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Examining the Role of Individual Differences and Motivation in Predicting Social TV Viewing Behaviors among Young Adults in the U.S.

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Social TV is the modern media multitasking behavior in which audiences engage in simultaneous social media use while watching linear or streaming television. This emerging trend in media consumption is growing as both the use of social media and integration of social media in television content becomes ubiquitous. An online survey (N = 276) utilized Uses and Gratifications theory as a framework for examining motivations closely associated with television consumption and social media use. Multiple regression results reveal that Passing Time and Personal Innovativeness positively influence the likelihood of using Social TV.

Keywords: Social TV, Uses and Gratifications, Self-efficacy

Seventy percent of Americans actively use social media to find and share information, connect with one another, engage content, and entertain themselves while watching television (Pew Internet, 2018). This practice is now commonly known as Social TV viewing and is defined by scholars as "using communication technology to connect TV-viewers, in order to create remotely shared experiences around TV content" (Harboe, 2010, p. 7). Social TV includes a range of behaviors through which online social interactions occur between viewers during the consumption of traditional linear TV via the integrated use of social media platforms, such as Facebook, Snapchat, Instagram or Twitter (Buscher, Schneider, & Uberheide, 2015).

Social TV also refers to the ecosystem of mobile phone applications, content and social media technologies surrounding linear TV programming that promotes communication and social interaction related to program content on social media (Gil de Zúñiga, Garcia-Perdomo, & McGregor, 2015). The term further describes any instance

when people meet to watch TV and interact with each other in a computer-mediated environment—either synchronously or asynchronously—over a distance or in a shared space (Mate & Curcio, 2009; Nee, 2013). This includes posting commentary, questions, photos, etc. related to actively viewed TV programming on social networking sites, like Twitter, Facebook, Instagram and Pinterest, or within mobile applications like Spoilit and Swarm (Raney & Ji, 2017).

Social media-based TV content—such as hashtags, memes, filters and apps, and engaging with real and fictitious characters—allows viewers from various locations to contribute to public discourse about the program being viewed. This interaction could involve known parties and contacts or total strangers on social networks. Illustrating the magnitude of this trend, a recent report on the most popular programs on social media noted an average of 2.6 million social media interactions cross Facebook and Twitter about each new episode of "Game of Thrones" on HBO just before, during and after each broadcast; this behavior is most prevalent among younger TV viewers, specifically 18 to 44-year-olds (Nielsen, 2017).

Despite the popularity of Social TV, there are few quantitative, empirical studies that aim to examine the individual differences and motivations that predict Social TV consumption. Only a handful of studies address the relationship between those differences and the gratifications sought from Social TV viewing (Han & Lee, 2014; Kraemer, Winter, Benninghoff, & Gallus, 2015; Nee, 2013; Raney & Ji, 2017). To that end, the present study applies Uses and Gratifications (U&G) theory to help clarify the gratifications derived from Social TV viewing among young adults in the U.S. The study also seeks to explore the potential for individual differences in personality commonly associated with social media and new communication technology use to predict self-reported Social TV viewing behaviors. Specifically, we examine the role of established motivations for TV viewing, including information seeking, convenience, entertainment, passing time and social utility; these dimensions are considered alongside personality predictors of new media and communication technology adoption, namely innovativeness, Internet self-efficacy, and need for control in predicting Social TV use.

LITERATURE REVIEW

Simultaneous social media use while watching TV has emerged as a common form of media multitasking—the simultaneous use of more than one form of media—in recent years, particularly among young adults who are the most avid users of social media (Pew Internet, 2018). Nielsen data (2013, 2017) reveals that nearly 80% of U.S. mobile device users regularly check their tablet or smartphone while watching TV and another 40% regularly check social media on their devices while watching TV; some 25% of people aged 18 to 34 use social media to comment about what they like/dislike in a story line while watching TV. However, adults ages 35 to 44 are the most likely to engage in social media discussions about TV programs with their connections on social media (Nielsen, 2017).

