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Master Thesis Clinical Psychology

The Emotional Impact of 4th May Commemoration on the Post-War Generation in the Netherlands

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7 July 2020

Abstract

Commemorations and rituals are often organised to help people recover from trauma

after tragedies, such as war. Nevertheless, studies show that commemorations can elicit

various emotional reactions. In the current study we analysed the emotional impact of the

Dutch commemoration of the Second World War (WWII) on the post-war generation since

WWII. One group participants did experience psychological complaints related to this war,

whereas the other group participants did not. Based on the Trauma Film Paradigm participants

watched a TV fragment of the commemoration on 4 May 2018, and rated their emotions

before and after the fragment. Conforming our hypothesis there is a difference in impact over

time between both groups, however the increase in negative emotions was stronger for people

without psychological complaints. Besides, solidarity and recognition seemed to explain the

increase in negative emotions, whereas solidarity was the only hypothesized predictor of

decrease in positive emotions. The findings highlight the need for further research on

commemoration and the role of rituals after trauma.

Keywords: Commemoration, Post-war Generation, Trauma, War, Emotion, PTSD,

Psychological Complaints

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Introduction

Tragedies such as war and genocide have an enormous impact on society. The emotional shock of those events can be abiding and can even spread to family of survivors (Bramsen & Van der Ploeg, 1999; Harlow, 2005; Van der Ploeg, 1991). To remember the deadly victims, commemorations are commonly organized (Hunt, 2010). A commemoration is described as 'an act that arises from an intention to keep the memory of a person or a thing alive' (Bomba, 2016, p. 7). This can take various forms, for instance preserving the memory in a ceremony, book, monument or movie (Carrier, 1996). Another illustration of social remembering is public silence (Brown, 2012). The different commemorations aim to create social cohesion, justify the deadly victims, bring convenience to the people and constitute an atmosphere to those concerned to repair their lives (Arthur, 2009). Another purpose is to create room for sharing emotions and managing them (Damousi, 2001). They also intend to unite through taking into account the past as well as recognizing the sacrifice in the here and now (Brown, 2012).

Commemoration in the Netherlands

The Netherlands commemorate the Dutch victims since the Second World War (WWII) during the National Commemoration on 4 May. Among them are civilians and soldiers who died in war and in peacekeeping operations (Rijksoverheid, n.d.).

Commemorations take place in almost all Dutch municipalities, and the National

Commemoration is broadcast live on television. The National Commemoration consists of a commemoration meeting in De Nieuwe Kerk, followed by the commemoration ceremony at the National Monument on Dam Square. The royal family lays a wreath, then the trumpet player plays and silence is held for two minutes at 8:00 PM. Subsequently the national anthem is sung, followed by a student who reads a poem and multiple wreath laying for the victims.

Range of responses

Despite decades of commemoration on 4 May and the mentioned positive intentions, studies show different emotional reactions on commemorations. Gasparre, Bosco and Bellelli (2010) reported in a quantitative study among survivors of Guatemalan genocide that attendance in rituals was linked to more intrusions. However, the attendance was also associated with altruistic behaviour, bigger collective support concerning violent events, fewer avoidant thoughts related to the trauma and a more positive identity and image of others. Likewise Damousi (2001) described how commemorations provide solidarity and comfort to persons who recall trauma. Contradictory Hilton (1997) reported in a case study among WWII veterans that commemoration through media triggered posttraumatic stress reactions, even fifty years after the liberation. In another qualitative study Ibreck (2012) found that survivors of genocide experienced through commemoration the opportunity to express and heal themselves. On the contrary, she described that it could also rejuvenate the trauma and sorrow. Bilewicz and Wojcik (2018) described an increase in feelings of empathy and recognition among students who visited the Auschwitz memorial museum. Besides, Beristain, Páez and González (2000) reported that participation in rituals, on the one hand, evoke feelings of unity and lower sense of helplessness, while on the other hand, it increased feelings of injustice and anger.

Moreover, according to a recent scoping review, mental health appears to influence trauma-related reactions in response to commemoration (Mitima-Verloop, Boelen, & Mooren, 2020). A quantitative study among people with trauma-related complaints yielded an increase in negative emotions after listening to Memorial Day songs (Bensimon, Bodner, & Shrira, 2016). Besides, Gishoma et al. (2015) described an increase in negative emotions and trauma-related complaints during and after commemoration. Furthermore, there seems to be a gender component on the impact of commemoration (Barron, Davies, & Wiggins, 2008). Women

generally tend to be more emotional than men (Barrett, Robin, Pietromonaco, & Eyssell, 1998; Brody & Hall, 2008).

It seems that commemoration has an effect on both positive and negative emotions and that feelings of solidarity with victims and recognition for ones' traumas are associated with this. Besides, there seems to be an influence for gender. Therefore, in this study we will examine among others sex, solidarity and recognition as predictors of the change in emotions.

