Bachelor thesis
"Did you watch today's news?" - The relationship between crime news exposure and fear of crime and the moderating role of psychological capital
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Abstract

Background: Research about crime news exposure has often debated its association with fear of crime and the role of demographics in this regard. Recommendations were made to find a moderator that can help to explain this relationship and psychological capital is a promising construct that has not been studied in this context yet.

Aim: This study aims to investigate the association between crime news exposure and fear of crime, the role of demographic variables and the role of psychological capital.

Methods: A correlational online survey was employed in which English and German versions of the Compound-Psychological-Capital questionnaire, the Victimization Worry Scale and items from the Reuters institute digital news report were administered to participants who had to be at least 16 years old. Potential participants were sent invitation e-mails or they could participate through the SONA systems portal. To analyse the data for associations, Spearman's Rho correlations were employed and the moderation was investigated using the PROCESS tool.

Results: On average, participants were exposed to crime news 2-3 times a week (M=5.2, SD=2.1) and the fear of crime levels were very low with females experiencing significantly higher levels in fear of crime than males (females: M= 2.0, SD=1.6; males: M= 1.5, SD= 1.1). Higher levels in crime news exposure were significantly associated with higher levels in fear of crime (r=.24), yet psychological capital was not associated with fear of crime and the moderation analysis revealed that psychological capital did not have a significant influence on the relationship between crime news exposure and fear of crime.

Conclusion: Crime news exposure was associated with fear of crime, yet psychological capital did not have a significant influence on this relationship and it was not associated with fear of crime. Practice should introduce interventions that spread awareness about the association between crime news exposure and fear of crime and the distorted image of crime that people may develop as a result of the negativity bias in the news. Future research should continue searching for other psychological variables that may help to better explain the relationship between crime news exposure and fear of crime.

Keywords: fear of crime, crime news exposure, psychological capital

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Introduction

When accessing the news, one may notice that a lot of the content tends to be negative. Especially when it comes to crime news, it can be said that the degree to which crime news are reported is out of proportion (Yamamoto, Ran, & Kuo, 2019). One construct that is often mentioned with regard to crime news exposure is fear of crime, which is an irrational mistrust and fear of the world that makes people believe that they can easily be victimized (Yamamoto et al., 2019). Fear of crime is much more prevalent than real victimization and research is debating whether it is associated with crime news exposure or not (Partington, 2013). To get a clearer view of this relationship, researchers argue that additional variables need to be considered to help explain the association between crime news exposure and fear of crime (Partington, 2013). Thus, this study aims to explore the relationship between crime news exposure and fear of crime and to examine the role of demographics and "psychological capital" herein.

In order to understand the severity of the issue, it should be clarified what effects fear of crime can have on people. To start with, fear of crime can lead people to develop avoidance behaviours (Smolej & Kivivuori, 2006). These can become noticeable through a decrease in social interaction, changes in lifestyle and the avoidance of certain places and areas out of fear of being attacked there (Smolej & Kivivuori, 2006). Such changes in behaviour may be noticed not only on the individual level but also in the behaviour of the community (Gray, Jackson, & Farall, 2011). Furthermore, studies showed that fear of crime can be detrimental to people's mental health which in turn causes a decrease in quality of life (Rader, Rogers, & Cossmann, 2020). These effects may eventually reach so far that people develop a fear of death (Gadarian, 2010). Taken together, these consequences highlight that the effects of fear of crime can be severe and intrusive to people's lives, creating a need for action against this phenomenon.

Whether crime news exposure leads to fear of crime seems unclear, but the question arises what other predictors can be sought out for fear of crime. When it comes to the demographics, women are more prone to fear of crime than men (Jackson, 2009; Smolej & Kivivuori, 2006). Yet, with regard to age, the results contradict each other and seem inconclusive (Rader et al., 2020; Smolej & Kivivuori, 2006). Next, people with lower mental or physical health report higher levels of fear of crime because their health status makes them feel more vulnerable to victimisation (Rader et al., 2020). Furthermore, people who live in socially weak and disadvantaged communities report higher levels of fear of crime because they are more likely to be exposed to crimes (Jacobsen, Miller, & Bhardwaj, 2020). Jackson (2009) states that people's perceptions can also be a predictor for fear of crime and people who perceive themselves as less capable of defending themselves are more likely to have higher fear of crime levels. Summing up, some predictors for fear of crime can be sought out, yet it still seems to be unclear which role demographics and crime news exposure play exactly.