This trend also exists globally, with the Internet Advertising Bureau (2014) reporting that 44% of U.S. adults older than 18 regularly do Media Multitasking, while 82% do so at least occasionally. In Europe, 53% of all adults—and 84% of 16 and 24-year-olds—watch TV and are online at the same time (IAB, 2014). More broadly, IPSOS found that 97% of Twitter users have several screens open (e.g., tablet) while watching TV; 60% of Twitter users have a strong interest in TV shows, a level 20% higher than nonusers (MacMillan, 2015). Ring Digital reports that 23.9% of U.S. adult Internet users engaged with Social TV in the last month, having "used a social platform to vote, post, share or otherwise comment on their TV-viewing activities" (Baumgartner, 2017, p. 1). Key audience effects uncovered in that study included increasing their viewing of live TV, enhancing enjoyment of TV, helping shows get discovered and increasing the amount of time spent with TV.

Research has also shown that these Social TV conversations and activities are highly correlated with TV ratings, while tweeting about live TV may affect program engagement and can be more powerful at influencing viewers than traditional commercials (Baumgartner, 2017; MacMillan, 2015). This has made Social TV a pivotal area of research for both marketers and producers of linear content, with the country's major broadcast networks—including ABC, CBS, NBC, FOX, ESPN, MTV, BET, TNT and others—actively engaging TV audiences on social platforms (Nielsen, 2017). But the reasons why individuals engage in this behavior, what media consumption needs are being

met, and what types of individuals are most likely to engage in this type of media multitasking have not been fully explored in U&G research.

Uses and Gratifications Theory

U&G theory has long been applied to help researchers understand the growth of new media and communication technologies and individuals' motivations for using them. Originating with the work of Katz and Gurevitch (1973) and Blumler and Katz (1974), the theory is built on the idea that specific gratifications draw audiences to particular media, and that those benefits satisfy deep-seated social and psychological needs (Ruggiero, 2000). The theory posits that media users play an active role in choosing and using the media; they consume and make a conscious effort to identify and seek the media that best fit their needs (Katz & Gurevitch, 1973).

The theory also suggests that media gratifications can be derived from at least three distinct sources: media content, exposure to the media, and the social context that typifies the situation of exposure to different media (Katz & Gurevitch, 1973). Central to this idea is the assumption that audiences are all passive and/or active to varying degrees, and that a state of activity moderates the uses and gratifications derived from the media they consume. This aspect of U&G theory makes it a useful lens through which researchers should explore Social TV all across three of those contexts—content, platform and social—which are central to the third-party discussion and interaction on social networks that comprise Social TV viewing.

The vast body of literature on media uses and gratifications has produced a five-category framework for benefits obtained through media use, i.e. social media consumption and linear TV viewing (Raacke & Bonds-Raacke, 2007). These categories include cognitive needs (information acquisition, knowledge acquisition, and understanding), affective needs (emotional needs, i.e. pleasure, entertainment and aesthetics), integrative (personal) needs (wanting to be part of a group, sense of belonging) integrative (social) needs (to appear credible and confident, to have high self-esteem) and diversion needs (passing time, relaxation, escape, diversion) (Raacke & Bonds-Raacke, 2007).

Some of the gratifications specifically associated with social media use include self-expression, social interactions, entertainment, passing time, information seeking,

professional advancement (Trammell, 2006), maintaining pre-existing social connections (Ellison, Steinfield, & Lampe, 2007); and finding others with similar interests (McKenna, Green, & Gleason, 2002). In addition, interactions on SNS may make offline relationships stronger, or can yield online relationships that are stronger than face-to-face ones (McKenna et al., 2002). This is likely due to the fact that online interactions tend to generate more self-disclosure than offline interactions, which can allow people to feel closer and connected to more friends online than they would in offline scenarios (Tidwell & Walther, 2002).

Sites like Facebook tend to be associated with more social gratifications than other sites, like keeping in touch with others and learning about social events, whereas micro-blogging tools like Twitter tend to be more closely tied to self-expression and learning (Hughes, Rowe, Batey, & Lee, 2012). Findings on the gratifications of user-generated content communities--such as YouTube, Instagram, and blogs--are less definitive, but posting behaviors are linked with social utility motivation (e.g., Hunt, Atkin & Krishnan, 2012; Lee, Atkin, & Christensen, 2019). By contrast, a separate content analysis of 358 blogs uncovered six major motivations for blogging; they were: self-expression; social interaction; entertainment; passing the time; information; and professional advancement (Trammell, 2006). Castro and Straubhaar's (2018) analysis of Social TV posts found that period programs garner more comments related to social issues than do those addressing the present, although "viewers enjoy programs critical of current social issues (e.g., political corruption)" (p. 3368).

