2010). *Relationship marketing in sports*. Burlington, MA: Butterworth-Heinemann.
- Carrotte, E. R., Prichard, I., & Lim, M. S. C. (2017). “Fitspiration” on social media: A content analysis of gendered images. *Journal of Medical Internet Research, 19*(3). [10.2196/jmir.6368](https://doi.org/10.2196/jmir.6368)
- Carrotte, E. R., Vella, A. M., & Lim, M. S. (2015). Predictors of “liking” three types of health and fitness-related content on social media: a cross-sectional study. *Journal of Medical Internet Research, 17*(8). <https://doi.org/10.2196/jmir.4803>
- Centers for Disease Control and Prevention (2020, January 9). *How much physical activity do you need?* Retrieved March 13, 2020, from <https://www.cdc.gov/physicalactivity/basics/adults/index.htm>
- Clark, C. (2014). Going beyond likes and followers: How fitness clubs can leverage social media. *ACSM's Health & Fitness Journal, 18*(5), 46-48.
- Clark, M., & Melancon, J. (2013). The influence of social media investment on relational outcomes: A relationship marketing perspective. *International Journal of Marketing Studies, 5*(4), 132-142.
- Corthouts, J., Denys, A., Thibaut, E., & Scheerder, J. (2019). Like it or not? The differences between and success factors of sports providers' use of social networking sites. *International Journal of Sport Management and Marketing, 1* 9(1-2), 56-79.
- Deighton-Smith, N., & Bell, B. T. (2017). Objectifying fitness: A content and thematic analysis of #fitspiration images on social media. *Psychology of Popular Media Culture, 6*(1). <http://dx.doi.org/10.1037/ppm0000143>
- Egan, J. (2004). *Relationship marketing: Exploring relational strategies in marketing*. Boston, MA: Pearson Education.
- Fable, S. (2011). Creating an online community: Use social media to extend your reach beyond the exercise studio. *IDEA Fitness Journal, 66-67*.

- Ferrand, A., Robinson, L., & Valette-Florence, P. (2010). The intention-to-repurchase paradox: A case of the health and fitness industry. *Journal of Sport Management*, 24, 83-105.
- Ferrand, A., & McCarthy, S. (2009). *Marketing the sports organisation: Building networks and relationships*. New York, NY: Routledge.
- Field, J. A., Elbert, D. J., & Moser, S. B. (2012). The use of social media in building interest in wellness on a college campus. *American Journal of Business Education*, 5(5), 515-524.
- Frier, S. (2018, April 10). Instagram looks like Facebook's best hope. *Bloomberg Businessweek*. <https://www.bloomberg.com/news/features/2018-04-10/instagram-looks-like-facebook-s-best-hope>
- Frimming, R. E., Polsgrove, M. J., & Bower, G. G. (2011). Evaluation of a health and fitness social media experience. *American Journal of Health Education*, 42(4), 222-227.
- Foreman, C. (2017, June 20). 10 types of social media and how each can benefit your business. <https://blog.hootsuite.com/types-of-social-media/>
- Greenwood, S., Perrin, A., & Duggan, M. (2016, November 11). Social media update 2016. <https://www.pewresearch.org/internet/2016/11/11/social-media-update-2016/>
- Grönroos, C. (2004). The relationship marketing process: Communication, interaction, dialogue, value. *Journal of Business & Industrial Marketing*, 19, 99-113.
- Grönroos, C. (1996). Relationship marketing: Strategic and tactical implications. *Management Decision*, 34(3), 5-14.
- Gummesson, E. (1999). *Total relationship marketing: Rethinking marketing management: From 4ps to 30rs*. Boston, MA: Butterworth.
- Hoy, D. (2013). Social media the new frontier. *Sport Health*, 29, 14-16.
- Hurley. (2004). Managing customer retention in the health and fitness industry: A case of neglect. *Irish Marketing Review*, 17(1 & 2), 23-29.
- Jackson, D. (2015, October 12). Twitter vs. Instagram: Which is best for your brand. <https://sproutsocial.com/insights/twitter-vs-instagram/>
- Kim, Y. K., Trail, G. T., Woo, B., & Zhang, J. (2011). Sports consumer-team relationship quality: Development and psychometric evaluation of a scale. *International Journal of Sports Marketing & Sponsorship*, 12, 254-271.
- Kolbeck, C. (2013). Know your members to successfully market your club. *ACSM's Health & Fitness Journal*, 17(5), 40-41.
- Laranjo, L., Arguel, A., Neves, A. L., Gallagher, A. M., Kaplan, R., Mortimer, N., Mendes, G. A., & Lau, A. Y. (2014). The influence of social networking sites on health behavior change: a systematic review and meta-analysis. *Journal of the American Medical Informatics Association*, 22(1), 243-256.
- Luedtke, H. S. (2013). Selling yourself without selling out: How to create an online presence that feels true to yourself - and your business. *IDEA Fitness Journal*, 20-23.
- Lusch, R. F., & Vargo, S. L. (2006). Service-dominant logic as a foundation for a general theory. In R. F. Lusch, & S. L. Vargo (Eds.), *The service-dominant logic of marketing: Dialog, debate, and directions* (pp. 406-420). Armonk, NY: ME Sharpe.
- Marandi, J. H. E. (2002). The gendered dynamics of relationship marketing: An initial discussion of the health and fitness industry. *Managing Leisure*, 7, 194-200.