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Knowing the severity of the issue, the question arises whether there is something that helps to protect or buffer people from fear of crime and its effects. According to Avey, Luthans, Smith, and Palmer (2010), one construct that can help and protect people in general in life is psychological capital (short: PsyCap). Luthans, Youssef, and Avolio (2007) define PsyCap as a person's:

"[...] positive psychological state of development and [it] is characterized by: 1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; 2) making a positive attribution (optimism) about succeeding now and in the future; 3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and 4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success." (p. 3).

The concept PsyCap is still relatively new, yet its four individual components form a reliable construct that is able to predict health and coping and it helps people to view events as challenges rather than threats (Riolli, Savicki, & Richards, 2012). PsyCap is therefore a promising construct when it comes to how people deal with incoming information.

Having clarified what PsyCap is, the question arises in what way it can be useful with regard to the relationship between crime news exposure and fear of crime. To start with, PsyCap has proven itself as buffer in various relationships as for example with regard to stress and well-being (Riolli et al., 2012). Smolej and Kivivuori (2006) stated that the relationship between crime news exposure and fear of crime should include psychological variables to explain it better and PsyCap is a combination of four psychological variables. Thus, PsyCap may be able to help explain why some people are more likely than others to develop fear of crime after being exposed to crime news. Furthermore, it has been shown that PsyCap can be trained and improved through e.g. web-based interventions (Luthans, Avey, & Patera, 2008). This makes it even more useful to test PsyCap with regard to fear of crime since it could provide a starting point for interventions to help people suffering from fear of crime. However, since PsyCap has not yet been tested in this specific context, this leaves a gap in knowledge and a need for research.

In summary, crime news exposure is increasing (Yomamato et al., 2019) but it is still debated to what degree it can lead to fear of crime. Researchers recommend that including psychological variables can help to explain why some people are more likely than others to develop a fear of crime after being exposed to crime news. As PsyCap is positively related to coping and negatively related to fear and stress (Riolli et al., 2012), PsyCap could prove itself as such a moderator and explain differences in this relationship. This is why this study will investigate crime news exposure, fear of crime and PsyCap in relation to each other. Besides this, demographic variables and other aspects of crime news i.e. crime news interest and sources will be considered since research connecting these to fear of crime was often inconclusive or scarce.

The current research

Taking all the previously mentioned aspects into consideration, the current research will focus on the relationship between crime news exposure and fear of crime and the moderating role of PsyCap in this context and therefore, the research question for this paper is: "What is the relation between crime news exposure and fear of crime, and is this relation moderated by psychological capital?". This requires several sub-questions: 1. "To what extent are people exposed to and interested in crime news and are there any differences between gender, age groups or education?". It is expected that the interest in and exposure to crime news are both high, yet no demographic distinctions have been found so far. The second sub-question is: 2. "To what extent do people experience fear of crime and are there any differences between genders, age groups or education?". Here, it is expected that fear of crime is very common and that females experience more fear of crime than males. For the third subquestion: 3. "Is there an association between exposure to and interest in crime news and fear of crime?", it is expected that an association exists and that higher exposure to and interest in crime news are both associated with higher levels of fear of crime. The fourth and final sub-question is: 4. "Is this association moderated by PsyCap?", for which it is expected that PsyCap moderates the relationship between crime news exposure and fear of crime with higher levels in PsyCap leading to lower levels in fear of crime.

Methods

Design

The current study employed a correlational survey design. It was part of a larger study that, besides crime news exposure, fear of crime and PsyCap, investigated various aspects of news consumption and their relationships to psychological variables.

Participants and procedures

The study was approved by the ethics committee of the Faculty of Behavioural, Management and Social Sciences of the University of Twente. Participants needed internet access in order to participate and had to be at least 16 years old which was the only restriction with regard to the demographics. The sampling method for this research was convenience sampling by which invitation letters in German and English that explained the aim of the study were sent to people in the researchers' social environments (see Appendix A). The study was also made available on the platform SONA systems through which students of the University of Twente could receive credits for taking part in the study. All in all, 188 people participated of which 167 people completed all or most of the questions relevant to this paper.