Social TV Uses and Gratifications

Some scholars have begun to examine the factors that influence Social TV viewing, but most of that work has been quite varied in scope. Recent studies have examined the types of social media behaviors in which individuals engage when viewing linear TV, including the nature of Social TV-related conversations (Andrejevic, 2008; Buscher et al., 2015), the diffusion of Social TV as a technology (Lee et al., 2019), the type of TV content that incites social media discussion, and platform choices or preferences among Social TV users (Guo & Chan-Olmsted, 2015). Content analysis of Social TV conversations have also revealed that users often want to feel connected to a larger community through TV discussion online (Schirra, Sun, & Bentley, 2014; Cohen & Lancaster, 2014; Buschow et

al., 2014) and are motivated by the desire to seek/share information, observe others and learn about programs (Schirra et al., 2014; Han & Lee, 2014; Kraemer et al., 2015). Conlin, Billings, and Averset (2016) found that fear of missing out (FOMO) to be a key predictor of social media use as it relates to TV. That said, although the current body of Social TV research covers extensive ground, this emerging corpus remains limited in terms of its depth and replication of findings.

However, two studies show particular promise in enhancing our understanding of Social TV consumption processes. In an analysis of U.S. and European Social TV users, Pagani and Mirabello (2011) found that--among the factors shown to most clearly predict Social TV viewing–were: (1) personal engagement with content, engagement with one's own social media community and (2) perceived enjoyment derived from that engagement. Their work also identified six distinct categories of Social TV related behaviors online—creating, criticizing, collecting content, joining groups, spectating, and inactivity (i.e., lurking)—which supports conceptions outlining user personas, motives and benefits related to Social TV viewing (Pagani & Mirabello, 2011).

Guo and Chan-Olmsted (2015) build on Pagani and Mirabello's work, applying their findings related to engagement and content perceptions with audience attributes and long-established motivations for both TV viewing and social media use. Their survey of Social TV viewing found that use was predicted most powerfully by passing time, personal innovativeness and social utility motives that were related to content-related predictors (i.e., program affinity, program involvement and genre preference) (Guo & Chan-Olmsted, 2015).These studies underscore the utility of U&G Theory for understanding Social TV viewing.

Taken together, the body of research on Social TV points to the complex interplay between factors related to motivation, program content and engagement. Based on the U&G conceptions and findings outlined above, we assume that Social TV use will be driven by the strength of one's viewing motivations. We further assume that viewing motivations are interrelated (e.g., Ruggiero, 2000). But, explorations of Social TV motivation remain incomplete. So, the present study builds on this assumption—that media use is predicted by the strength of audience motivations—to propose the following hypotheses:

Hypothesis 1: Social Utility motivations predict Social TV viewing.

Hypothesis 2: Entertainment moti-vations predict Social TV viewing.

Hypothesis 3: Passing Time motivations predict Social TV viewing.

Hypothesis 4: Convenience motivations predict Social TV viewing.

Hypothesis 5: Information Seeking motivations predict Social TV viewing.

Finally, given the absence scholarly work in this area, we propose a research question about the general media consumption and use habits of Social TV viewers:

RQ1: Are there clear preferences for Social TV applications, social media platforms, program content and Internet enabled devices among Social TV users?

Individual Differences and Social TV Viewing

Rosengren (1974) expanded the utility of U&G theory as a framework for understanding media consumption behaviors by popularizing the notion that motivation does not exist in a psychological vacuum. Individual differences as well as contextual societal factors influence our motivations for and gratifications sought from media use, which underscores the importance of including ascriptive factors and personality traits when modeling media consumption behaviors. For Kim, Song, and Lee (2017), for instance, extroversion positively influenced Social TV viewing experiences. Further, researchers (Lin et al., 2015; Sherry, 2004) found that consumption of new media modalities is influenced by one's skill at media use, which suggests that behavioral tendencies and abilities related to Social TV viewing may also be a predictive factor for its use. But this assumption has not yet been examined in the context of Social TV.

The importance of considering individual differences is further supported by recent research suggesting differences in information processing styles and approaches between those who engage in regular media multitasking and those who do. For instance, those who engage in heavy media multitasking are more easily distracted by environmental stimuli and worse at tasks switching than those who do not (e.g., Ophir, Nass, & Wagner, 2009). Yet, few published studies merge traditional U&G theory with the literature on individual differences in personality and media adoption or new media multitasking.

