



Guilty Pleasure No More

The Relative Importance of Media Use for Coping With Stress

Robin L. Nabi, Debora Pérez Torres, and Abby Prestin[†]

Department of Communication, UC Santa Barbara, Santa Barbara, CA, USA

Abstract: Despite the substantial attention paid to stress management in the extant coping literature, media use has been surprisingly overlooked as a strategy worthy of close examination. Although media scholars have suggested media use may be driven by a need to relax, related research has been sporadic and, until recently, disconnected from the larger conversation about stress management. The present research aimed to determine the relative value of media use within the broader range of coping strategies. Based on surveys of both students and breast cancer patients, media use emerged as one of the most frequently selected strategies for managing stress across a range of personality and individual difference variables. Further, heavier television consumers and those with higher perceived stress were also more likely to use media for coping purposes. Finally, those who choose media for stress management reported it to be an effective tool, although perhaps not as effective as other popular strategies. This research not only documents the centrality of media use in the corpus of stress management techniques, thus highlighting the value of academic inquiry into media-based coping, but it also offers evidence supporting the positive role media use can play in promoting psychological well-being.

Keywords: media use, stress management, coping, psychological well-being

Stress is an inherent part of life, necessitating effective management strategies to mitigate its negative effects, including threats to physical and subjective well-being (Diener & Chan, 2011). Although numerous strategies for managing stress, such as seeking social support, cognitive reappraisals, and general relaxation methods, have received substantial attention (e.g., Grossman, Niemann, Schmidt, & Walach, 2004; Turner, 1999), the use of media for purposes of stress management has been virtually ignored in the coping literature. Communication scholars have occasionally explored how media use may help mitigate stress and aid in recovery (Kubey & Csikszentmihalyi, 1990; Reinecke, 2009); however, this work is still in its very early stages. Indeed, the fundamental question of where media use fits *relative to* other stress management strategies has yet to be addressed. Yet without placing media use within the broader context of other stress management techniques, it is impossible to fully grasp the importance of media use as a coping tool. And given the modern media-saturated environment, understanding how such exposure and use may benefit consumers' well-being is of tremendous societal value.

This research aims to examine the coping strategies people adopt to manage their stress, and the relative importance of media use within this larger context. We do so with two samples of participants – one experiencing typical daily stresses (i.e., students) and the other experiencing a significant life stressor (i.e., breast cancer patients). We augment

this inquiry by examining individual differences that might motivate media consumption for stress management (Study 1) and how effective consumers believe media use is in achieving their stress management goals (Study 2).

Defining Stress

Stress is conceptualized as the mental or somatic consequence that emerges when internal or external conditions disrupt the equilibrium between the demands one experiences and one's resources to manage those demands (Lazarus, 1966; Selye, 1982). Stress can result from a range of different perceptions, including those related to threat (i.e., an impending negative event), harm (i.e., an experienced negative event), loss (i.e., a missed positive condition), or challenge (i.e., a difficult situation that may yield benefit). As such, stress is not by definition a negative experience. Rather, the nature of the appraisals of the environmental circumstances relative to one's goals determines its valence.

Although stress is beneficial for mobilizing resources and motivating preparatory behavior, overwhelmingly stress is viewed as a psychological state to be managed given the cognitive and physiological disruptions it creates, which may ultimately undermine subjective and physical well-being (Carver, 2007; Cohen & Herbert, 1993). Indeed,

continuous exposure to stressful events can impair cognitive functioning and mental health across the life span (for a review, see Lupien, McEwen, Gunnar, & Heim, 2009). Further, stress is broadly immunosuppressive. Thus, its chronic activation contributes to immune system-mediated illness, such as infectious and inflammatory diseases, heart disease, immune disorders, and cancer (e.g., Carver, 2007; Sapolsky, 1998).

Stress-Coping Strategies

Concern over the emotional and physiological harm associated with stress has generated deeper attention to both the need for recovery to enhance well-being (e.g., Sonnentag, 2001) as well as the more active process of coping, or one's cognitive and behavioral efforts to manage demands that are appraised as taxing or exceeding one's resources (Lazarus & Folkman, 1984). Regarding recovery, evidence suggests that how people spend their leisure time indeed influences their well-being. For example, Sonnentag's (2001) diary study revealed that performing work-related activities during free time negatively influenced well-being, whereas engaging in low-effort, social, and physical activities improved well-being. These latter activities, although perhaps not fully motivated by or consciously used to address stress, demonstrate that the actions people take during their free time influences the degree of stress recovery.

From the coping literature, such efforts, or coping strategies, are often categorized as either *problem-focused*, which aim to manage external aspects of the stressor, or *emotion-focused*, which aim to regulate the internal consequences of the stressor. Alternate classifications also exist, most notably approach or avoidant coping, referring to cognitive and emotional activity oriented toward or away from a stressor, respectively (Roth & Cohen, 1986). Generally speaking, problem-focused and approach strategies have been linked to more positive outcomes compared with emotion-focused and avoidance strategies, including reduced negative affect and enhanced sense of control and mastery (e.g., Baker & Berenbaum, 2007).