Post-war generation

Besides people who experienced war or genocide themselves, there are people who suffer from war-related complaints due to intergenerational-transmitted trauma. As a consequence of traumatic experiences such as witnessing torture or killing, Posttraumatic Stress Disorder (PTSD) could be developed. Individuals with PTSD re-experience traumatic events, have increased levels of irritability and these symptoms cause impairment in social or occupational functioning (APA, 2013). Because of this impairment in social functioning, parents could transmit this trauma to their children. This so-called intergenerational-transmitted trauma or secondary traumatization has led to the post-war generation of WWII, where some children of war-survivors even developed PTSD (Bar-On et al., 1998). However, regarding a meta-analysis on the effect of secondary traumatization, no evidence for the influence of the parents' traumatic experiences on their offspring was found. The secondary traumatization appeared only when the parents were also stressed because of other reasons (Van IJzendoorn, Bakermans-Kranenburg, & Sagi-Schwartz, 2003).

In the Netherlands the post-war generation consists of people whose parents are traumatized, for instance because they were persecuted because they were of Jewish descend or because they were from former Dutch East Indian descend who experienced internation in Japanese camps (Schreuder, Van der Ploeg, Van Tiel-Kadiks, Mook, & Bramsen, 1993).

Some of the post-war generation never heard stories about the war during their childhood.

Their parents avoided this subject, mostly because it was too painful for them to think about it. Others experienced the opposite: the war was predominant in their childhood (Dashorst, 2016).

Much has been written about possible differences from a clinical perspective. However, there is a lack of systematic scientific research. From a clinical perspective there seems to be a variety in complaints experienced by this post-war generation. Many complaints have to do with identity, for instance struggling with the self (Dashorst, 2016). For them, commemoration is a way of processing and finding their identity, however others do not want anything to do with commemoration, because it reminds them of their trauma. Some that seek professional help are afraid of entering relationships, have feelings of guilt, suffer from depression or have nightmares about the war. To handle the tension, alcohol or drugs could be used, resulting in a risk of addiction (Schreuder et al., 2003).

Current study

To date there are conflicting outcomes on the effects of commemoration on emotions and mental health. According to a recent review, limited research focused on the psychological perspective of commemoration and the effects on mental health of people with and without war-related complaints are ambiguous (Mitima-Verloop et al., 2020).

The purpose of the present study is to monitor emotional reactions after watching the Dutch national commemoration. By conducting this research, the psychological aspects of commemoration and the effect on negative and positive emotions will be examined. Therefore this study contributes to both practice and science. Based on the results of this research, the National Committee 4 and 5 May (*Nationaal Comité 4 en 5 mei*) could determine their policy making, taking into account the impact on vulnerable persons. Furthermore, the findings of this study could improve knowledge for mental health care, with regard to managing trauma.

The research question is: What is the (short term) impact of commemorating war on the emotional affect of post war generation WWII? Divided in sub questions: what is the difference in impact with the post-war generation that does not experience complaints related to WWII versus the group that experiences psychological complaints related to WWII? And how do sex, PTSD reactions, solidarity and recognition together predict the positive and negative emotional reactions of post-war generation victims of WWII? We hypothesized that there will be an increase in negative emotions and a decrease in positive emotions for both groups. Based on previous mentioned literature, we hypothesized that the increase in negative emotions and decrease in positive emotions will be bigger for people with complaints related to WWII than for the people without complaints related to WWII. Additionally we expect that the changes in emotional affect will be stronger among women compared to men.

Furthermore we expect that the presence of PTSS symptoms will explain the increase in negative emotions. Lastly we hypothesized that solidarity and recognition will predict the change in emotional reactions for both groups.

Method

Design

The design of the research is an experimental design. It is derived from the Trauma Film Paradigm (James et al., 2016). This paradigm was introduced to examine psychological responses to stress (Lazarus, 1964). The visualization of a movie fragment that is associated with trauma would activate comparable responses as actual traumatic events (James et al., 2016). In the current study we used this paradigm to examine emotional reactions to the commemoration. The participants watched a TV fragment of sixteen minutes of the national commemoration on 4 May 2018. This clip contains important parts of the commemoration, such as the two minutes of silence, the sound of a trumpet, personal speeches from family members of the first generation, the national anthem and the laying of the wreaths.

Manipulation check

Two questions were asked as a manipulation check after watching the TV fragment, to analyse the degree of agreement in emotional responses between experiencing the commemoration on 4 May and watching the clip as part of the current study. The first item was "In comparison to the real commemoration, my emotional reaction to the clip was", which ranged from 1 (much less intense) to 5 (much stronger). The second item was "During the two minutes of silence on the clip, have you commemorated the same way as you would during the commemoration on 4 May?", which ranged from 1 (not at all) to 5 (very much).