Innovativeness, Internet Self-efficacy and Need for Control

Three related individual differences that are commonly associated with the use of new communication technologies and can thus be explored when modeling Social TV

adoption include innovativeness, Internet self-efficacy and the Need for Control. These variables have been shown to be highly correlated to the uses of new media within the context of social media activities and media multitasking behaviors (e.g., media co-viewing) (e.g., Atkin, Hunt, & Lin, 2015). It is useful, then, to explore how each construct can help explicate Social TV use.

Innovativeness. Innovativeness is described as "the risk-taking propensity that exists in certain individuals, but not others" (Agarwal & Prasad, 1999, p. 361). Research on the diffusion of innovations and the relationship between personality traits and new media adoption has shown that innovative individuals are able to cope with high levels of uncertainty and therefore more likely to seek out new ideas, information and technologies (Lu, Yao, & Yu, 2005; Agarwal & Prasad, 1999). This assumption has been extended to include mobile and social media adoption as well, with personal innovativeness being shown to predict the perceived usefulness of new communication technologies, thereby increasing the likelihood of adoption (e.g., Atkin et al., 2015; Lu et al., 2005).

Given the various functions of Social TV as a potential means of entertainment, cognitive stimulation, learning, social interaction, etc., innovativeness may lead users to more easily envision an array of benefits derived from its use, and positively influence adoption. Researchers have found innovativeness to be a predictor of Internet and social media related activities such as forwarding content and chatting with others (Haridakis & Hanson, 2009; Sun, Youn, Wu, & Kuntaraporn, 2006; Wu & Atkin, 2017) and webcasting (Lin, 2004; Lin, 2006). But, the relationship between innovativeness and Social TV adoption and use is not clearly established in the literature. Self-efficacy is one concept that can shed light on audience use of emerging channels like Social TV.

Internet Self-efficacy. Internet self-efficacy is the "what a person believes he or she can accomplish online now or in the future" (Eastin & LaRose, 2000, para 4). The concept derives from Bandura's (1986) Social Cognitive Theory (SCT), which posits self-efficacy as a critical factor in determining whether or not individuals decide to change or adopt behaviors. Internet self-efficacy has been shown to predict adoption and use of functionally similar media. Such research suggests that innovativeness may be relevant to the use of a relatively new online phenomenon such as Social TV, but there is little evidence to suggest how strong of a relationship might exist. As such, it is included in this study to help

understand the extent to which users' level of Internet self-efficacy might influence innovativeness and motivation for Social TV viewing as the behavior becomes ubiquitous.

Need for Control. In research on new communication technology adoption, the need for control over media, "reflects one's belief in the relative power to control events in one's life" (Levenson, 1974). Largely associated with systems theory, and found in studies that follow the Technology Adoption Model (TAM) of new media and communication technology adoption, this trait is positively correlated with excessive TV viewing (Wober & Gunter, 1986), attitudes toward the Internet and its content (e.g., Hoffman, Novak, & Schlosser, 2003), socializing with others (among males) and the use of the social media video sharing platform YouTube (Haridakis & Hanson, 2009). Given the fact that Social TV encompasses each of these features—TV viewing, the Internet, socializing, and social networking—it represents another possible predictor of Social TV viewing.

Taken together, the aforementioned findings underscore the need to examine the motives and gratifications associated with Social TV viewing in wider context, bringing motivations and individual differences together to define more comprehensive models of prediction. We assume that Social TV facilitators of media adoption uncovered with functionally similar media—including self-efficacy and innovativeness—would also apply in this context. The same would be true of need for control, given the affordances that Social TV presents in aiding uncertainty reduction regarding favorite programs (e.g., discussion of plotlines). Based on the theory and research outlined above, then, it is posited that:

Hypothesis 7: Innovativeness is positively related to Social TV viewing.

Hypothesis 8: Internet self-efficacy is positively related to Social TV viewing.

Hypothesis 9: The Need for Control is positively related to Social TV viewing.

Finally, a question remains concerning whether Social TV is still regarded as a novel innovation, in which case social locators like education could facilitate use (e.g., Lin, 2006). However, other work suggests that demographic differences level as a media platform reaches the "flat" part of the diffusion curve that it is approaching. Given the dearth of theory and research in this domain, the second research question will focus on the role of demographics in determining Social TV viewing:

RQ 2: Are Social TV viewing and related media consumption behaviors differentiated by social locators (i.e., race, gender, age and/or education?

