



## My world is ok, but yours is not: television news, the optimism gap, and stress

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### Summary

Public opinion polls reliably find a disparity between people's views of the state of their own communities and of the nation in general. This discrepancy, frequently called the Optimism Gap, is often attributed to the fact that people have personal knowledge of things around them, but derive their larger world-view from media sources such as television, which tend to over emphasize the negative, risky aspects of life. This study explores this premise, as well as the possibility that emotional factors such as depression, anxiety, and anger also play a role. Data from 171 participants were analysed. Overall, people rated problems in the nation in general as more severe than those in their own communities. Television exposure was predictive of ratings of problems nationwide, but not of problems in respondents' own communities, while attention paid to the television news was related to ratings of national and community problems. Depression, irrational beliefs, and anger arousal were all related to ratings of problems in the nation in general, while anger arousal and optimism were predictive of ratings of problems in respondents' own communities. These findings suggest that the links between television news exposure and mental health should be explored further. Copyright © 2002 John Wiley & Sons, Ltd.

### Key Words

*optimism gap; television news; stress; emotions; cognitions*

### Introduction

Public opinion polls consistently indicate that people believe crime, education, racial relations, education, and lifestyle issues to be far less problematic in their own communities than in the nation in general.<sup>1</sup> This gap, frequently called

the Optimism Gap, is often attributed to the fact that people have personal knowledge of things around them and so have access to both good and bad information, but derive their larger world-view from the media (particularly television), which tends to emphasize the negative.<sup>2</sup> This is consistent with the fact that people frequently report that the world in general is a far more risky, stressful place than it actually is, and that the things they worry about are those which receive intensive media coverage.<sup>3,4</sup> The argument is further bolstered by the fact that television news coverage of sensational stories such as violent crimes, homicides, accidents, economic hardships, and disasters has been steadily increasing as news providers attempt to attract viewers and generate income.<sup>5–7</sup> If indeed, the result of incessant negative news coverage is the development of a population, which increasingly

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believes that the nation and culture are in terrible shape, despite personal experiences to the contrary, the adverse implications for mental health and stress management are far reaching.

However, television viewing and responses to news sources do not occur in a vacuum. Rather, they are affected by the emotional and cognitive state of the viewer. For example, there is some evidence that depressed individuals watch television in general as a coping strategy<sup>8</sup> and that anxious mood states may predispose people to attend to threatening information.<sup>9,10</sup> People exposed to negative news coverage may also demonstrate increased sadness and anxiety, and catastrophize personal worries.<sup>11</sup> Interestingly, surprisingly little research has been done regarding the relationship between anger and news media exposure despite the assumption that there are large groups of angry people scattered throughout society.<sup>2</sup>

The current study was designed to test the hypotheses that media exposure and attention will be related to negative views of problems in the nation in general, but not in respondents' own communities. It is further expected that anxiety, depression, and anger will interact with television viewing to exacerbate people's sense that the nation at large is in terrible shape.

## Materials and methods

### Participants

A total of 109 females and 62 males (age range 18–59 years) were recruited from Introductory Psychology classes at a large public University in the United States, and were given course credit for their participation. All subjects completed consent forms and were informed that they were free to discontinue the study at any time. All data was collected anonymously, and handled confidentially.

### Optimism gap

A two-part questionnaire was developed to assess participants' views of the problems facing their own communities and the nation in general. Each section was composed of 15 items on topics such as crime, substance abuse, public school performance, racial issues, and lifestyle issues. Each item was rated using a 10-point scale ranging from 1 (No problem) to 10 (Extremely serious problem). Principal Factor Analyses using Varimax rotation suggested that while both the community

and nation scales were comprised of three factors, the first factor accounted for the majority of the variance in both cases. For the community data all of the 15 items loaded on the first variable with loadings ranging from 0.32 and 0.88, and accounted for 54.7 per cent of the variance, (Cronbach's alpha = 0.95). For the national data all item loadings ranged from 0.46–0.85, and the factor accounted for 44.9 per cent of the variance, (Cronbach's alpha = 0.92). Consequently, scores on these scales were computed by summing all items.

### Media exposure

Media viewing was assessed using a questionnaire modelled on the work of Pfau *et al.*<sup>12</sup> Participants rated the exposure and attention they paid to television news sources using a 10-point scale ranging from 1 (rarely) to 10 (regularly), (Cronbach's alpha's exposure = 0.75; attention = 0.85).

