

Exploration of the 'Mean World Syndrome' in Dutch Older Persons

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ABSTRACT

It was hypothesized that persons aged 57 and over who use more types of mass media, such as internet, television and newspapers, are more anxious and afraid. Also the effects of the different types of media as well as the different contents are explored. The sample originates from the Longitudinal Aging Study Amsterdam (LASA) and consists of 1,536 respondents, who were assessed in 2005/2006. It was found that reading newspapers as well as internet use decreases anxiety and fear, whereas television viewing increases these. Mixed findings were found if the content of the programmes was taken into account.

Keywords

Cultivation theory, Mean World Syndrome, George Gerbner, mass media, older persons, anxiety, fear.

INTRODUCTION

In current modern society, people are regularly confronted with images and stories from all parts of the world through the mass media, penetrating their private lives with global disasters [1]. One recent example is the attack on Charlie Hebdo in Paris, which has stirred up shocked reactions nationally and internationally [2]. These confrontations may cause the mass media consumer in other parts of the world to overestimate the dangers of the world. The theory behind this misperception is called the cultivation theory; the more people 'live' in the world of the mass media, the more they believe that social reality is as represented in the mass media [1]. However, in mass media the number of horrible incidents is overrepresented, and therefore people might assume that the world is an unforgivable place [3], even though they don't experience the disasters themselves. The consequence is that those people experience more feelings of fear, mainly for criminality, becoming a victim, or walking alone at night [4]. This phenomenon is called the 'Mean World Syndrome'.

Although George Gerbner who first coined the term 'Mean World Syndrome', found an effect of television

viewing on fear, the cultivation theory has received criticism and the actual existence of a 'Mean World Syndrome' is questioned [5]. A reexamination of the data by Micheal Hughes, has shown that the effect of television viewing on fear was in fact explained by the joint effect of sex, age and educational level. In addition, the cultivation theory is mostly applied to television viewing, but not to other types of mass media, and also the influence of different contents is rarely included in research. Therefore an extensive exploration is required to better understand the effects of mass media on fear and anxiety.

In this paper, the relation between mass media use and anxiety and feelings of fear will be explored among older persons. Not only the time spent with mass media, but also the different kinds of mass media and differences in content will be involved in this paper. Possible underlying mechanisms will be investigated by including confounders such as age, sex, educational level, loneliness, depression, perceived self-efficacy and self-esteem. A focus on older adults is of particular interest since they experience relatively high levels of fear while having a relatively low chance of becoming a victim of violence and criminality, which is a reasonable alternative explanation for fear and anxiety [6].

The following hypotheses will be tested:

H1: Older persons who use more types of mass-media, are more anxious and fearful.

H2: There is a difference in the cultivation of anxiety and fear between the different types of mass media.

H3: There is a difference in the cultivation of anxiety and fear between the different programmes/activities presented by the mass media.

METHODS

Sample

The data used in this study originates from the Longitudinal Aging Study Amsterdam (LASA). LASA started its first measure in 1992/93, where information of 3,107 respondents between 55 and 85 years old is collected in different parts of The Netherlands [7]. In this study, data from 2005/2006 is used and 1,257 respondents of the original sample in 1992 and 908 respondents of the new cohort that was added in 2002/2003 were included. After deleting missing values, the total N of the study sample is 1,536.

Dependent: Anxiety and Fear

Because Gerbner's definition of 'Mean World Syndrome' can only be measured approximately, two dependent variables are included in this study: anxiety and fear. Anxiety is measured with the 'Hospital Anxiety and Depression Scale-Anxiety Subscale' (HADS-A) [8]. The scale is constructed of seven items and the final score reaches from zero to 21 points, where a higher score refers to more anxiety symptoms. A score of eight and higher is indicative of an anxiety disorder. The Cronbach's alpha of the scale is 0.83, which indicates a good internal consistency. Since the 'Mean World Syndrome' basically refers to fear, while anxiety is a disorder, it is decided to include a second dependent variable, fear, which was assessed by asking the respondent whether he or she was afraid to walk alone in the evening. This question was also used by George Gerbner in his studies about the 'Mean World Syndrome' [4].