METHODS

An online survey was conducted using Qualtrics survey software. Participants were recruited at a large state university in the Northeast, using a convenience sample derived from an undergraduate student research participant pool. Given that this "digital native" user cohort also mirrors the preponderance of social media and Social TV users (e.g., Baumgartner, 2017), the sample was also deemed a purposive vehicle for exploring underlying media use dynamics. Students received course credit only in exchange for their participation in the study. Participation was restricted to U.S. residents with IP addresses located on the continent. Only those over the age of 18 were included and a total of 342 participants took the survey, of which 276 were deemed usable and included in analysis.

The questionnaire consisted of 37 multiple choice and open-ended questions, 32 of which were used in this study. Questions measured a range of individual attributes commonly associated with media multitasking and social media use, adapted measures of media uses and gratifications, quantitative and qualitative questions about Social TV viewing habits and other media consumption behaviors. Basic demographic information including age bracket, annual income, race, gender, marital status and education level was also collected. The survey participants spent an average of 11 minutes to complete.

Participants

The participant pool was 53% male, 47% female, and predominantly white (64%). Other racial/ethnic groups represented in the sample included Asians (15%), African Americans (8%), and those selecting to identify as "Other" (4%). The dominant age group in the sample was 18 to 24 years old (99%). Education levels reported were "some college" (89%), and a "4-year degree" (10%), followed by 1% who identified as Masters, PhD or professional degree holders. Annual household income in the sample varied considerably, ranging from below $20,000 (8%), $21,000 to $39,999 (7%), $40,000 to $59,999 (11%), $60,000 to $79,999 (15%), and $90,000 or more (48%). Finally, the majority of participants were single (98%) and the remainder were married or cohabitating with a partner (2%).

Measures

Social TV Motivations. A set of 42 items measuring motivations and gratifications for media use were derived from several prior studies, including agreement statements pertaining to convenience, social companionship, entertainment, enjoyment, identity formation, learning social norms, passing time, and knowledge building (Papacharissi & Rubin, 2000); educating others and educating one's self, self-expression, para-social interactions, information seeking, professional advancement (Trammell, 2006), maintaining pre-existing social connections (Ellison et al., 2007) finding others with similar interests (McKenna et al., 2002) and self-disclosure (Tidwell & Walther, 2002). From this review, five motivation scales were adapted for social utility *(M = 2.76,* SD = 1.39, ˛ α = .96), convenience (M = 2.87, SD = 1.48, α = .94*),* passing time (M = 5.39, SD = 1.13, ˛ α = .82), entertainment (M = 5.34, SD = 1.10, ˛ α= .83), and information seeking (M = 4.37, SD = 1.18, α = 91). Responses were captured on a 7-point scale, where 7 = Strongly Agree, 6 = Agree, 5 = Somewhat Agree, 4 = Neither Agree nor Disagree, 3 = Somewhat Disagree = 2 = Disagree and 1 = Strongly Disagree.

Innovativeness. Innovativeness was measured using seven Likert-type agreement items, including "I like new challenges," "I stay curious," "I seek new ideas," "I learn new skills," "I like to keep up with new innovations," "I like to keep up with scientific progress," and "I like to keep up with computer technology." Responses were captured on a 5-point scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neither Agree nor Disagree, 2 = Disagree and 1 = Strongly Disagree (M = 3.78, SD = .64, α =.87).

The Need for Control. Items were adapted from Verkasalo, López-Nicolás, Molina-Castillo, and Bouwman (2010) to assess the need for control over media within the context of TV viewing, using seven items on a 5-point scale, including "I like to watch my favorite shows when I want to watch them," "I like being able to control the pace at which I view my favorite shows," I like being able to watch my favorite shows over and over," "I enjoy watching several episodes of my favorite show at the same time," "I enjoy being able to watch TV on my phone," "I enjoy watching TV on a computer or laptop," "I like to watch TV without advertising," and "I like being able to control the advertising I see." Responses were captured on a 7-point scale (7 = Strongly Agree thru 1 = Strongly Disagree (M = 5.44, SD = 1.00, ˛ α = .86).

Internet Self-efficacy. Internet self-efficacy measures were adapted from LaRose and Eastin's (2004) 8-item scale. The respondents rated their level of agreement with efficacy statements relating to Internet use, including "I am typically good at…:" "understanding words and terms relating to internet hardware," "understanding words and terms relating to internet software," "describing functions of the internet," "trouble-shooting internet problems," "explaining why a task will not work on the internet," "learning advanced skills within a specific internet platform or website," and "turning to an online discussion group or forum when I need help." Responses were captured on a 5-point scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neither Agree nor Disagree, 2 = Disagree and 1 = Strongly Disagree (M = 3.36, SD = 0.78, α .91).