Across these broad classification categories, numerous more specific stress management approaches are distributed. However, the literature is somewhat fractured in its discussion of individual strategies, given the wide range of contexts in which stress has been studied. In other words, a comprehensive list of specific stress management techniques is not available (Skinner, Edge, Altman, & Sherwood, 2003). Still, several coping techniques have repeatedly surfaced in the extant literature. Seeking social support from others is one of the most well-studied strategies with very broad application (e.g., Turner, 1999) as are mindfulness

and relaxation practices (e.g., Grossman et al., 2004) and cognitive approaches, such as reappraisal of the stressor and problem-solving (e.g., Roesch, Weiner, & Vaughn, 2002). In the context of coping with illness-related stress, information-seeking and cognitive escape have also emerged as key stress-management techniques (Dunkel-Schetter, Feinstein, Taylor, & Falke, 1992; Felton, Revenson, & Hinrichsen, 1984). Other notable strategies include religious practice, seeking financial support, and engaging in leisure activities (Pierceall & Keim, 2007). Importantly, although research primarily focuses on positive coping activities, several potentially harmful strategies have also been identified, including using drugs, alcohol, and tobacco (Pierceall & Keim, 2007).

Despite the wealth of extant research on stress-coping strategies, including the use of leisure activities, media use as a coping strategy has yet to be directly addressed in the coping literature. This is somewhat surprising given TV consumption is one of the most frequently enjoyed leisure activities cross-culturally (Kuykendall, Tay, & Ng, 2015) and the seemingly pervasive use of media to meet a full spectrum of psychological and practical needs generally. Media scholars, however, have sporadically discussed the role of media use in response to stress, as discussed next.

Media and Stress Management

Theoretically, the role of media use as a coping device is rooted primarily in its great capacity for providing diversion. This perspective traces back to the uses and gratifications (U&G) paradigm, which asserts that individuals are aware of their social, psychological, and biological needs. As such, they evaluate various media channels and content, assess functional alternatives, and select the media or interpersonal channel they believe will best meet their various needs (see Rubin, 2009, for a review). With diversion identified as a key psychological need, it stands to reason that the desire to reduce or manage stress would trigger this particular need, which would, in turn, motivate media selection. However, the U&G research does not address this point specifically.

Zillmann's (1988) mood management theory (MMT) addresses emotional needs more directly, asserting that people use media to modulate their affective states. Consequently, they will arrange their environments, including media options, to adjust a wide range of moods. He further argues that people may, but need not be, cognizant of the reasons for their choices. Thus, MMT suggests that those who are experiencing psychological stress, even if they are not attuned to it, might turn to media for relief.

Although MMT-based research does not directly address issues of stress management, empirical evidence

demonstrates that people do, in fact, turn to media in response to daily hassles and stress (e.g., Anderson, Collins, Schmitt, & Jacobvitz, 1996; Kubey & Csikszentmihalyi, 1990), even though there is no clear evidence for lasting stress relief. Indeed, Kubey and Csikszentmihalyi (1990) found that negative affect earlier in the day predicted subsequent heavier TV consumption. Further, participants reported greater relaxation during viewing, although feelings of stress returned after media exposure concluded. This finding is supported by Kuykendall and coworkers' (2015) meta-analysis of leisure and subjective well-being, which documents the low correlation between evaluative subjective well-being and time spent on leisure activity ($r = .08$). Given watching TV constitutes the most common leisure activity cross-culturally, they conclude that although TV viewing may be relaxing, it does not generate broad psychological benefits that translate into more lasting subjective well-being.

Still, contemporary research has begun to explore the more specific pathways through which media use might provide more enduring stress relief, focusing on how media consumption may aid in the stress recovery process through the replenishment of depleted physical, cognitive, and emotional resources. For instance, in his investigation of the role of videogame use in work-related stress, Reinecke (2009) found that individuals routinely played videogames after experiencing stress, and those who had stronger perceived recovery experiences after game play were more likely to play more after facing stress. Further, daily stress was positively related to videogame use for recovery, especially for those with less social support. Extending this research beyond perceived recovery experience, Reinecke, Klatt, and Krämer (2011) found that playing videogames aided in recovery measured objectively through cognitive performance. Further, Rieger, Reinecke, Frischlich, and Bente (2014) found that different types of films influence different aspects of recovery. Specifically, hedonic entertainment influenced relaxation and psychological detachment whereas eudaimonic entertainment related to mastery experiences. Thus, some evidence supports the benefits of different media-based entertainment experiences on key factors underlying psychological well-being, at least in the short run.

To recap, the coping literature has failed to directly address media use as a viable avenue for mitigating stress, at best conflating it with general leisure activities. Although media scholars have identified media consumption as a potential resource for stress management, the related research has been sporadic, with careful attention emerging only recently and in isolation of other stress management strategies. Thus, some very basic questions about media use for coping with stress remain unanswered, most centrally: How often do people turn to media to help manage

stress and how does this fit within the repertoire of stress management strategies in terms of frequency and effectiveness? In light of the public's extensive use of a broad range of media tools, understanding how such use relates to experiences and management of stress would not only expand the coping literature to reflect more modern methods of communication but would also offer important insight into the ways in which media use may benefit users' psychological, and perhaps even physical, well-being. This research initiates an integration of these bodies of literature by examining where media use fits into the corpus of stress-coping strategies, by whom, and to what effect. Specifically, we ask:

Research Question 1a (RQ1a): How frequently is media use mentioned as a stress-coping strategy relative to other strategies?

The role of individual differences in the use of media for coping purposes is also salient. It is well-documented that individual differences influence media selection as well as the use of media for relaxation (see Krmar, 2009, for a review). It is further well-documented that personality and individual differences are associated with different methods of coping with stress (Carver & Connor-Smith, 2010). For example, meta-analytic work has linked optimism to the use of more engagement and problem-focused coping strategies whereas neuroticism has been linked to disengagement strategies (Carver & Connor-Smith, 2010). As such, an interesting question arises as to whether individual difference or trait variables influence media use specifically for coping purposes. Thus, we ask:

Research Question 1b (RQ1b): Are there individual differences that are associated with frequency of media use as a stress-coping strategy?