When clicking the link on the SONA website or in the invitation mail, participants were redirected to the study itself which was posted on qualtrics.com. There, the informed consent form first explained that all data would be handled anonymously, that participants were free to leave at any point or have their data deleted without any consequences or need for justification and that the study would not have any negative effects on them (see Appendix B). If agreement to the informed consent was provided, the survey itself could be started which lasted approximately 20 minutes. After completion, the participants were thanked for their participation, informed that their response had been saved and the researchers' contact information was provided in case there were any remarks or questions. If participants wanted to be informed about the results, they could also provide their e-mail address in an open text field. These were kept separate from the data and destroyed after the results had been sent to them.

Instruments

As already stated, some questionnaires were employed that were relevant to the larger study but not relevant to this paper. These other questionnaires measured the consumption of general news, climate change news and mobile media consumption and in what way these were related to optimism, ecological coping, stress, psychological capital and psychological well-being.

The questionnaires employed for this paper were validated and previously used by other researchers. Except from the questionnaire that was used to measure PsyCap, all other instruments were only available to the current research in English and not in German. Since the survey was conducted in both languages, the researchers used the forward-backward translation procedure in which the questionnaires were translated into German and then translated back into English by another person and adjusted if necessary. This procedure is proposed by the World Health Organisation and as can be seen in the research of Bekes, Omara, Safar, and Stamm (2019), reliable and valid translations can be achieved using this method.

Demographics: First, respondents were asked to answer demographic questions. They needed to indicate their gender with the options "male", "female" and "diverse" and their age in years. For the nationalities, participants could choose between "German", "Dutch" and "other" for which an open text field allowed them to enter their nationality. Participants were also asked about their highest completed level of education with the options 1 = "no degree", 2 = " middle school", 3 = "high school", 4 = "vocational education (MBO)", 5 = "university bachelor's degree or equivalent" and 6 = "university master's degree or higher".

Crime news exposure: To measure crime news exposure, three questions were taken out of the Reuters institute digital news report (Newman, Fletcher, Kalogeropoulos, & Nielsen, 2019). For the context of the current study, the questions were altered to read "crime news" instead of "news". To measure the amount of crime news exposure, the question "Typically, how often do you access crime news (on

purpose or accidentally)? By news we mean national, international, regional/local news and other topical events accessed via any platform (radio, TV, newspaper or online)" was used with 11 answer possibilities ranging from "never" to "more than 10 times a day" and "don't know". These were later grouped into five larger groups for the analysis, with the answer categories 1= "never", 2=" less than once a month" and 3="less than once a week" each forming their own category, the next three higher answer options forming the category 4="weekly" and the four highest answer options forming the category 5="daily". The "don't know" answers were scored as missing values and 7 participants chose this option and were thus excluded for this item. Since this was the only item measuring the amount of crime news exposure, the scoring was equal to the answer that the participants provided on this single item.

Next, to measure which source was used most frequently to consume crime news, the question "Which of these was the main way in which you came across crime news in the last week?" was employed. The answer categories listed the following options of which only one could be chosen: "newspaper", "radio", "TV", "social media", "websites", "don't know" and "other" for which an open text field allowed participants to type their answers. Again, the "don't know" answers were later considered as missing values and here, 11 participants chose this option and were thus excluded for this item.

Third, the question "How interested, if at all, would you say you are in crime news?" was used to measure the interest in crime news with five answer possibilities ranging from "very interested" to "not interested at all" and a sixth option "don't know" which was again considered as missing value. Here, two participants chose this answer. The scoring was again equal to the answers provided on this single item.

Fear of crime: To measure fear of crime, 10 of the 15 items from the Victimization Worry Scale were used since according to the creators of the scale, the other items either measured white collar offenses or had low correlations with the rest and should thus be omitted in order to fit the context of fear of crime (Williams, McShane, & Akers, 2000). An 11th item, cybercrime, was added because of its high and growing prevalence in everyday life, especially in recent years (van de Weijer & Leukfeldt, 2017). The respondents were asked how worried they were about becoming a victim of several crimes in the next year and to rate this on a matrix ranging from 0 to 10 (0 = not worried at all, 10 = very worried). The 11 items with each their own matrix were then listed: "robbery", "assault with a weapon", "assault without a weapon", "rape or attempted rape", "arson or attempted arson", "burglary", "motor vehicle theft", "other theft", "vandalism or malicious mischief", "murder" and "cybercrime". The higher a participant's total mean score was, the higher their level of fear of crime. All in all, the scale had an excellent reliability score (α=0.90).