- Marcus, B. H., Nigg, C. R., Riebe, D., & Forsyth, L. H. (2000). Interactive communication strategies: Implications for population-based physical-activity promotion. *American Journal of Preventative Medicine*, *19*, 121-126.
- Merz, M. A., He, Y., & Vargo, S. L. (2009). The evolving brand logic: a service-dominant logic perspective. *Journal of the Academy of Marketing Science*, *37*, 328-344.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, *58* (3), 20-38.
- Ogden, C. L., Carroll, M. D., Fryar, C. D., & Flegal, K. M. (2015) Prevalence of obesity amount adults and youth: United States, 2011-2014. *NCHS Data Brief*, *219*. Retrieved from <https://www.cdc.gov/nchs/data/databriefs/db219.pdf>
- Pagoto, S., Waring, M. E., May, C. N., Ding, E. Y., Kunz, W. H., Hayes, R., & Oleski, J. L. (2016). Adapting behavioral interventions for social media delivery. *Journal of Medical Internet Research*, *18*(1). <https://doi.org/10.2196/jmir.5086>
- Park, K., Weber, I., Cha, M., & Lee, C. (2016). Persistent sharing of fitness app status on Twitter. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (pp. 184-194).
- Pew Research Center. (2019, June 12). Social media fact sheet. <https://www.pewresearch.org/internet/fact-sheet/social-media/>
- Pew Research Center. (2016, November 11). The social life of health information: Exercise or fitness. <https://www.pewresearch.org/internet/2016/11/11/social-media-update-2016/>
- Pinto, M. B., & Yagnik, A. (2017). Fit for life: A content analysis of fitness tracker brands use of Facebook in social media marketing. *Journal of Brand Management*, *24* (1), 49-67.
- Polsgrove, M. J., & Frimming, R. E. (2013). A creative way to utilize social media to enhance fitness and health knowledge. *Strategies*, *26* (2), 3-7.
- Rodriguez, M. (2018, May 29). IHRSA 2018 global report: Health club industry revenue totaled \$87.2 billion in 2017. <https://www.ihrsa.org/about/media-center/press-releases/ihrsa-2018-global-report-club-industry-revenue-totaled-87-2-billion-in-2017/>.
- Santtila, M., Grönqvist, K., Räisänen, J., & Kyröläinen, H. (2014). Impact on physical fitness of exercise promotion service utilizing social media. *Biomedical Human Kinetics*, *6* (1), 84-89.
- Teodoro, R., & Naaman, M. (2013). Fitter with Twitter: Understanding personal health and fitness activity in social media. In *Seventh International AAAI Conference on Weblogs and Social Media* (pp. 611-620).
- Thackeray, R., Neiger, B. L., & Keller, H. (2012). Integrating social media and social marketing: A four-step process. *Health Promotion Practice*, *13*, 165-169. <https://doi.org/10.1177/1524839911432009>
- Tiggemann, M., & Zaccardo, M. (2018). 'Strong is the new skinny': A content analysis of #fitspiration images on Instagram. *Journal of Health Psychology*, *23* (8), 1003-1011.
- Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). #gettinghealthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior*, *45*, 151-157.

- Williams, J., & Chinn, S. J. (2010). Meeting relationship-marketing goals through social media: A conceptual model for sport marketers. *International Journal of Sport Communication*, 3, 422-437.
- Williams, A. S., & Wright, B. K. (2016). Strategic fitness communication: Examining social media usage in the fitness sector of the sport industry. *International Journal of Sport Management*, 17, 235-252.
- Woodcock, N., Broomfield, N., Downer, G., & Starkey, M. (2011). The evolving data architecture of social customer relationship management. *Journal of Direct, Data and Digital Marketing Practice*, 12, 249-266. <https://doi.org/10.1057/dddmp.2010.45>
- World Health Organization. (n.d.). Global strategy on diet, physical activity and health: Physical activity and adults. Retrieved March 13, 2020, from http://www.who.int/dietphysicalactivity/factsheet_adults/en/
- Zhang, J., Brackbill, D., Yang, S., & Centola, D. (2015). Efficacy and causal mechanism of an online social media intervention to increase physical activity: Results of a randomized controlled trial. *Preventive Medicine Reports*, 2, 651-657.

Funding and Acknowledgements

The author declares no funding sources or conflicts of interest.

Online Connections

To follow Rebecca M. Achen in social media: @BeckyAchen