Frequency of use may tell us how often media may be selected for coping purposes. However, given individuals often use multiple coping strategies when dealing with stressful events, understanding how media use relates to the use of other coping strategies is of great importance. That is, it is not enough to simply know how often media is used relative to other strategies. We must understand whether that use serves a complimentary or compensatory function within the stress management process and whether typical media use patterns influence selection of media for coping purposes. We explore both of these issues by asking:

Research Question 2 (RQ2): To what other stress management strategies does the coping-driven media use strategy most closely relate?

Research Question 3 (RQ3): Do general patterns of media use relate to media use for stress management?

Finally, if media use is initiated during times of stress, it is important to determine not only if it seems effective in mitigating stress but also whether it is more effective or less effective than other stress-relieving activities. Thus, we ask:

Research Question 4 (RQ4): Do those who use media to cope with stress find it effective relative to other strategies?

For our inquiry, we have chosen two quite different samples. In Study 1 (designed to answer RQ1–3), we focus on college students, who face numerous daily stressors. In Study 2 (designed to address, RQ1–2 and RQ4), we focus on breast cancer patients, who are also dealing not only with daily hassles but also with a significant health threat. By comparing these very distinct groups' use of media for coping, we will be better positioned to provide more meaningful insights into the relative importance of media as a stress-coping tool.

Study 1 Method

Participants and Procedures

In Study 1, 421 undergraduates completed an on-line survey on health and well-being in exchange for research credit. The majority of participants were female (77%). Their average age was 20 years ($SD = 2.42$), and 57% were White. College students are an excellent sample to study stress given they face numerous stressors, including living away from home, navigating a new social environment, and managing challenging academic work (e.g., Ross, Niebling, & Heckert, 1999). Additional stresses arise as students consider careers, encounter different worldviews, manage romantic relationships, and deal with numerous minor hassles (e.g., family obligations, minor illness, roommate conflicts). Indeed, as many as 75% of students are under moderate stress and 10–12% are extremely stressed (Pierceall & Keim, 2007).

Measures

Stress Management Strategies

After answering a series of questions about physical health, participants were asked to respond to the following prompt: "In the past 4 weeks, what steps have you taken to manage your stress level? Please describe these steps in the space below." They were given no limit on how much they could

write. Given our goal of considering where media use fits within traditionally studied stress management techniques, our investigation eschewed molar classification groupings (i.e., emotion vs. problem focused) in favor of molecular categories. That is, we focused on what people *did* rather than the higher-order goal of those actions.

Guided by the extant literature as well as an examination of the responses received, we developed a codebook with 25 conceptually unique coping strategies (see Table 1). Most notably, *social support* included any attempt to manage stress through social interaction (e.g., talking to friends, family, significant others). *Cognitive strategies* included any attempt to think differently about the stressor (e.g., focus on one thing at a time, try not to think about it, engage in positive thinking or self-talk). *Calming behaviors* included any action designed to directly calm physiological arousal (e.g., yoga, meditation, conscious breathing). *Exercise* included any action designed to strengthen the body (e.g., working out, sports, walking). Central to this research was the category of *media use*, which included consumption of music, watching TV, playing video/computer games, reading books or magazines, surfing the Internet, and Facebook or other Internet use. The codebook is available at <http://www.osf.io>.

Each participant's responses were unitized by two trained coders to identify unique stress management strategies (Cohen's $\kappa = 1.00$, based on 10% of the sample). Each unit was then coded for both the general stress management strategy category represented (e.g., exercise, media use) as well as the specific action mentioned (e.g., running, TV). Given participants could mention multiple specific behaviors within a single stress management strategy (e.g., read, watch TV), the coding resulted in continuous measures of each strategy's use. Coder reliability was high (Cohen's $\kappa = .94$, based on 10% of the sample) with differences resolved through discussion.

Media Consumption Measures

Several media consumption variables were assessed, including frequency of TV, Internet, music, and videogame use. Consistent with extant research (e.g., Shrum, 1996), *daily television viewing* was measured by asking respondents to indicate how many hours of TV they watch during each of four time periods during the average weekday and weekend day. These data were combined (weighting the "average week day" items by a factor of five and the "average weekend day" items by a factor of two) to create an "average daily TV viewing hours" measure ($M = 2.58$, $SD = 1.98$).

Then, for a typical weekday and weekend day, participants were asked to estimate how many hours and minutes they spend using several media, including the Internet, videogames, and music. These measures were combined

Table 1. Frequency of spontaneous mentions of stress management strategies

	Study 1: Student sample	Rank	Study 2: Patient sample	Rank
Exercise	34.7%	1	65.7%	1
Social support	31.8%	2	58.8%	2
Calming behaviors	14%	6	46.1%	3
Media use	15%	5	32.4%	4
Religion	2.4%		23.5%	5
Sleep	25.4%	3	20.6%	6
Relax	10.9%	8	17.6%	7
Food	10.5%	9	12.7%	8
Cognitive strategies	16.9%	4	11.8%	9
Emotional expression	1.9%		9.8%	10
Counseling	2.1%		9.8%	10
Work/school	10.9%	7	7.8%	
Creative endeavors	6.4%		7.8%	
Reduce commitments	2.1%		7.8%	
Unhealthy behaviors	2.9%		6.9%	
Other	5.9%		6.9%	
Offer social support	0.2%		5.9%	
Enhancement behaviors	1.2%		4.9%	
Time alone	6.7%		2.9%	
Avoid substances	0.7%		2%	
Time management	10.2%	10	2.9%	
Shopping	1.4%		1%	
Cleaning	1.4%		1%	
Sex	0.5%		0%	
Medication	1%		0%	
Tackle problems	4.3%		0%	

Note. Frequencies are based on the number of participants who mentioned the strategy at least once. Percentages in bold reflect a top 10 strategy.

using the procedures described earlier, resulting in average hours of daily use for the Internet ($M = 4.05$, $SD = 2.24$), videogames ($M = .27$, $SD = .62$), and music ($M = 3.40$, $SD = 2.61$).