Psychological capital: Finally, the Compound-Psychological-Capital questionnaire (CPC-12) was used in order to measure psychological capital, PsyCap (Lorenz, Beer, Pütz, & Heinitz, 2016). It consists of three items for each of the four PsyCap facets (hope, optimism, resilience and self-efficacy) leading to 12 items in total. An example item of the hope subscale is: "I can think of many ways to reach my current goals" and an example for the optimism subscale is: "I am looking forward to the life ahead of me". For the resilience subscale, an example item is: "When I'm in a difficult situation, I can usually find my way out of it" and finally, an example item of the self-efficacy subscale is: "I can solve most problems if I invest the necessary effort". Participants were asked to what degree they agreed to these statements on a six-point Likert scale (1 = "strongly disagree", 6 = "strongly agree"). All 12 items were combined into a mean score and the higher the mean score, the higher the PsyCap level. The reliability score of the CPC-12 in this study was good (α = 0.85) whereas for the different subscales, the reliability scores ranged from questionable (resilience: α =0.62) to acceptable (self-efficacy: α =0.71, hope: α =0.70) to good (optimism: α =0.83). Yet, for the analysis of the current study, only the mean scores of the whole scale were relevant.

Data analysis

For the data analysis, the programme SPSS Statistics 24 by IBM was used. To answer the first sub-question: "To what extent are people exposed to and interested in crime news and are there any differences between gender, age groups or education?", descriptive statistics of crime news exposure and interest including means and standard deviations were used and additional frequencies for crime news exposure, interest and sources were included. To reveal demographic differences, gender, age, education and PsyCap were correlated with crime news exposure and interest using Spearman's Rho.

The second sub-question: "To what extent do people experience fear of crime and are there any differences between genders, age groups or education?" was investigated by computing the mean, standard deviation, minimum, maximum and range of the fear of crime mean scores. To investigate demographic differences, gender, age, education and PsyCap were correlated with fear of crime using Spearman's Rho.

Next, for the third sub-question: "Is there an association between exposure to and interest in crime news and fear of crime?", the researchers used Spearman's Rho correlations once again, this time correlating fear of crime with crime news exposure and interest and the different crime news source options which were coded into dummy variables to investigate each source's association with fear of crime.

Finally, to answer the fourth sub-question "Is this association moderated by PsyCap?", the researchers used regression analysis using the PROCESS tool (Hayes, 2020). Here, crime news exposure was used as the independent variable, fear of crime as the dependent variable and PsyCap as the moderator.

Results

Characteristics of the study group

The frequencies and percentages for the demographic variables can be seen in Table 1. The data was calculated from 167 participants and when a participant had not answered an item for a variable, their response was treated as missing for this specific variable. The majority of the sample consisted of Germans and far more females than males participated. The ages of participants ranged from 16 to 88 but the average participant was still rather young with 32.5 years. When it comes to the highest completed level of education, most participants indicated that they had completed a high-school degree, followed by people with a bachelor's degree or equivalent. Furthermore, the average level of PsyCap in the population was moderate to high and the PsyCap scores were clustered closely together.

 Table 1.

 Demographic characteristics of the study group

Variable		M (SD)	Min/Max	Frequency	%
Age (<i>N</i> =167)		32.5 (16.6)	16/88		
Gender (<i>N</i> =167)	Male			60	35.9
	Female			107	64.1
Nationality	German			143	86.1
(<i>N</i> =166)	Dutch			10	6
	Other			13	7.8
Highest completed	No degree			3	1.8
level of education	Middle school			10	6
(<i>N</i> =167)	High school			73	43.7
	Vocational education (MBO)			11	6.6
	University bachelor's degree or equivalent			36	21.6
	University master's degree or higher			34	20.4
PsyCap (<i>N</i> =164) _a		4.5 (0.6)	2.4/6		

Note: a: Hypothetical range from 1 to 6

Exposure to and interest in crime news

As can be seen in Table 2, people were exposed to crime news ranging from "never" to "between 6 to 10 times a day" and most people indicated that they were exposed to crime news once a day. The two

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highest and the two lowest answer options received the least amount of responses, showing that the average consumption of crime news was rather moderate. When it comes to the crime news sources, most people accessed crime news equally through websites and social media whereas the least amount of people received crime news through the radio or "other" sources. With regard to crime news interest, most people were somewhat interested in crime news which was closely followed by those who were not very interested, showing that the crime news interest was low to moderate.