### Anxiety

Anxiety was assessed using the Spielberger State/Trait Anxiety Inventory.<sup>13</sup> This well-researched scale consists of two separate self-report scales which measure state and trait anxiety (Cronbach's alpha's state anxiety = 0.93; trait anxiety = 0.91).

### Depression

Depression was assessed using the Beck Depression Inventory (BDI),<sup>14</sup> (Cronbach's alpha = 0.84).

### Anger

Anger was assessed using the Multidimensional Anger Inventory.<sup>15</sup> The anger arousal subscale of the scale (reflecting anger frequency, intensity, and duration) was used as a general measure of anger propensity, (Cronbach's alpha of 0.88).

## Results

*t*-Test comparisons indicated that participants rated problems overall, and each of the problem areas individually, as significantly worse in the nation in general, than in their own community (see Table I). Zero order correlations among the primary variables of interest are presented in Table II.

Two series of multiple regression analyses were calculated. In the first set of analyses, ratings of

Table I. *t* Test comparisons between ratings of problems in respondent's communities versus the nation in general.

Variables	Community ratings		Country ratings	
	Mean	SD	Mean	SD
Crime	23.36	15.40	44.17	10.30**
Drug abuse problems	16.78	8.48	24.53	5.35**
School-related problems	5.61	2.98	7.77	2.03**
Racial problems	7.93	4.90	13.22	4.29**
Quality of life issues	13.13	6.91	19.98	5.50**
Total problems	66.82	32.39	109.66	22.09**

All comparisons significant at  $p < 0.01$ .

Table II. Correlations among variables ( $n = 171$ ).

Variable	1	2	3	4	5	6	7	8
(1) Television exposure	—							
(2) Television attention	0.53**	—						
(3) Community problems	0.14	0.16*	—					
(4) National problems	0.15*	0.15*	0.35**	—				
(5) Depression	0.10	0.13	0.08	0.05	—			
(6) State anxiety 0.01	0.03	0.09	-0.01	0.61**	—			
(7) Trait anxiety -0.01	0.03	0.15*	0.08	0.68**	0.80**	—		
(8) Anger arousal	0.00	0.16*	0.18*	0.20**	0.33**	0.41**	0.47**	—

\* $p < 0.05$ ; \*\* $p < 0.01$ .

problem issues in the community were predicted on the basis of television news exposure and news attention, along with either depression, state anxiety, trait anxiety, or anger arousal, and their two- and three- way interactions. This resulted in a total of four equations. An identical series of four regression analyses was calculated to predict ratings of problems in the nation in general. All interaction terms were created by centering variables and then multiplying the terms. The emotional variables were analysed in individual equations, since entering them simultaneously would have yielded unwieldy interaction terms (see Table III for all regression equations).

As predicted, three of the four combinations of variables were predictive of problems in the nation in general, but not in respondent's own communities. The inclusion of depression resulted in a significant equation in which attention paid to television news, the two-way interaction of television news exposure and attention, and the three-way interaction of exposure, attention and depression all made significant contributions to the prediction of ratings of problems in the nation. The two-way interaction was further analysed by comparing the relationships between television exposure and problem ratings in the nation at high, average, and low levels of television attention, using the

procedures outlined by Aiken and West.<sup>16</sup> As Figure 1 indicates, high levels of exposure and attention to the news are associated with higher ratings of problems in the nation.<sup>‡</sup> The three-way interaction was also assessed by evaluating the relationship between news media exposure and national problems when depression and attention paid to the news were set either both 1 SD above the mean, both 1 SD below the mean, or in the two conditions where one was held above and one below the mean, again following techniques outlined by Aiken and West.<sup>16</sup> The results suggest that depression and increased exposure to the news media are associated with increased ratings of problems in the nation in general at both high and low levels of media attention. However, the greater the attention paid, the greater the magnitude of the relationship, thus accounting for the significant three-way interaction (see Figure 2).

When either state or trait anxiety was included in the equations only the two-way interaction of media exposure and attention made significant

<sup>‡</sup> This figure indicates that higher ratings of problems in the nation are associated with both increased television news viewing and exposure. All figures were completed following the procedures outlined in Aiken and West.