Individual Differences

Several individual difference and trait variables that relate to a person's experience of and orientation to stress were assessed. The 14-item global measure of *perceived stress* (Cohen, Kamarck, & Mermelstein, 1983) assesses how much stress individuals are aware of experiencing ($\alpha = .86$; $M = 2.78$, $SD = .54$, measured on 5-point scales). The Social Readjustment Rating Scale for minors (SRRS; Holmes & Rahe, 1967) assesses the experience of 48 *stressful life events* to tap into cumulative life stressors ($M = 21.22$; $SD = 7.10$). The 5-item Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) assesses the *global life satisfaction* component of subjective well-being ($\alpha = .90$; $M = 5.09$, $SD = 1.32$, measured on 7-point scales).

Given lower self-esteem may be associated with greater stress, the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) was included ($\alpha = .89$; $M = 5.62$, $SD = 1.02$, measured on 7-point scales). Given tendency to experience anxiety should correlate with perceived stress, the 20-item State-Trait Anxiety Inventory, Trait version (Spielberger, 1983) was included ($\alpha = .93$; $M = 2.38$, $SD = .69$, measured on 5-point scales). Finally, the 6-item Life Orientation Test - Revised (Scheier, Carver, & Bridges, 1994), which assesses trait optimism, was included given optimism may mitigate stress experiences ($\alpha = .87$; $M = 3.06$, $SD = .63$, measured on 4-point scales).

Results and Discussion

Media Use for Stress Management

RQ1a-b asked how frequently media use is mentioned as a stress-coping strategy relative to other strategies and by whom. Frequencies of the 25 coping strategies revealed that seeking social support and exercise were the strategies mentioned most often with each cited at least once by approximately one third of the sample (31.8% and 34.7%, respectively; see Table 1). Sleep was the next most popular strategy, mentioned at least once by 25.4% of the sample. Cognitive strategies, media use, and calming behaviors were mentioned by 16.9%, 15%, and 14% of participants, respectively. This evidence confirms not simply that media use is a common stress management technique but that its use is as prevalent as some of the traditionally researched and recommended strategies.

Next, partial correlations were run to determine if strategy mention frequency was associated with degree of perceived stress, controlling for gender and age. Of the top 10 coping strategies mentioned, none correlated with perceived stress ($r_p = -.02-.05$, $p > .20$), with the exception of media use, $r_p(417) = .11$, $p = .02$. Thus, perceived stress levels did not influence which strategies were implemented, with one modest exception. Those who felt more stressed were also more likely to report using media to cope with stress.

To address whether any individual differences might relate to coping-driven media use, correlations between media use for stress management and the demographic and trait variables were computed. Results revealed no significant associations between coping-driven media use and age, gender, optimism, trait anxiety, or self-esteem, suggesting media use as a coping tool is not privileged by certain personalities. Further, coping-driven media use was not associated with life satisfaction, $r(419) = -.01$, $p = .80$, or experienced stressful life events, $r(421) = -.05$, $p = .31$. In examining the remaining top 10 coping strategies, no significant associations emerged with any individual difference variable ($p > .05$), with the exception of two small

Table 2. Study 1 partial correlations among the top ten stress management strategies

Coping strategy	M	SS	E	S	C	CB	W	R	F	TM
Media use (M)	–	.21	.15	.00	–.01	.07	–.08	.06	.02	–.07
Social support (SS)		–	.15	–.03	–.08 [†]	–.05	–.14	.10	.09 [†]	–.14
Exercise (E)			–	.03	–.14	.13	–.04	.07	.14	–.08
Sleep (S)				–	–.07	–.01	.01	–.01	.19	–.04
Cognitive strategies (C)					–	.09 [†]	–.11	.03	–.08	–.06
Calming behaviors (CB)						–	–.01	–.06	.02	.00
Work (W)							–	–.07	.01	.05
Relaxing (R)								–	.00	–.09 [†]
Food (F)									–	–.02
Time management (TM)										–

Note. Correlations in bold are significant at $p < .05$, [†] $p < .10$. Control variables include age, gender, perceived stress, experienced stressful events, and personality traits.

gender-related findings. Specifically, women were more likely to use calming behaviors, $r(421) = .11$, $p = .03$, and men were more likely to use work to manage stress, $r(421) = -.12$, $p = .01$. In sum, the only individual difference finding pertinent to media use was that those higher in perceived stress were also more likely to use media as a stress management strategy.

RQ2 asked how the coping strategy of media use relates to other stress management strategies. Partial correlations were run among the top 10 stress management strategies (i.e., those mentioned by at least 10% of the sample), controlling for age, gender, perceived stress, experienced stressful events, and the range of personality traits to account for any modest influence they might have on the reported relationships (see Table 2). Results indicated that media use correlated most strongly with seeking social support, $r_p(409) = .21$, $p < .001$, and exercise, $r_p(409) = .15$, $p = .003$. All other associations were not statistically significant, $p > .05$. Given social support and exercise are the two most frequently used strategies by this group, these data support the centrality of media use in the stress-coping toolbox for this sample. Further, given media use, exercise, and social interaction are all staples in the lives of college students, these data suggest that students handle stress by relying more heavily on existing habits or behaviors.