Table 2. Frequencies of crime news exposure, sources and interest

Variable		M(SD)	Frequency	%
Crime news		5.2 (2.1)		
exposure (N=160)a				
	Never		9	5.6
	Less than once a month		6	3.8
	Less than once a week		24	15
	Once a week		21	13.1
	2-3 days a week		29	18.1
	4-6 days a week		13	8.1
	Once a day		33	20.6
	Between 2 and 5 times a		20	12.5
	day			
	Between 6 and 10 times a		5	3.1
	day			
	More than 10 times a day		0.0	0.0
Crime news source	Newspaper		25	16
(<i>N</i> =156)	Radio		11	7.1
	TV		35	22.4
	Social media		38	24.4
	Websites		38	24.4
	Other		9	5.8
Crime news interest		2.6 (0.9)		
(<i>N</i> =165) _b				
	Not at all interested		15	9.1
	Not very interested		60	36.4
	Somewhat interested		64	38.8
	Very interested		25	15.2
	Extremely interested		1	0.6

Note. a: coded as 1=never, 10= more than 10 times a day; b: coded as 1= not at all interested, 5= extremely interested

Correlating crime news exposure and crime news interest with the demographic variables (Table 3) revealed that people with higher levels of education were significantly more exposed to crime news, although this association was only weak. Additionally, males showed significantly less interest in crime news than females. Lastly, higher levels in PsyCap were significantly, yet weakly, associated with lower interest in crime news.

Table 3.Spearman's Rho correlations of exposure to and interest in crime news and the demographic variables

	Crime news exposure (<i>N</i> =160)		Crime news interest (<i>N</i> =165)	
	Spearman's Rho correlation	p	Spearman's Rho	p
Age	.10	.190	14	.074
Gender _a	.14	.086	.30**	.000
Education	.17*	.037	04	.647
PsyCap	.00	.963	17*	.033

Note. a: coded as 1=*male* and 2= *female*

Fear of crime

Table 4 depicts the descriptive statistics for fear of crime. The degree to which participants in this sample experienced fear of crime was very low which was indicated by a low mean and standard deviation. The maximum also did not reach any of the three highest answer options (*very worried*) whereas the lowest answer option (*not very worried*) was reached.

 Table 4.

 Descriptive statistics for fear of crime

	Fear of crime
M(SD)	1.8 (1.4)
Min	0
Max	7.45
Range	0-10

^{*} Correlation is significant at the .05 level

^{**} Correlation is significant at the .01 level

With regard to the associations between fear of crime, the crime news variables and the demographics (Table 5), it can be said that females experienced significantly higher levels of fear crime than males, although the association was only weak. Furthermore, higher levels in crime news exposure and interest were both significantly, yet weakly, associated with higher levels in fear of crime. Lastly, people who accessed crime news through the radio experienced significantly less fear of crime than people who used other sources whereas people who received crime news mainly through social media experienced significantly more fear of crime than people who used other sources. In addition to the associations in Table 5, the four PsyCap subscales have been tested for their association with fear of crime individually but yielded no significant results.

Table 5.Spearman's Rho correlations of fear of crime with crime news variables and demographic variables

Variable	Fear of crime		
	Spearman's Rho correlation	p	
Age	11	.148	
Gender _a	.18*	.019	
Education	.04	.633	
PsyCap	11	.177	
Crime news exposure	.24**	.003	
Crime news interest	.26**	.001	
Newspaper	14	.093	
TV	08	.396	
Social media	.19*	.016	
Websites	.15	.061	
Radio	17*	.028	
Other	02	753	

Note. a: coded as 1=male and 2= female

To what extent is the relation between crime news exposure and fear of crime moderated by PsyCap?

Finally, regression analysis was employed using the PROCESS tool (Hayes, 2020) to see whether PsyCap could explain the relationship between crime news exposure and fear of crime as a moderator (see Table 6). It showed that only a very small portion of the variance in the fear of crime scores could

^{*} Correlation is significant at the .05 level

^{**} Correlation is significant at the .01 level

be explained by the interaction model between crime news exposure and PsyCap. It was also revealed that PsyCap did not have a significant influence on the relationship between crime news exposure and fear of crime and thus, PsyCap did not prove itself as a moderator in this relationship.