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Table III. Series of regression equations predicting either ratings of problems in the respondent community or in the nation on the basis of television news exposure, television news attention and either depression, state anxiety, trait anxiety or anger arousal and their respective multiplicative combinations.

	Community problems			National problems		
	B	SE B	Beta	B	SE B	Beta
<b>Depression</b>						
News exposure	1.24	1.65	0.07	0.79	1.08	0.07
News attention	2.24	1.73	1.33	2.43	1.14	0.21*
Depression	0.24	0.47	0.04	-0.12	0.31	-0.03
Depression × exposure	<0.01	0.26	<0.01	0.24	0.17	0.13
Depression × attention	0.07	0.23	0.03	0.04	0.15	0.02
Exposure × attention	0.49	0.71	0.06	1.13	0.47	0.20*
Exposure × attention × depression	-0.06	0.11	-0.05	-0.16	0.07	-0.21*
	R <sup>2</sup> = 0.04, F = 0.93(7, 163)			R <sup>2</sup> = 0.10, F = 2.71**(7, 163)		
<b>State anxiety</b>						
News exposure	1.48	1.63	0.09	1.06	1.09	0.09
News attention	2.04	1.68	0.12	2.11	1.13	0.18
State anxiety	0.19	0.23	0.07	-0.08	0.15	-0.04
State anxiety × exposure	-0.17	0.14	-0.11	0.01	0.10	0.01
State anxiety × attention	0.08	0.14	0.06	0.11	0.10	0.11
Exposure × attention	0.61	0.70	0.07	0.98	0.47	0.17*
Exposure × attention × state anxiety	-0.03	0.06	-0.05	-0.05	0.04	-0.12
	R <sup>2</sup> = 0.06, F = 1.52(7, 163)			R <sup>2</sup> = 0.09, F = 2.43*(7, 163)		
<b>Trait anxiety</b>						
News exposure	1.48	1.63	0.09	0.94	1.09	0.08
News attention	2.06	1.70	0.12	2.06	1.14	0.18
Trait anxiety	0.44	0.25	0.14	0.17	0.17	0.08
Trait anxiety × exposure	-0.15	0.16	-0.09	-0.02	0.10	-0.01
Trait anxiety × attention	0.06	0.15	0.04	0.08	0.10	0.08
Exposure × attention	0.76	0.70	0.09	1.22	0.47	0.22**
Exposure × attention × trait anxiety	-0.03	0.07	-0.05	-0.05	0.04	-0.10
	R <sup>2</sup> = 0.07, F = 1.72(7, 163)			R <sup>2</sup> = 0.10, F = 2.52*(7, 163)		
<b>Anger arousal</b>						
News exposure	1.92	1.62	0.11	0.94	1.11	0.08
News attention	1.88	1.65	0.11	1.77	1.11	0.15
Anger arousal	0.73	0.38	0.16*	0.66	0.25	0.21**
Anger arousal × exposure	0.20	0.22	0.08	0.01	0.15	0.01
Anger arousal × attention	-0.10	0.23	-0.04	-0.11	0.16	-0.06
Exposure × attention	0.52	0.68	0.06	1.22	0.46	0.22**
Exposure × attention × anger arousal	-0.21	0.10	-0.20*	-0.08	0.06	-0.10
	R <sup>2</sup> = 0.09, F = 2.34*(7, 163)			R <sup>2</sup> = 0.11, F = 2.95**(7, 163)		

\*p ≤ 0.05; \*\*p ≤ 0.01.

contributions to the prediction of problems in the nation, and both of the patterns of relationships were similar to that shown in Figure 1 (see Table III).

Anger also made significant contributions to both the predictions of community and national problems. The interaction of news exposure and attention also contributed to national problem ratings, and exhibited a pattern similar to that observed in previous equations. However, the three-way interaction of anger, news exposure, and attention was a significant contributor to the ratings of community problems, which was not originally

predicted. An analysis of this interaction suggests that when people are low in anger, but have high television news exposure and pay attention to what they view, they rate problems in their community as higher than they do if they pay little attention to what they watch. However, if they are high in anger to begin with, then increasing news media exposure and attention results in higher ratings of problems in the community, although the magnitude of the differences vary such that lower attention actually results in a steeper slope in the relationship between exposure and problem ratings (see Table III and Figure 3).