General Media Consumption Patterns and Media Use for Stress Management

RQ3 asked whether general patterns of media consumption might relate to the selection of media for stress management purposes. Partial correlations revealed that TV viewing frequency, but not music, Internet, or Facebook use, was significantly associated with the use of media generally for stress management, $r_p(389) = .12$, $p = .02$, controlling for all the individual difference and trait variables noted earlier. Interestingly, TV viewing was negatively associated with a number of stressful life events, $r_p(389) = -.14$, $p = .007$,

although not with perceived stress, $p = .51$. These findings suggests that people dealing with real stressors may not have the time or motivation for as much TV viewing, but those who tend to watch more TV may see media generally as a potentially useful stress management tool. However, the lack of an association between TV viewing and perceived stress suggests that general TV consumption is not necessarily minimizing the psychological experience of stress over time. Of note, no meaningful relationships emerged between the media consumption variables and any other stress management strategy. Further, analyses based on weekday versus weekend TV viewing revealed parallel findings to the daily TV viewing analyses reported.

In sum, these data document that media use is a relatively common stress management strategy used by a wide range of individuals, and especially by those who are more frequent TV consumers generally. Further, for these undergraduates, media use seemed to expand the range of coping strategies used, although its association with perceived stress suggests that either media use is not a particularly effective means of reducing stress (otherwise we'd expect a negative association) or, more optimistically, that when people are aware of their stress, media is a readily available resource to turn to for addressing those feelings.

Regardless, this study offers clear evidence supporting the value of investigating media use as a stress management tool. However, these results are based on a college sample and thus may not generalize to other populations as the stressors they face, although often significant, may be unique to their life circumstance. Thus, investigating the posed research questions with a different sample is crucial. One group that sharply contrasts with college students includes those facing a health crisis or chronic disease. Not only is dealing with a health threat a significant stressor itself, but there are a host of others challenges (e.g., financial, relational, emotional, physical) that may compound that stress. Further, given that stress negatively

affects physiology in ways that can exacerbate illness, those facing serious illness may be particularly motivated to manage their stress and to do so in ways that differ from those dealing more with the stressors of daily life. Study 2, then, explores similar questions as Study 1 regarding media use for stress management, but with a sample of adult women dealing with a significant health stressor – breast cancer.

Study 2 Method

Participants and Procedures

In all, 102 adult women previously diagnosed with breast cancer were recruited from a California city cancer center to complete a paper survey on stress, coping, and cancer. Participants were on average 51 years old ($SD = 10.72$) and predominantly White (79%). Their average time since their cancer diagnosis was 36 months, with 49% diagnosed within the previous 12 months.

Measures

Perceived Stress

Participants completed the 14-item global measure of perceived stress ($\alpha = .86$; $M = 2.79$, $SD = .68$).

Stress Management Strategies and Effectiveness

Participants were then asked to respond to the following prompt: “In the past month, what efforts have you made to manage your stress level? Please list up to five stress management steps you’ve taken and describe each in the space below.” They were then asked to rate how *effective* they found each strategy to be on a scale of 0–10. The codebook from Study 1 was modified slightly to incorporate the different experiences of non-students that emerged (i.e., focus on work vs. school; vacation as a form of relaxation) and then used to unitize (Cohen’s $\kappa = 1.00$) and code the unique stress management strategies (Cohen’s $\kappa = .97$), with reliability between two trained coders based on 10% of the cases. Differences were resolved through discussion.

Finally, demographics were assessed, including age, race, time since diagnosis (in months), and cancer stage.

Results

Media Use for Stress Management

To answer RQ1a, frequencies of the 25 stress management strategies were examined. As in Study 1, exercise (65.7%) and seeking social support (59%) were mentioned most often (see Table 1). Calming behaviors ranked third (46%), followed by media use (32%), thus supporting the

important place of media use in the arsenal of coping strategies.

Next, some suggestive findings emerged regarding differences in coping strategy selection based on perceived stress level. Correlations between perceived stress and frequency of each of the top 10 coping strategies revealed those higher in perceived stress also engaged in less exercise, $r_p(97) = -.20$, $p = .05$, and fewer calming behaviors, $r_p(97) = -.19$, $p = .06$, although they were more likely to seek counseling, $r_p(97) = .18$, $p = .07$. Although, as in Study 1, those higher in perceived stress favored media use to a modest degree, $r(102) = .12$, $p = .24$, this relationship was not statistically significant in light of the smaller sample size. In sum, these findings suggest that media use is among the top four stress management strategies for this group, with limited evidence that it is favored by those who perceive themselves to be under greater stress.

RQ2 asked how coping-driven media use relates to the use of other stress management strategies. Partial correlations among the top 10 stress management strategies (i.e., those mentioned by at least 10% of the sample; see Table 3), controlling for perceived stress, time since diagnosis, and age, indicated media use was negatively associated with emotional expression, $r_p(96) = -.22$, $p = .03$, cognitive strategies, $r_p(96) = -.21$, $p = .04$, and social support, $r_p(96) = -.19$, $p = .06$. These findings suggest that this group may use media as a distraction from thinking about, talking about, and the emotions associated with their illness. Interestingly, although media use was not associated with exercise as in Study 1, exercise demonstrated a similar pattern of relationships with both cognitive strategies and emotional expression as did media use (see Table 3). Thus, exercise and media consumption appear functionally related with each arguably serving as a means of escape from the emotional challenges of serious illness.