On average, participants with complaints answered that their reaction was similar or somewhat more intense than their reaction on 4 May (M = 3.6, SD = 1.2). Participants without complaints answered on average that their reaction was similar to their reaction on the real commemoration (M = 2.7, SD = 0.7). Moreover, most participants in both groups answered to commemorate the two minutes of silence 'reasonably the same way' as they used to do during 4 May (M = 3.7, SD = 1.4; M = 3.0, SD = 1.0). Therefore it seems that the manipulation was successful.

Data collection and procedure

Ethical approval for the study was provided by the ethical review board of the Faculty of Social Sciences of Utrecht University. The research was focused on a bigger group, but this study only analysed the post-war generation with and without psychological complaints of a war they never experienced themselves. The participants of this study who had not experienced complaints were acquired through a convenience sample. Besides, it was communicated via the notice board at Utrecht University and it was communicated via the personal Facebook page of the researcher. The post-war generation with complaints was reached by handing out invitations to their practitioners at ARQ Centrum-'45 at Oegstgeest, the national center for diagnostics and treatment of people with complex psychotrauma

complaints in the Netherlands. Those willing to participate received an information letter in advance and filled an informed consent. This form was returned to the researchers, who then contacted the participants. Most participants were sent the link to the questionnaire by e-mail, except for most participants with complaints who filled in the questionnaire in the presence of the researcher at the clinic. Given the content of this study, it was mandatory to complete the questionnaire on a laptop or computer with a screen size between thirteen and fifteen inches and a headset for listening to the clip. A pilot study was conducted to test the intelligibility before the experimental application, based on that results a few items in the questionnaire were refined.

Participants

The final sample consisted of 44 participants who completed the questionnaire. The inclusion criteria were that the participants had at least one parent who was born in the Netherlands before 5 May 1945, or when born in former Dutch East Indies before 15 August 1945. Furthermore, the participants had to be born in the Netherlands, or former Dutch East Indies and they had to master the Dutch language.

Among a total sample of 17 participants with complaints, 10 were female (58.8%) and 7 were male (41.2%), with a mean age of 56.88 years (SD = 6.49), 16 (94.1%) born in the Netherlands and 1 born in the Dutch East-Indies (5.9%). Of those participants without complaints, 17 were female (63.0%) and 10 male (37.0%), with a mean age of 56.89 years (SD = 7.76), all of them were born in the Netherlands. Further details about education, background and participation are presented in Table 1.

Table 1

Frequencies of descriptive variables for both groups separately

	Complaints			
Variables	N	%	N	%
Sex (0-1)				
Male (0)	7	41.2	10	37
Female (1)	10	58.8	17	63
Education				
Lower secondary education	0	0	3	11.1
Average secondary education	6	35.3	7	25.9
College/University	11	64.7	17	63
Country of origin				
The Netherlands	16	94.1	27	100
Other	1	5.9	0	0
Participation				
Two minutes of silence	15	88.2	27	100
Physically attended	3	17.6	4	14.8
Radio, TV or online	12	70.6	17	63
Did not commemorate	1	5.9	0	0
Other	5	29.4	1	3.7

Instruments

The measuring instruments will be described in order of test taking.

In view of the research being part of a larger study where other samples were used, the demographic data were used to request the inclusion and exclusion criteria. Questions covered sex, age, which generation is applicable, highest completed education and participants' country of origin. The variable complaints was measured by the item 'Do you have (had) problems in your functioning that are related to a war that you did not experience yourself?'', and could be answered by ticking yes or no.

Ten items from the PANAS-X subscales were chosen to measure emotions (Watson & Clark, 1994), using a VAS-scale consisting of five positive and five negative emotions. The positive emotions inspired, happy, concentrated, proud and calm and negative emotions

afraid, angry, ashamed, sad and downhearted were covered. Participants had to answer the questions before and immediately after watching the clip of the commemoration. The scores on these items ranged between 0 and 100. The VAS is a validated scale, with a high test-retest reliability (Luria, 1975). We calculated the total scores for the pre positive emotions (α = 0.86), post positive emotions (α = 0.80), pre negative emotions (α = 0.90), and post negative emotions (α = 0.85) by adding all items in that sub category, with total scores possible between 0 and 500.

PTSD symptoms were measured by the PCL-5, a PTSD checklist (Weathers et al., 2013). The PCL-5 contains 20 items about this disorder according to the most recent version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (APA, 2013). One of the items was 'In the past month, how much were you been bothered by: repeated, disturbing and unwanted memories of the stressful experience?'', and items were scored from 1 (not at all) to 5 (extremely). Participants had to answer these questions before watching the clip of the commemoration. The PCL-5 is a validated scale, with a high test-retest reliability (Blevins, Weathers, Davis, Witte, & Domino, 2015). The total score was calculated (α = 0.940) by adding all items and ranged from 20 until 100. Participants who indicated that they had no impaired functioning as a result of war did not complete this questionnaire.