## The optimism gap

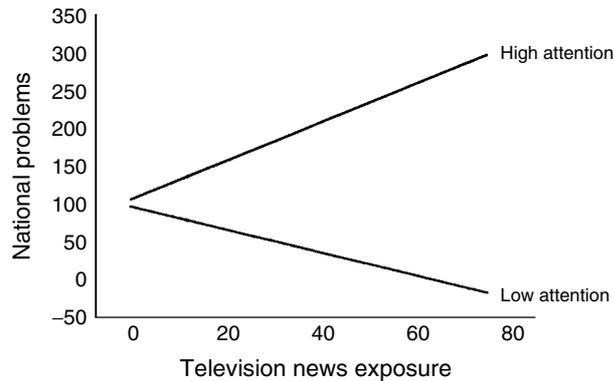


Figure 1. Regression of television news exposure on perceptions of national problems for two levels of television news attention.

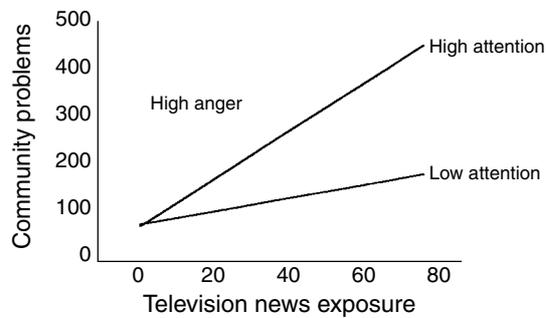
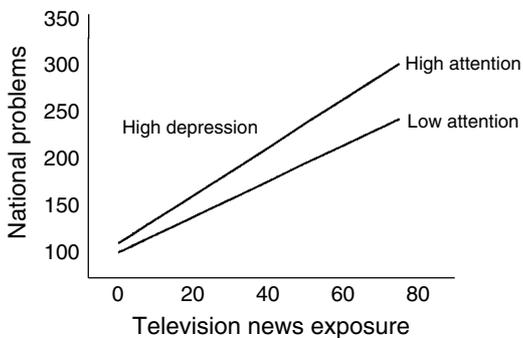
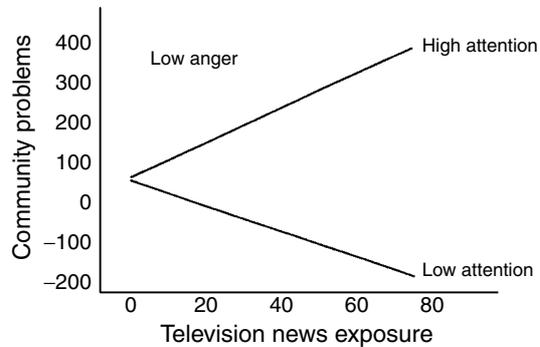
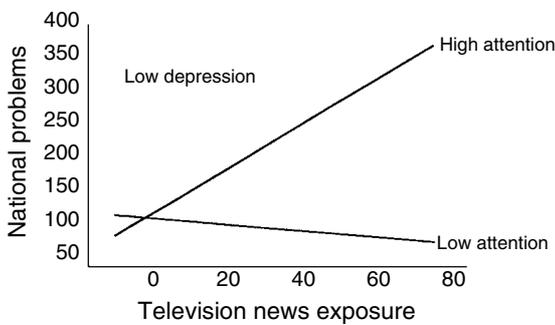


Figure 2. Regression of television news exposure on perceptions of national problems at levels of television news attention 1 SD above and 1 SD below the mean and depression at either 1 SD below or 1 SD above the mean.

Figure 3. Regression of television news exposure on perceptions of community problems for levels of television news attention 1 SD above and 1 SD below the mean and anger at either 1 SD below or 1 SD above the mean.

### Discussion

The results of the current study are consistent with previous research indicating that people tend to believe that social issues such as crime, substance abuse, education, racial, and lifestyle issues are far more problematic in the nation in general than they are in their own communities. As predicted, these

data also suggest that the media play a role in creating this discrepancy.