Table 6. *Moderation analysis for fear of crime* (N=157)

Predictors	coefficient	SE	t	<i>p</i> *
Crime news exposure	1.04	.79	1.31	.193
PsyCap	.18	.54	.35	.730
Interaction (crime news exposure x PsyCap)	15	.17	89	.377

Note. $R_2 = .09$; df = (3,153)

Discussion

This was the first study that investigated the relationship between crime news exposure and fear of crime taking into consideration the role of PsyCap and it yielded several useful insights. To start with, for the first sub-question "To what extent are people exposed to and interested in crime news and are there any differences between gender, age groups or education?" it was found that people were exposed to crime news on average several times a week and rather uninterested in them. The interest and exposure levels were both below expectations as it was assumed that the media's accessibility leads to a higher presence of crime news in people's lives. This difference could be explained by the fact that the data was collected during a pandemic that dominated the news and social life for months which may have caused lower levels of crime news exposure and interest among participants. The fact that many people were uninterested in crime news but were exposed to them regularly could be explained by the fact that many people come across news incidentally without actively looking for them (Bergström & Jervelycke Belfrage, 2018). Hence, this could generate a higher level of exposure than interest. Concerning the demographics, it was found that females were significantly more interested in crime news than males whereas higher levels of education were significantly related to higher exposure. Research supports this and states that people with higher levels of education can generally be characterized as news seekers (Ksiazek, Malthouse, & Webster, 2010). Since a gap between crime news exposure and interest was found, meaning that people were rather uninterested in crime news but still consumed them regularly, it would be interesting if future research investigated the reason for this gap. It could for instance be investigated how often people deliberately look for crime news and how often they incidentally come across them without looking for them. If this reveals that people who are uninterested in crime news frequently come across news

^{*}significant at p<.05

incidentally and are not looking for them, this could explain why they consume crime news regularly despite not being interested.

Next, for the second sub-question, "To what extent do people experience fear of crime and are there any differences between genders, age groups or education?", the study showed that the fear of crime levels were also very low. These low levels could again be related to the pandemic. Since people were staying home most of the time to avoid getting infected, they may have experienced fewer situations where the risk of victimization is higher like for instance on the streets at night. Thus, the fear of crime levels recorded may not have been representative of the levels in their regular, daily life when it is not restricted by a virus. Concerning the demographics, females experienced significantly higher levels in fear crime than males which was expected and Jackson (2009) states that a reason for this can be that women tend to feel less capable of protecting themselves. A conclusion from these findings is that fear of crime may need to be investigated again at a time where there is no global restriction to social life as in this study during the pandemic. This may reveal more accurate depictions of fear of crime than in the current study because people had to restrict their lifestyles and deal with a threatening virus each day. If such a new study would still prove that the fear of crime levels are generally low, an implication for practice would be that fear of crime interventions do not need to be targeted at the general population but only specific risk groups that are more likely to suffer from fear of crime. These could be groups like e.g. the mentally ill and the socially weak (Whitley & Prince, 2005).

Third, for the sub-question "Is there an association between exposure to and interest in crime news and fear of crime?", it was found that, as expected, higher exposure to and interest in crime news were both significantly related to higher levels in fear of crime, yet these relationships were only weak. Previous research on this relationship was mixed since it did not always find an association between crime news exposure and fear of crime. Yet, as Partington (2013) states, crime news can make people more afraid of crimes even when the real crime rate is decreasing, creating an asymmetry between reality and perception. This is why an association between crime news exposure and fear of crime was expected. Concerning the crime news sources, people who accessed crime news mainly through social media experienced significantly higher levels of fear of crime than people who accessed crime news through other sources. This finds support in a study conducted by Intravia, Wollf, Paez, and Gibbs (2017) who add that social media is generally very influential and people spend a significant amount of time there which can increase the psychological and social elements that create fear. Since an association between crime news exposure and interest and fear of crime was found, future practice should use this knowledge and spread awareness about the overrepresentation of crime on the news and that it can lead people to develop fear of crime. Explanations on the characteristics of fear of crime could be provided e.g. that it distorts people's views on crime, making them believe crimes are much more prevalent than they actually are as Partington (2013) states. This could be done on social media and other websites which would be especially useful since this study showed that

most participants used websites and social media to access crime news and social media was also associated with higher levels of fear of crime, meaning that spreading awareness here would reach many people who need it.