Independent: Mass Media use

The independent variables include four types of media use: newspaper, radio, television and internet. Newspaper reading is measured with the question how many times the respondent reads the newspaper in a week, with a fivepoint scale ranging from never to every day. Listening to the radio and television viewing is measured by asking to what extent the respondent listens/watches certain programmes, such as news, sport or music, on a four point scale from never to very often. Because no variable with overall radio listening and television viewing was available, new variables were conducted by calculating the mean of the scores on all different programs. Internet use is measured as a dichotomous variable (yes or no internet use) and by asking what activities the respondent does online, such as e-mailing, surfing or participating in discussion groups.

Control variables

The demographic variables sex, age and educational level are included as control variables. The social/emotional variables are loneliness, depression, perceived self-efficacy and self-esteem. Loneliness is measured with De 'Jong Gierveld' scale consisting of eleven items [9]. A higher score indicates a higher level of loneliness. Depression is measured with the 'Centre for Epidemiological Studies-Depression Scale' (CES-D) [10], consisting of 20 items where a higher score indicating more depressive symptoms. Perceived self-efficacy is defined as the belief of a person in its own capacities to perform certain behaviors to achieve a particular goal [11]. The self-efficacy scale consists of twelve items. Lastly, self-esteem is measured with a shorter version of the 'Rosenberg Self-esteem Scale' [12], consisting of four items.

Statistical analyses

Analyses were conducted by means of the Statistical Package for Social Scientists (SPSS). Linear regression analyses were conducted with anxiety as dependent variable, while logistic regressions were conducted to analyze fear to walk alone at night. To analyze H1, a new

variable was computed consisting of the sum of the different media forms. A score of zero indicating no media use, while a score of four indicates that the respondent makes use of all media forms. Controlling variables were one for one added to each regression analysis. The order of adding control variables is: sex, age, educational level, loneliness, depression, perceived self-efficacy, and lastly self-esteem.

RESULTS

Descriptives

Most respondents were between the age of 64 and 74 (37.8%, N=581). The mean age is 70, with the lowest age 57 and the highest age 97. The sample consists of more women (53.8%, N= 826) than men (46.2%, N= 710). Most respondents had a score of seven or lower on the HADS-A (90.8%, N= 1394), indicating that no anxiety disorder is present. Also most respondents feel safe to walk in their neighborhood in the evening (90.2%, N= 1386). Regarding the media-variables, most respondents read the newspaper everyday (75.5%, N= 1160) while 5.9% never reads the newspaper (N= 91). 59.5% of the respondents sometimes to regularly listen to the radio (N= 909), while 28.1% of the respondents never to sometimes listen (N= 432) and 12.7% of the respondents listen regularly to very often (N= 195). Watching the television seems more popular than listening to the radio, since 15.4% of the respondents watch regularly to very often (N= 15.4%), while only 7.3% never to sometimes watch television (N= 112). Lastly, most respondents do not use internet (60.2%, N= 925).

Similarity Anxiety and Fear

It is further explored whether anxiety and fear are indeed different concepts. If these are too similar, it is not fruitful to conduct multiple analyzes separately. Therefore a crosstabs was conducted between the anxiety cut-off score and the feeling of fear to walk in the evening. It is found that 1275 (83%) of the respondents are not anxious and not fearful and 31 (2%) respondents are both anxious and fearful. However, there are 119 (7.7%) respondents that do feel unsafe, but are not anxious. Also, there are 111 (7.2%) respondents that do have an anxiety disorder, but do feel safe in their neighborhood at night. The Pearson Chi-Square shows significant differences in the categories, $\chi^2(1, N = 1536) = 25.85, p < 0.001$. A correlation shows a relatively weak, albeit significant connection between anxiety and feeling unsafe ($r = 0.20, p < 0.001$). Therefore, it is decided that both variables should be included as different dependent variables.