Social TV Use. To assess Social TV use/multitasking, respondents were asked "How regularly do you use social media to discuss TV shows as you're watching them?" Participants were asked to answer those two questions on a 5-point scale, where 5 = Always, 4 = Most of the time, 3 = Some of the time, 2 = Rarely and 1 = Never (M = 3.31, SD = .92).

General Media Use Behaviors. Participants were asked to quantify their time spent on social media and watching TV, how they typically access the Internet, their preferred social networking sites, the number and types of social media platforms they use, their preferred apps and/or social media platforms for Social TV viewing, and favorite kind of TV content (i.e., drama, comedies, reality TV shows, sports, news, etc.).

Demographics. Finally, participants were asked to provide the demographic information categorized above—including their age bracket at the start of the survey—followed by questions about their annual income, race/ethnicity, gender, marital status and education at the end of the survey. Further information on scaling of these variables is in Table 1.

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Innovativeness	273	1.00	5.00	3.7750	.64569	-.389	.147	.846	.294
Internet self-efficacy	270	1.00	5.00	3.3565	.78497	.026	.148	-.094	.295
Social Utility	263	1.00	7.00	2.7608	1.39679	.508	.150	-.417	.299
Information Seeking	265	2.27	7.73	4.3763	1.18800	.070	.150	-.678	.298
Passing Time	266	1.75	7.88	5.3999	1.13428	-.388	.149	-.079	.298
Convenience	273	1.00	7.00	2.8711	1.48267	.408	.147	-.694	.294
Entertainment	267	1.00	7.00	5.3408	1.10809	-.551	.149	.192	.297
Age	284	2.00	4.00	2.0141	.14492	11.397	.145	139.701	.288
Race	276	1.00	7.00	1.9638	1.51554	1.621	.147	2.207	.292
Education	274	1.00	7.00	2.8321	.79439	1.325	.147	3.695	.293
Gender	271	1.00	2.00	1.4686	.49994	.126	.148	-1.999	.295
Social TV (DV)	276	1.00	5.00	3.3116	.92874	-.275	.147	.354	.292
Control over the Medium	274	1.71	7.00	5.4432	1.00500	-.541	.147	.056	.293
Valid N (listwise)	214								

RESULTS

Multiple regression was used to test study hypotheses. The assumptions of linearity, normally distributed errors and un-correlated errors were met. Table 2 displays a preliminary correlation analysis of all variables included in the hypotheses. The analyses showed only small to moderate bivariate relationships between the independent variables, but inspection these results alongside V.I.F. indices (< 5.0) did not reveal any issues with multi-collinearity.

Table 2
Correlation Matrix

	Inn.	Int. Self-eff.	Con-trol	Soc. Util.	Info-seek	Pass-Time	Conve-nience	Ent't	Age	Race	Edu	Gender	Social TV
Innovativeness	1	.449**	.495**	-.101	-.018	.220**	-.075	390**	.106	182**	-.025	.050	.156**
Internet Self-eff.		1	.312**	.079	.024	.084	.035	214**	.150*	-136*	.048	-.171**	.142*
Control (medium)			1	-.230**	-.148*	.436**	-.188**	603**	.087	164**	-.055	.197**	.140*
Social Utility				1	.800**	.253**	.816**	-126*	.155*	.156*	.073	.034	-.017
Info-seeking					1	.337**	.830**	-.016	.142*	.121	.069	.028	.002
Passing Time						1	.230**	.58**	.087	-.078	-.004	.125*	.165**
Convenience							1	-157*	.123*	.144*	.071	.056	-.001
Entertainment								1	.105	-143*	-.007	.068	.112
Age									1	.117	334**	.106	-.033
Race										1	.084	.052	-.214**
Education											1	.007	-.075
Gender												1	.048
Social TV Use (DV)													1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

U&G Predictors of Social Viewing

Using the enter method, and controlling *for age, race, education and gender,* the theorized prediction model was tested to measure the effect of our hypothesized motivation variables on our dependent variable, Social TV Viewing. The first set of hypotheses posited that social utility (H1), entertainment (H2), passing time (H3), convenience (H4), information seeking (H5) positively predict Social TV viewing behavior. The overall regression model fit was significant (Adj. $R^2 = .05$, $F(5, 262) = 10.48$, $p = .01$). Per unique individual predictors, only passing time (ß = .23; p. 01) emerged as a significant predictor. Other relationships were in the hypothesized direction, albeit insignificant (i.e., social utility (ß = .03), information seeking (ß = .09), convenience (ß = .04) and entertainment (ß = .07) motivations were all positively related Social TV Viewing). This leaves only Hypothesis 3 with support.