Television news media exposure was significantly related to higher ratings of problems in the nation overall, but not to ratings of problems in one's community. This finding supports the theory that exposure to news coverage is related

to the increased perception of problems in the larger world. Interestingly however, attention paid to television news coverage was associated with high ratings of problems both in the community and the nation. Perhaps when people do attend to television news coverage, which tends to be negative in nature,<sup>6,7</sup> it colours their view both of the issues of which they have personal knowledge, and of the world in general. Conversely, people who tend to see the world as problematic in general may actually pay greater attention to the television news media. As noted in the Introduction, media viewing is impacted by a variety of emotional and cognitive factors, and as such there may be a reciprocal relationship between world-views and media viewing. While it is difficult to elucidate such causal issues in a cross-sectional study, the findings in this study do support our *a priori* assumption that news media viewing and negative attitudes towards the state of the world are integrally related.

In combination the media viewing variables and depression were predictive of increased ratings of problems in the nation in general, but not the respondents' communities in particular. Specifically higher rates of depression were associated with increasingly negative views of the nation as television exposure and attention increased. Perhaps depression, which is characterized by negative appraisals of the world in general<sup>17</sup> predisposes people to attend to and internalize the negative messages prevalent in the news. This in turn could result in a general sense that the country at large is beset with problems. However, this generalized negative world-view might be counteracted in their own communities because they have more detailed information of events rather than having to rely only on negatively biased news information available to them regarding events and situations for which they have no direct personal experience of their own. Perhaps personal experience or more detailed information regarding events enables people to resist negative media messages about their own community. Again, this supports our *a priori* contention that television news viewing affects people's views of situations about which they have little personal knowledge, but is less influential regarding situations with which they are more familiar.

It should be noted that the population under study in this project was made up of undergraduate college students whose responses to the media may not generalize to all populations. While it would be expected that the participants under study would exhibit normative rates of anxiety and depression, we did not control for the possibility that at least

some of our subjects could have been using either alcohol or illicit drugs such as marijuana which can influence mood. Also, we did not assess the use of anti-anxiety or antidepressant medications. Clearly drug use of these types could be expected to effect the relationship between news viewing habits and responses and mental health, and should be considered in future studies.

Surprisingly, although the equations including media viewing and either state or trait anxiety significantly predicted views of national problems, neither measure of anxiety made a significant independent contribution, or interacted with the news media viewing variables, in predicting problem ratings in the community or the nation. Interestingly, there was a zero-order correlation between trait anxiety and rating of community problems. Future studies would do well to further evaluate the relationships between anxiety and television viewing and in particular, whether anxiety is an outcome, which is affected by media exposure and attention rather than a factor which moderates or interacts with viewing.

Interestingly, anger and television viewing were predictive of ratings of problems in both the community and the nation. It would seem that people, who are easily angered, tend to judge problems negatively across the board, whether they have had personal experience in the area or not. If they also have news media exposure and pay attention to what they view, the relationship is exaggerated further. Given the dearth of research on anger in response to news media exposure, such relationships are clearly deserving of further exploration.

It is apparent that this research has raised more questions than it answered. While the media clearly impact attitudes about problems in both the community and the nation in general, both emotional and cognitive variables affect these relationships. However, the interpretation of the relationships among these variables is hampered by the study's cross-sectional design and reliance on college student participants. Causal statements cannot be derived from single time samples and factors such as age, race, culture, and socioeconomic status may affect media viewing habits and responses. Consequently, we plan to conduct future prospective, longitudinal studies using community samples stratified for the aforementioned demographic variables in order to broaden our understanding of the impact of news media viewing on mental health.

## The optimism gap

Other future studies would also benefit from the use of experimental designs wherein the distance of the news from the subject (local, city, regional, country or world) could be manipulated as well as such variables as level of negativity, the presence or absence of positive information, and subject characteristics. Possible approaches could include showing participants sample news programmes and recording immediate and longer term responses. To explore possible causal effects of mood, perhaps mood induction procedures for altering viewer states could be used.

In conclusion, this study suggests that optimism about the world and television news media exposure is related. If indeed, we have created a television news media viewing population which believes that the world has numerous negative problems despite positive experience in their own communities, it is not surprising that rates of depression,<sup>18</sup> cynicism, and fear are on the rise.<sup>3</sup> And, if emotions such as depression and anger exacerbate responses to television news viewing, a vicious cycle emerges. Clearly, carefully evaluating the possibility that the current negative, sensational tenor of news coverage is a significant source of stress in modern life is crucial if we are to effectively help people adjust to life in this technological era.

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