Media use and anxiety

Bivariate linear regression analysis showed that that older persons who use more forms of mass media, are less anxious ($B = -0.41, p < 0.01$). The effect remains when sex is added to the regression model, but it becomes weaker ($B = -0.26, p < 0.05$). The significant relation disappears after educational level is added to the model ($B = -0.18, p = 0.21$) and stays insignificant in the final model ($B = 0.07, p = 0.51$). The number of mass media a person uses, explains roughly 1% of the variance in anxiety.

When mass media use is divided into different forms of mass media, different relations with anxiety are found. Reading the newspaper has a negative effect on anxiety ($B = -0.31$, $p < 0.001$), as well as using internet ($B = -0.38$, $p < 0.05$). Listening to the radio ($B = 0.04$, $p = 0.80$) and watching television ($B = 0.39$, $p = 0.06$) is not significantly related to anxiety. The significant effect of internet use already disappears after adding sex ($B = -0.20$, $p = 0.22$) and the significant effect of reading the newspaper disappears after adding depression to the model ($B = -0.01$, $p = 0.27$). Remarkably, the relationship between television viewing and anxiety becomes significant after adding loneliness to the regression model ($B = 0.39$, $p < 0.05$) and remains significant in the final model ($B = 0.31$, $p < 0.05$). The different forms of mass media explain roughly 3% of the total variance in anxiety.

In a last step, the different programmes and activities are explored. Newspaper is not included in this analysis, because there was no information about the type of newspaper or articles present in the data. It is found that watching sports has a negative effect on anxiety ($B = -0.28$, $p < 0.05$) and that watching films or series has a positive effect on anxiety ($B = 0.37$, $p < 0.001$). The other variables had no significant relation. The total variance is roughly 4%.

Media use and feelings of fear

A logistic regression analysis was conducted with the number of mass media the respondent uses, and feeling unsafe walking at night as dependent. Mass media use seems to have a negative influence on feeling unsafe ($B = -0.55$, $OR = 0.58$, $p < 0.001$). Media users are less likely to feel afraid in their neighbourhood at night. The significant relation disappears after adding age to the model ($B = -0.22$, $OR = 0.81$, $p = 0.17$). According to the Nagelkerke R^2 , media use explains 2% of the variance in feeling unsafe.

When mass media use is divided in the different types of mass media, reading the newspaper ($B = -0.18$, $OR = 0.83$, $p < 0.01$) and internet use ($B = -0.52$, $OR = 0.60$, $p < 0.01$) both show a negative effect on feeling unsafe. Television viewing has a positive significant relation ($B = 0.51$, $OR = 1.66$, $p < 0.05$). The significant relationship of television viewing ($B = 0.44$, $OR = 1.55$, $p = 0.07$) and internet use ($B = -0.34$, $OR = 0.20$, $p = 0.09$) both disappear after adding sex to the model. The significant relation of newspaper reading disappears after adding loneliness to the model ($B = -0.13$, $OR = 0.88$, $p = 0.07$). According to the Nagelkerke R^2 , the explained variance by the different media types is roughly 3%.

Lastly, the variables are further divided in content or activities. In this model, more significant relations are found than in the anxiety model. Respondents that listen to music on the radio, are less likely to feel unsafe at night ($B = -0.29$, $OR = 0.75$, $p < 0.05$), but respondents who watch music clips on the television are more likely to be afraid ($B = 0.52$, $OR = 1.68$, $p < 0.001$). Watching sports has a negative effect on feeling afraid ($B = -0.42$, $OR = 0.65$, $p < 0.01$) and watching the news increases the feelings of fear ($B = 0.39$, $OR = 1.48$, $p < 0.05$). Lastly,

respondents who make use of telebanking, are less likely to be afraid ($B = -0.76$, $OR = 0.47$, $p < 0.05$). The Nagelkerke R^2 is 0.10, so 10% of the variance of feeling afraid in the neighborhood at night is explained by the different genres and activities.