Personality Predictors of Social TV Viewing

To test our second set of hypotheses, the same regression procedure was used for personality variables. It was posited that innovativeness (H6), Internet self-efficacy (H7) and need for control (H8) positively predict Social TV viewing. Support for these hypotheses was also mixed. The overall model was significant (Adj. $R^2 = .033$, $F(3, 262) = 6.20$, $p = .01$). However, innovativeness was the only unique significant predictor of Social TV Viewing in the model ($\beta = -.18$, $p = .01$), and in a direction opposite of that posited, leaving it without support.

To answer our research questions (RQ1 and RQ2), the results above were analyzed alongside demographic variables and responses to both quantitative and open-ended media consumption behavior and preference questions. The media consumption habits and preferences ranking highest among Social TV viewers were the subject of RQ1. Results show that Instagram (184), SnapChat (183), Facebook (177) and Twitter (145) were the most commonly-used platforms while watching TV. These were followed by YouTube (47%), Pinterest (20), Tumblr (31). The least mentioned social platforms were the two dominant Social TV apps at the time the survey was conducted: GetGlue (1) and Viggle (1). The "Other" response option included written mentions of an array of social media platforms designed for user-generated content creation and curation, including Reddit (6), Tumblr (1) and Vine (2); a discrete mobile phone application specifically designed for Social TV engagement called Twitch.tv (1); and the SMS-based chat app YikYak (3).

Turning to how Social TV users typically access the Internet while watching TV, most respondents cited mobile phones (127), laptops (117) and tablet/other mobile device (21), desktop computer (13) and web enabled TV sets (1). Regarding the kind of TV content participants viewed most, comedy (37%) Drama (27%), Sports (19%), Reality Shows (8%) were most popular, followed way behind by Soap Operas, Music/Theatrical Performances, News and Game Shows, (each < 1%). When asked how they consume news media specifically, 47% of participants cited social media as their primary source of news media, while 31% mentioned news websites and 14% said TV and cable news broadcasts. Some 45% of Social TV viewers reported watching between 1 and 3 hours of television per day, while 43% watched 1 hour or less per day, and about 11% watch 4 hours per day or more.

Per RQ2, race was the only unique individual social locator variable among demographic variables to emerge as a predictor of Social TV viewing ($\beta = -.19$, $p < .01$), as the inverse relationship with white/Caucasian status failed to attain significance. Gender, Age and Education showed no significant influence on Social TV viewing beyond their combined contribution to the full variable model.

DISCUSSION

The present study extends and provides support for applying media U&G to the domain of Social TV. Although the overall model was significant for the motivation and individual differences variables' influence on Social TV viewing, the variance explained by these models was relatively low. The modest explanatory power of motivation and individual differences, in particular, suggests that TV programs evoke different communication activities. Moreover, levels of engagement can influence the level of Social TV audience activity, an important component of gratifications (Blumler & Katz, 1974; Sherry, 2004). This dynamic is important, given that program content can vastly influence the cognitive and emotional needs shaping TV viewing behavior (e.g., Sherry, 2004; Guo & Chan-Olmsted, 2015).

Passing time emerged as the strongest single predictor among the hypothesized motivations. This is consistent with other examinations of passing time and related concepts, i.e., enjoyment, alongside individual differences, content features, and modality preferences (Bartsch, 2012; Nabi, Finnerty, Stitt, Halford, & Quintero, 2004; Nabi et al., 2006). The notion that individuals derive enjoyment is widely proven, but more empirical evidence on Social TV enjoyment and how it influences behavior related to use is needed to strengthen the validity of these assumptions.

Nevertheless, the penitential U&G theory represents an appropriate vehicle to enhance our understanding Social TV; that is, even critics of U&G theory agree that it is *most* useful when applied to understand individual's motivations for new information and communication technology use (Ruggiero, 2000). Although a straightforward and unilateral model of predictors did not emerge, this study offers some support for established notions about of what motivates people to engage in Social TV viewing behaviors, while providing a foundation for later work.