Stress Management Strategy Effectiveness

RQ4 asked whether those who use media to cope with stress find it effective relative to other strategies. To answer this question, the average effectiveness score for each stress management strategy was calculated (see Table 4). Sample sizes differ across strategies as effectiveness ratings were provided only when a particular strategy was mentioned. Religion was cited as most effective for those who adopted this strategy, followed by exercise ($M_s > 7.5$). Social support, relaxation, and cognitive strategies formed the next grouping ($M_s = 7.17$ – 7.26) followed closely by media use and calming behaviors (both $M_s = 6.90$). Emotional expression and counseling formed the next grouping ($M_s = 6.45$ – 6.50) before a notable dip to the last two strategies of sleep and food consumption ($M_s < 6.0$). As we consider media use specifically, its effectiveness rating was significantly above the midpoint of the 0–10 scale, $M = 6.90$, $SD = 2.11$,

Table 3. Study 2 partial correlations among the top ten stress management strategies

Coping strategy	M	E	SS	CB	RG	S	R	F	C	EE	TH
Media use (M)	–	.08	–.19 [†]	–.10	.01	.07	.10	–.02	–.21	–.22	–.08
Exercise (E)		–	–.01	.05	–.06	.02	–.14	.02	–.29	–.14	.05
Social support (SS)			–	.11	.08	.01	–.24	.08	–.02	–.10	–.13
Calming behaviors (CB)				–	.02	–.05	–.13	–.15	–.11	.14	.01
Religion (RG)					–	–.14	–.06	–.01	.09	.11	–.14
Sleep (S)						–	.13	.18 [†]	–.13	.00	–.11
Relaxing (R)							–	–.04	–.10	–.09	.14
Food (F)								–	–.15	–.13	–.13
Cognitive strategies (C)									–	.19 [†]	–.06
Emotional expression (EE)										–	–.13
Therapy (TH)											–

Note. Correlations in bold are significant at $p < .05$, [†] $p < .10$. Control variables include perceived stress, time since diagnosis, and age.

Table 4. Study 2 Perceived effectiveness of the top ten stress management strategies

	Perceived effectiveness	Frequency rank	Effectiveness rank
Exercise	7.51 (2.01) $n = 67$	1	2
Social support	7.26 (1.89) $n = 60$	2	3
Calming behaviors	6.90 (2.15) $n = 47$	3	6
Media use	6.90 (2.11) $n = 33$	4	6
Religion	8.38 (1.35) $n = 24$	5	1
Sleep	5.57 (3.08) $n = 21$	6	10
Relax	7.22 (2.41) $n = 18$	7	4
Food	5.38 (3.07) $n = 31$	8	11
Cognitive strategies	7.17 (2.10) $n = 28$	9	5
Emotional expression	6.50 (2.27) $n = 10$	10	8
Therapy/counseling	6.45 (2.17) $n = 10$	10	9

Note. Samples sizes reflect each instance a strategy was mentioned, including multiple mentions by participants.

$t(32) = 5.16, p < .001$, suggesting better-than-average perceived effectiveness in achieving stress management benefits. However, given media use ranked sixth, tying with calming behaviors, it seems that those who choose media as a strategy to cope with stress generally find it useful, although perhaps not as useful as other popular strategies.

Discussion

Despite the substantial attention paid to a range of stress management techniques in the extant coping literature, media use has been surprisingly overlooked as a strategy worthy of close examination. Although media scholars have suggested media use may be driven by a need to relax, related research has been sporadic and, until recently, disconnected from the larger conversation about stress management. This research was designed to determine the

relative value of media use within the broader domain of coping strategies. Examining both students and breast cancer survivors, it is clear that not only is media use a frequently selected stress management strategy – in the top five of 25 unique strategies coded – but, based on Study 1, its selection does not appear to be influenced by demographic or personality factors. Thus, like exercise and social support, media use appears to be a highly accessible and appealing stress management approach. In both studies, there was evidence of small increases in media use for those higher in perceived stress, although the correlation for the breast cancer sample fell short of significance in light of the smaller sample size. Further, based on Study 2, media use is viewed as comparably effective as other well-established tools. In sum, this evidence validates the importance of the burgeoning line of inquiry into coping via media use and serves as a starting point for understanding how media use operates relative to other stress-coping strategies.

Despite the convergence in the two data sets on the relative importance of media use for stress management, some important differences emerged. Most notably, those facing a significant life stressor (breast cancer survivors) utilized the top four stress management strategies, including exercise, social support, calming behaviors, and media use, at approximately double the rate of those who were not (i.e., students). Most interesting is not the elevated frequency rates per se but rather the remarkable similarity of the two groups' *relative* use of strategies. We thus infer that media use is, in fact, a staple within the coping toolbox and as the need for coping increases, so too does reliance on media. This point is further supported by the perceived stress-media use relationship.

A second interesting difference between the samples involves the relationships among the stress management techniques. For the students, media use was positively associated with social support and exercise. However, among the cancer survivors, media use was negatively associated

with social support, emotional expression, and cognitive strategies. We cannot know from these data exactly why participants chose the strategies they did. However, these findings suggest that media has the capacity to serve as a proactive means to recharge from daily stressors for some as well as a means for temporarily escaping more overwhelming stressors for others.

Having demonstrated the importance of media use as a coping tool amidst the broad array of stress management options, there are numerous directions for future research that stem from this inquiry. For example, we did not find differences in media use based on traits nor evidence of media serving a compensatory function relative to other strategies. However, there are likely circumstances where such outcomes may be more likely to emerge. For instance, those who have a more limited social network, are more socially aversive, or who have physical disabilities might turn to media more frequently in place of the dominant strategies of social support and exercise. Further, it is possible that such differences would emerge were we to consider specific media forms. For example, younger people or high sensation seekers may be more likely to use newer (e.g., Snapchat) or more stimulating (e.g., videogames) media. Thus, understanding the personal and life factors that influence who is more likely to select what types of media for coping is a valuable direction for future research.