Finally, the fourth sub-question "Is this relationship moderated by PsyCap?" can be answered by stating that PsyCap was not associated with fear of crime and it did not moderate the relationship between crime news exposure and fear of crime. This was contrary to expectations due to the moderating role of PsyCap in other relationships and its role as a buffer and protector of negative outcomes (Riolli et al., 2012). One reason why PsyCap did not moderate the relationship between crime news exposure and fear of crime could be because of the dynamic nature of the media which makes it difficult to accurately depict associations with other variables (Partington, 2013). Although PsyCap was not associated with fear of crime, future research should continue investigating other psychological variables that may act as a buffer with regard to fear of crime. This could help to get a clearer picture of how exactly crime news exposure and fear of crime are related, especially since a lot of the variation in this relationship could still not be explained, meaning that there may be a yet unknown moderator.

Strengths and Limitations

A strength of the study was that for the demographics, a lot of variation was present with regard to age, education and gender. People from all groups of education participated and the ages ranged very far from 16 years to 88 years. Although there were more females than males and less participants of older age, there was still a considerable amount of middle aged and older people as well as men which allowed some degree of demographic comparisons.

Another strength to the study was that the researchers did not just measure fear of crime with a single item as many other studies on fear of crime do, but this study actually used a multi-item questionnaire in order to generate more reliable results and in fact, the reliability on the Victimization Worry Scale turned out to be excellent.

Furthermore, the current study did not only investigate the exposure to crime news itself but added items for the crime news interest and sources which also generated significant results, showing that there are several aspects of crime news to be considered with regard to fear of crime.

When it comes to the limitations of the study, it must first of all be mentioned that the current study was a correlational survey meaning that causations could not be proven. Thus, although fear of crime and crime news exposure have been proven to be associated with each other, no assumptions can be made with regard to the direction of this relationship. To investigate whether crime news exposure causes fear of crime, future research could conduct an experimental study in which the experimental group is exposed to crime news and afterwards asked to answer a questionnaire that measures their fear of crime levels while the control group is not exposed to crime news previously

and answers the same questionnaire. Then the results of the two groups could be compared and if significant differences are found, statements on causation could be made.

Another limitation is that the study was conducted in the midst of a global pandemic, as previously mentioned. The corona virus started spreading around the world a few months prior to data collection and by the time the data was collected, Germany and the Netherlands such as many other countries were in lockdown, meaning that the virus more or less dictated the daily life of society. Thus, a lot of the content on the news and social media was mostly about this virus and issues related to it, meaning that other issues such as crime were less present. The levels of fear of crime or the levels of crime news exposure could thus be underestimated by participants because being at home most of the time and mostly receiving information on the virus could have distorted their regular view on crime.

Finally, although there were three different aspects of crime news measured (i.e. exposure, source and interest), each of them was measured using only one item. Crime news exposure for example could have been investigated more extensively by inspecting various aspects to it, such as separate questions for incidental and deliberate exposure or the degree to which people pay attention while watching crime news. This would have allowed to compare for more differences and make more distinctions in the population.

Conclusions

All in all, it can be said that crime news exposure was associated with fear of crime but PsyCap did not have a significant influence on this relationship and it was not associated with fear of crime. Additionally, not only higher crime news exposure was associated with higher fear of crime but also higher crime news interest and certain sources. Practice should use this knowledge and spread awareness on the overrepresentation of crime news in the media and that it can lead to fear of crime in order to counteract wrong perceptions of crime. This could be done on social media and other websites by e.g. spreading real incidence rates. Besides this, since this study was only a correlational survey, no statements about causations can be made which is why it would be useful if future research investigated the direction of the relationship between crime news exposure and fear of crime. Finally, PsyCap was not related to fear of crime and thus, future research should try to find other psychological variables that help to explain more of the variance in the relationship between crime news exposure and fear of crime.

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Appendix

English
Hey,
I would like to ask you whether you would participate in my study. Currently, I am writing my bachelor's thesis at the University of Twente in Enskede and I would be happy about every participant. The topic of my paper is news and media exposure and whether/how it affects our wellbeing. Several studies have shown that negative news seem to be much more prevalent than positive news. This negative bias in the news can trigger negative feelings such as fear and hopelessness and also negatively affect our mental health. As a research group of five students, we want to look further into that topic and are thankful for every participant. The survey takes about 20 minutes, and every data collected will be treated confidential and anonymous.
This is the link for participating in our study:

German

Appendix A: Invitation mail

Hey,

Ich wollte fragen ob du Lust hast an meiner Studie teilzunehmen. Ich schreibe derzeit meine Bachelorarbeit an der Universität Twente in Enschede und freue mich über jeden Teilnehmer. Das Thema meiner Arbeit sind Nachrichten und ob/wie sie sich auf unser Wohlbefinden auswirken können. Einige Studien haben gezeigt, dass negative Nachrichten deutlich präsenter sind als positive Nachrichten. Dies kann Gefühle der Angst und Hoffnungslosigkeit auslösen, sowie unsere mentale Gesundheit negativ beeinflussen.