The inverse role of Innovativeness in predicting Social TV seemed counterintuitive, based on the long-standing work linking innovativeness to the adoption of such emerging platforms (e.g., Lin, 2004; Lin, 2006). Interestingly, innovativeness was modestly correlated with Social TV use in the bivariate analyses ($r = .156$; $p < .05$). But that relationship was reversed in the larger multivariate analysis. This tenuous relationship suggests that some Social TV viewers may be using the platform as a substitute for more technology savvy forms of online expression—where willingness to adopt other emerging channels is key—and maintain the collaborative viewing aspects of the more "continuous" linear TV medium.

Internet Self-Efficacy was positively related to Social TV viewing in the bivariate analyses ($r = .14$; $p < .05$), but failed to survive the controlling influence of other variables in the larger multivariate model. The concept has its roots in Bandura's (1986) SCT, which posits that individuals learn by observing the experiences and observations of others, and much of that learning is facilitated by media exposure and use. Widely accessible social media networks that connect individuals to others, in turn present an opportunity to observe and learn from others, which can have a profound effect on knowledge formation despite such individual factors as personal innovativeness. The desire to learn from others may, thus, also be a gratification sought from Social TV use and should be a more integral part of future inquiries that include self-efficacy related variables, despite having been omitted in this study (Dabbagh & Kitsantas, 2012).

The same is true of need for control ($r = .14$; $p < .05$), which is often included as an antecedent variable in social media studies that draw on the TAM perspective to explain motives for the adoption of new technologies. Social TV, however, is less of a new technology than it is a form of multitasking with two already ubiquitous technologies, therefore requiring little effort or knowledge to use. As such, TAM's capacity for utility in understanding Social TV viewing may be limited. The questionable relevance of the need for control is supported in this study by its insignificant beta weight as an independent predictor of Social TV. More broadly, the limited influence of long-standing predictors of new media adoption and use, the need for control over a medium and Internet self-efficacy underscores the need to consider other variables.

Study findings also point to the idea that these variables are mere components of a much more complex prediction model for Social TV effects requiring a more inclusive and carefully conceived theoretical framework. Past work (e.g., Atkin et al., 2015) suggests that some measures of adoption effectively function as proxies of social locators (e.g., socio-economic status or race). Importantly, Race was the most significant predictor among the demographic variables analyzed here (i.e., non-white/Caucasian status). This is consistent with recent usage data on both Social TV viewing and social media use in general, according to Pew Internet (2018). A similar trend exists with general viewing, as Nielsen TV ratings data shows that the most avid viewers of linear and streaming TV are African American adults (IAB, 2014).

With regard to study limitations, the lack of diversity in this sample constrains the generalizability of this study, as vast cultural differences in social media use and overall TV consumption exist between cultural, racial, ethnic and socioeconomic groups in the U.S. For instance, African Americans use of social media in general is equal to other groups, but their use of the platform Twitter in particular—the second most widely used online social network in Social TV conversation—is disproportionately higher than any other demographic group (Pew Internet, 2018).

In addition, although study scales were generally robust, the use of single items for certain measures constrains study reliability, particularly in relation to a complex construct like Social TV use. But such items are typically accepted as effective measures of self-reported facts, i.e., age, time spent on the Internet, etc. Future studies should aim to develop or implement new Social TV use related measures (e.g., Cohen and Lancaster's (2014) Co-viewing Orientation Scale)—or with reliable multi-item measures of Social TV use--to establish convergent validity.

Later such work could also profitably examine effects across differences in modalities (i.e., the potential differences in effect resulting from Social TV use by smartphone, tablet, laptops, or web-enabled TV sets) and disposition (alone, with others, at home or elsewhere). These factors have not been included in research on the motivations for Social TV use to date. Further examination of the relationship between motives, individual differences and the nature of content (genre, features, synchronous vs. asynchronous, etc.) is also warranted, given the myriad methods of social media and TV

integration being developed by industry, and the fluctuation of users from one social media platform to another.

Applied studies that incorporate individual user level data from Social TV applications, such as Spoilit, could help map specific Social TV features and attributes to motivations established in the scholarly literature. Further, this approach to creating a typology of Social TV application features—which aligns with established motivations--helps inform quantitative content analyses of app user analytics, which would provide behavioral evidence of the gratifications sought from Social TV viewing.

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