Second, there is clearly great variety in both types of media and the content within each medium. Our research considered media use at the broadest level, consistent with other similarly broad coping categories (e.g., exercise). Having now documented the value of media use relative to other similarly general stress management strategies, an important question concerns the relative importance of different types of media. Investigating under what circumstances television versus social media, for example, is chosen, by whom, and toward what specific end is an important research direction, as is examining how media are selected in light of particular types of stressors. Such work would build nicely on the existing research of Rieger et al. (2014) on stress recovery and Prestin (2013) on optimism and perseverance by investigating the role specific types of media content play in promoting well-being.

Interestingly, for both samples, media use arguably served a more emotion-focused function. However, various media also have the potential to support problem-focused goals. Indeed, media use may serve as a molar category in which other, more specific coping strategies reside. That is, media may be used for escape, to promote cognitive reappraisal, for social support, for information-seeking, for shopping, and the like. Investigating *why* people select the media they do when under stress would be invaluable for understanding more fully the motivations for specific media use.

Finally, evidence from Study 2 suggests that media use, although generally considered useful, was not perceived to be as effective as other popular coping strategies. These findings are consistent with previous research that has concluded that TV use does not generate longer-term stress relief (e.g., Kubey & Csikszentmihalyi, 1990). However, we suggest that this is not an inherent limitation of TV viewing or media consumption generally, but rather that media are likely selected without particular consideration for the ways in which their use might aid, or possibly exacerbate, existing stress. Indeed, it is not clear how consciously media consumers are selecting media for stress management. Under such circumstances, media use is likely constrained as a coping tool as the nature of the stressor is likely to remain unchanged in light of the media consumed. Indeed, media use might aggravate existing stress if it results in exposure to more stress-inducing information. Further, there may be barriers to stress relief posed by people's media perceptions. Most notably, the notion of media as "guilty pleasure" suggests that any enjoyment and release experienced by media consumers are potentially undermined by the belief that media consumption lacks value (e.g., Reinecke, Hartmann, & Eden, 2014). By developing a better understanding of what media experiences and content best address what types of stressors, for whom, and with what possible costs, we may ultimately be well-positioned to prescribe more effective media interventions for stress management, and ultimately change the perception of media use from frivolous to functional.

This research is certainly not without limitations. Although two very different samples were included, we are not yet able to generalize to the broad array of people experiencing the range of stresses in the human experience. Also, the cancer patient sample size precluded detection of small effect sizes as significant and did not allow us to consider the effectiveness of particular media types. Further, our data are based on retrospective recollections and thus are subject to memory error, and the correlational nature of many of the analyses preclude answering questions related to causality. Future research would do well to consider more diverse and larger samples as well as implement alternative methodologies (e.g., diary studies, experiments) that allow for insights into how specific stressors result in specific coping strategy selection. Still, despite these limitations, the similar pattern of findings across the student and breast cancer patient samples suggest media-based coping is a very promising and productive direction for future media research.

To conclude, in the modern environment in which more is expected to be done at a faster and faster pace, it is unsurprising that stress levels are at an all-time high (Cohen & Janicki-Deverts, 2012). Given the often negative psychological and physical consequences of prolonged stress, it is imperative that scholars offer not only better understanding

of the strategies that people use to manage stress but, more importantly, deeper insight into improved methods of stress management. Although media use is often seen as a guilty pleasure at best and a frivolity with damaging consequences at worse, this research adds to the growing literature supporting media use's potential value for mitigating stress. It is thus incumbent upon media scholars to illuminate not simply how segments of the population are using media in response to their stress, but to offer insight into how media could be used to better accomplish this task.