DISCUSSION

The findings of this study are partly consistent with George Gerbner's cultivation theory [1], since it is found that television viewing indeed has a positive relation with anxiety and fear. However, consistent with Hughes' statement, it is found that the different programs the television and the other media have to offer indeed matter [5]. It is also shown that the explained variance rises when further dividing media use in types and content. But why some programs have positive effects while others have negative effects, remains unexplained. Also consistent with Hughes, is the importance of control variables. Most of the effects between mass media and anxiety and fear disappear after adding all control variables. However, television viewing did remain significant in the final model with anxiety, which implements that the 'Mean World Syndrome' may apply to Dutch older persons.

Although this study provided renewing insights, there are a few limitations. First, it has been assumed that mass media influences anxiety and fear, while a reversed causality may be possible. In Van den Bulck's study [13], different causalities are tested with structural equation modeling. The study has shown that the cultivation theory, so mass media leads to fear, is the best fitting model. To achieve more evidence for this causality, a longitudinal study can be conducted. A second limitation is the way how mass media was measured. For example, there was no information available about which newspaper or kind of articles the respondent mainly reads. Also, there was no data about how much the respondent listens to the radio or watches television in a day or week. On the other hand, more questions about mass media use may be undesirable in a large longitudinal study; too much survey questions may lead to loss of respondents due to the time intensity. The third limitation is that the dependent variable that Gerbner applied to his studies [4], was not fully available in this data. Therefore, the findings in this study may differ slightly when repeated with the variables he used to measure 'Mean World Syndrome'. However, the results between anxiety and feelings of fear did not differ greatly from each other. And lastly, the analyzed data is relatively old while the internet is rapidly changing. The reason for this choice was that the cohort in 2005/2006 had the most respondents and measured the required variables. In newer cohorts, no information of media use is available. It can be discussed whether the results presented in this article would be the same if the study was carried out more recently.

It would be fruitful if future research into the cultivation theory also includes newspaper, radio and internet as media types, instead of only television viewing. The present study has demonstrated that newspaper reading and internet use lower anxiety symptoms and feelings of

fear, while television viewing increases these. But why different types of media have different influences on anxiety symptoms and fear remains unclear. It is also interesting to do further research on this topic with older persons, since this age-group is more frequently inside their home and may be easy victim to the 'Mean World Syndrome'. If television viewing keeps showing a cultivation effect in future research, while newspaper reading and internet use retain an anxiety-lowering effect, interventions may be based on these results to counter anxiety and fear in older persons.

CONCLUSION

The goal of this study was to explore the relationship between mass media and anxiety and fear in Dutch older persons. The first hypothesis, that more mass media use makes a person more anxious or fearful, had to be rejected. Using mass media is not positively, but negatively related to fear and anxiety, indicating that it leads to less anxiety symptoms or less feelings of fear. The significant effect however, is very small and disappears after adding control variables. When the different types of media are studied, we find a negative relation with newspaper reading and internet use, and a positive relation with television viewing. Listening to the radio had no significant effect. In the anxiety model, television viewing is significant in the final model where all control variables are added. The other relations disappear after adding control variables. Furthermore, it is found that watching sports lowers both feelings of anxiety and feelings of fear, while watching films/series raises anxiety and watching news and music clips raises fear.

ROLE OF THE STUDENT

Lisa Klinkenberg was an undergraduate- and honoursstudent in Sociology, working under the supervision of Marja Aartsen when the research in this report was performed. The topic was proposed by the supervisor, but further defined by the student. The theoretical framework, the request of the data material, the processing of the results, as well as the formulation of the conclusions and the writings, were done by the student.

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