Zusammen mit vier Kommilitonen bilden wir eine Forschungsgruppe und möchten das genauer herausfinden, daher sind wir für jede Teilnahme dankbar. Die Umfrage dauert ungefähr 20 Minuten, und jegliche Daten die wir sammeln behandeln wir vertraulich und anonym.

Hier ist der Link,um an der Studie teilzunehmen:

Thank you very much for your time and effort!

Vielen Dank für deine Zeit und deinen Aufwand!

Appendix B: Informed consent

English

Dear Participant,

Welcome to this study! Various studies have shown that the focus of news nowadays is more on negative topics and avoids positive subjects. This can trigger feelings of fear, pessimism and hopelessness. Therefore, this study deals with news consumption and its influence on the mental health of individuals. A particular focus lies on dealing with news on crime and climate change. It also examines whether positive psychological resources, such as optimism and hope, can be helpful in dealing with news.

A prerequisite for participation in the study is the minimum age of 16 years. The study consists of a set of questionnaires you will have to answer which takes approximately 20 minutes. There are **no correct or incorrect answers** to the questions, so we ask you to answer the questions according to your personal opinion.

Participation will have no consequences for you in the short or long term. Yet, if you wish to withdraw from the study, you can do so at any point in time without consequences and reasoning. Your data will be treated confidentially and anonymously, meaning nobody including the researchers can match any of the data to individual participants. This research was approved by the Ethics Committee of the University of Twente, Drienerlolaan 5, 7522 NB in Enschede. If you experience any problems or questions coming up, please do not hesitate to contact us via mail: n.schmitt@student.utwente.nl. Please indicate whether or not you agree to the specifics below.

Thank you for your time and participation!

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German

Lieber Teilnehmer,

Willkommen zu dieser Studie! Verschiedene Studien haben gezeigt, dass der Fokus der Nachrichten heutzutage eher auf negativen Themen liegt und meist positive Neuigkeiten auslässt. Dies kann Gefühle der Angst, Pessimismus und Hoffnungslosigkeit auslösen. Daher beschäftigt sich diese Studie mit Nachrichtenkonsum und dessen Einfluss auf unsere mentale Gesundheit. Ein besonderer Fokus liegt auf dem Umgang mit Nachrichten zu Kriminalität und Klimawandel. Des weiteren wird untersucht, ob positive psychologische Ressourcen, wie zum Beispiel Optimismus und Hoffnung, im Umgang mit Nachrichten hilfreich sein können.

Eine Voraussetzung für die Teilnahme an der Studie ist ein Mindestalter von 16 Jahren. Die Studie besteht aus verschiedenen Fragebögen, die insgesamt ungefähr 20 Minuten zum Ausfüllen dauern. Bei den Fragen gibt es **keine richtigen oder falschen Antworten**, daher bitten wir Sie die Fragen nach Ihrer persönlichen Einschätzung zu beantworten.

Ihre Teilnahme an dieser Studie wird keinerlei kurz- oder langzeit Folgen für Sie haben. Sollten Sie sich dennoch entscheiden Ihre Teilnahme abzubrechen, können Sie dies zu jedem Zeitpunkt ohne Konsequenzen oder Angabe Ihrer Gründe tun. Ihre Daten werden vertraulich und anonym behandelt, sodass niemand, einschließlich der Forscher, Daten zu einzelnen Teilnehmern zuordnen kann. Dieses Forschungsprojekt wurde vom Komitee für Ethik der Universität Twente, Drienerlolaan 5, 7522 NB in Enschede genehmigt. Sollten Probleme auftreten oder Sie Fragen jeglicher Art haben, zögern Sie nicht uns eine Email zu schreiben: n.schmitt@student.utwente.nl. Bitte geben Sie unten an ob Sie den Einzelheiten zustimmen oder nicht.

Vielen Dank für Ihre Zeit und Teilnahme!

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