References

- Anderson, D., Collins, P., Schmitt, K., & Jacobvitz, R. (1996). Stressful life events and television viewing. *Communication Research*, 23(3), 243–260. doi: 10.1177/009365096023003001
- Baker, J., & Berenbaum, H. (2007). Emotional approach and problem-focused coping: A comparison of potentially adaptive strategies. *Cognition and Emotion*, 21(1), 95–118. doi: 10.1080/0269930600562276
- Carver, C. S. (2007). Stress, coping, and health. In H. S. Friedman & R. C. Silver (Eds.), *Foundations of health psychology* (pp. 117–144). New York, NY: Oxford University Press.
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, 61, 679–704. doi: 10.1146/annurev.psych.093008.100352
- Cohen, S., & Herbert, T. (1993). Health psychology: Psychological factors and physical disease from the perspective of psychoneuroimmunology. *Annual Review of Psychology*, 47, 113–142. doi: 10.1146/annurev.psych.47.1.113
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385–396. doi: 10.2307/2136404
- Cohen, S., & Janicki-Deverts, D. (2012). Who's stressed? Distributions of psychological stress in the United States in probability samples from 1983, 2006, 2009. *Journal of Applied Social Psychology*, 42, 1320–1334. doi: 10.1111/j.1559-816.2012.00900.x
- Diener, E., & Chan, M. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3, 1–43. doi: 10.1111/j.1758-0854.2010.01045.x
- Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. doi: 10.1207/s15327752jpa4901_13
- Dunkel-Schetter, C., Feinstein, L. G., Taylor, S. E., & Falke, R. L. (1992). Patterns of coping with cancer. *Health Psychology*, 11(2), 79–87. doi: 10.1037/0278-6133.11.2.79
- Felton, B., Revenson, T., & Hinrichsen, G. (1984). Stress and coping in the explanation of psychological adjustment among chronically ill adults. *Social Science & Medicine*, 18, 889–898. doi: 10.1016/0277-9536(84)90158-8
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57(1), 35–43. doi: 10.1016/S0022-3999(03)00573-7
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11(2), 213–218. doi: 10.1016/0022-3999(67)90010-4
- Krcmar, M. (2009). Individual differences in media effects. In R. L. Nabi & M. B. Oliver (Eds.), *The SAGE Handbook of media processes and effects* (pp. 237–250). Thousand Oaks, CA: Sage.
- Kubey, R. W., & Csikszentmihalyi, M. (1990). Television as escape: Subjective experience before an evening of heavy viewing. *Communication Reports*, 3(2), 92–100. doi: 10.1080/08934219009367509
- Kuykendall, L., Tay, L., & Ng, V. (2015). Leisure engagement and subjective well-being: A meta-analysis. *Psychological Bulletin*, 141(2), 364–403. doi: 10.1037/a0038508
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York, NY: McGraw-Hill.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lupien, S., McEwen, B., Gunnar, M., & Heim, C. (2009). Effects of stress throughout the lifespan on the brain, behavior and cognition. *Nature Reviews Neuroscience*, 10, 434–445. doi: 10.1038/nrn2639
- Pierceall, E., & Keim, M. (2007). Stress and coping strategies among community college students. *Community College Journal of Research and Practice*, 31, 703–712. doi: 10.1080/10668920600866579
- Prestin, A. (2013). The pursuit of hopefulness: Operationalizing hope in entertainment media narratives. *Media Psychology*, 16, 318–346. doi: 10.1080/15213269.2013.773494
- Reinecke, L. (2009). Games and recovery: The use of video and computer games to recuperate from stress and strain. *Journal of Media Psychology*, 21, 126–142. doi: 10.1027/1864-1105.21.3.126
- Reinecke, L., Hartmann, T., & Eden, A. (2014). The guilty couch potato: The role of ego depletion in reducing recovery through media use. *Journal of Communication*, 64, 569–589. doi: 10.1111/jcom.12107
- Reinecke, L., Klatt, J., & Krämer, N. C. (2011). Entertaining media use and the satisfaction of recovery needs: Recovery outcomes associated with the use of interactive and noninteractive entertaining media. *Media Psychology*, 14, 192–215. doi: 10.1080/15213269.2011.573466
- Rieger, D., Reinecke, L., Frischlich, L., & Bente, G. (2014). Media entertainment and well-being—linking hedonic and eudaimonic entertainment experience to media-induced recovery and vitality. *Journal of Communication*, 64, 456–478. doi: 10.1111/jcom.12097
- Roesch, S., Weiner, B., & Vaughn, A. (2002). Cognitive approaches to stress and coping. *Current Opinion in Psychiatry*, 15, 627–632.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ross, S., Niebling, B., & Heckert, T. (1999). Sources of stress among college students. *Social Psychology*, 61, 841–846.
- Roth, S. R., & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41(7), 813–819. doi: 10.1037/0003-066X.41.7.813
- Rubin, A. M. (2009). The uses-and-gratifications perspective on media effects. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 165–184). New York, NY: Routledge.
- Sapolsky, R. (1998). *Why zebras don't get ulcers*. New York, NY: W. H. Freeman & Co.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063–1078. doi: 10.1037/0022-3514.67.6.1063
- Selye, H. (1982). History and present status of the stress concept. In L. Goldberger & S. Breznitz (Eds.), *Handbook of stress: Theoretical and clinical aspects* (pp. 7–17). New York, NY: Free Press.

- Shrum, L. J. (1996). Psychological processes underlying cultivation effects further tests of construct accessibility. *Human Communication Research*, 22, 482–509. doi: 10.1111/j.1468-2958.1996.tb00376.x
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129(2), 216–269. doi: 10.1037/0033-2909.129.2.216
- Sonnentag, S. (2001). Work, recovery activities, and individual well-being: A diary study. *Journal of Occupational Health Psychology*, 6, 196–210. doi: 10.1037/1076-8998.6.3.196
- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory STAI (Form Y)*. Palo Alto, CA: Mind Garden.
- Turner, R. J. (1999). Social support and coping. In A. Horwitz & T. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 198–210). New York, NY: Cambridge University Press.
- Zillmann, D. (1988). Mood management: Using entertainment to full advantage. In L. Donohew, H. Sypher, & E. Higgins (Eds.), *Communication, social cognition, and affect* (pp. 147–171). Hillsdale, NJ: Erlbaum.

Received October 17, 2016

Revision received April 19, 2017

Accepted May 17, 2017

Published online September 1, 2017

Robin L. Nabi

Department of Communication
UC Santa Barbara
Santa Barbara, CA, 93106
USA
nabi@comm.ucsb.edu



Robin L. Nabi (PhD, University of Pennsylvania) is a professor of communication at the University of California, Santa Barbara. Her research interests focus on the influence of discrete emotions on media message processing and effects. She has published over 70 articles and book chapters and is co-editor of *The SAGE Handbook of Media Processes and Effects*.



Debora Pérez Torres (MA, University of Utah) is currently a doctoral student in the Department of Communication at the University of California, Santa Barbara. Her research interests focus on media and health with a specific interest in stress and coping.



Abby Prestin (PhD, University of California, Santa Barbara) was employed as a social scientist at the Food and Drug Administration at the time of her death in 2014. Her research focused on the interplay between cognition and emotion in understanding the effects of mediated health messages, with specific attention to issues related to stress and coping and media-based positive psychology interventions.