The variable solidarity was measured by the items "Through watching the commemoration, I feel supported by people around me" and "...I feel connected with people around me", and categories ranged from 1 (not at all) to 5 (very much). The total score was calculated by adding the two items ($\alpha = 0.726$) and this score ranged from 2 to 10. Participants answered these items after watching the clip of the commemoration.

The variable recognition was measured by the items as a response to commemoration "I experience a sense of recognition for (indirect) war victims" and "I see that there is attention for injustice in Dutch society", ranging from 1 (not at all) to 5 (very much). The total score

was calculated ($\alpha = 0.725$) by adding the two items and ranged from 2 to 10. Participants answered these items after watching the clip of the commemoration.

Data analysis

First, we calculated the minimum required sample size by using power analysis G*
Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). Following the calculations for the
Mixed ANOVA with a medium effect size and two measurements we needed 54 participants
and for the multiple regression and a medium effect size the sample size needed to be 129,
which both differed from the actual sample size. We examined the data for outliers,
normal distributed variables and homogeneity of variances. Given skewness and kurtosis did
not deviate significantly, we proceeded the analyses and applied the adjusted R-squared.
Subsequently we performed a Mixed ANOVA to calculate whether the emotion scores were
different for both groups before and after the clip. Finally, a multiple regression analysis
was performed to analyse whether sex, PTSD reactions, solidarity and recognition together
could predict the increase in negative emotions and decrease in positive emotions.

Results

Main effect of time

All mean scores of emotions are shown in Table 2. We hypothesized that watching the clip of the commemoration would cause an increase in negative emotion scores and a decrease in positive emotion scores. As described in Table 3, the effect is significant at p < .001. Conform our hypothesis the Mixed ANOVA reported a significant increase in negative emotions with a large effect size, F(1,42) = 24.51, p < .001, partial $\eta 2 = .37$. However, it reported no significant decrease in positive emotions, F(1,42) = .60, p = .44, partial $\eta 2 = .01$, indicating that there is no significant change in positive emotions after watching the clip. A graphic representation of the negative emotions is shown in Figure 1, a representation of the

positive emotions is shown in Figure 2.

Main effect of group

Regarding the effect of group, the Mixed ANOVA revealed significant effects with respectively large and medium-large effect sizes, as seen in Table 3. People with complaints have a higher mean score on negative emotions and a lower mean score on positive emotions than people without complaints, scores differed substantially for both negative and positive emotions F(1,42) = 22.01, p < .001, partial $\eta 2 = .34$ and F(1,42) = 8.95, p < .05, partial $\eta 2 = .18$.

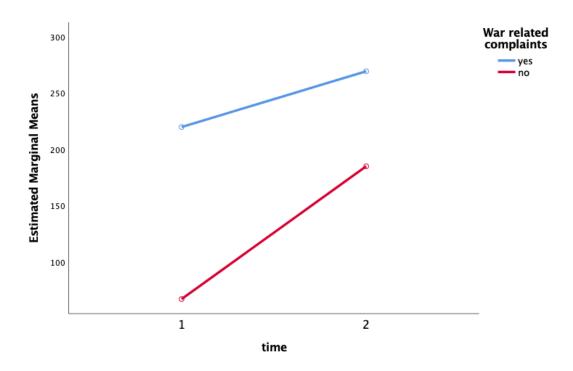


Figure 1. Main effect of time on negative emotion scores.

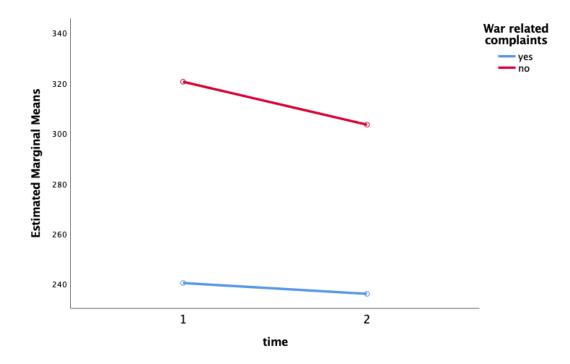


Figure 2. Main effect of time on positive emotion scores.

Table 2

Means and Standard Deviations on the Pre and Post Measures of Emotions by Groups

			Negative emotions				Positive emotions	3	
		Pre		Post		Pre		Post	
Group	n	M	SD	M	SD	M	SD	M	SD
Suffering from complaints	17	219.76	100.69	269.35	69.39	240.41	69.92	236.12	81.35
No complaints	27	66.74	74.79	184.85	128.34	320.48	105.48	303.41	93.20

Table 3

Mixed Analysis of Variance of Emotion Scores by groups (complaints or no complaints)

Emotions	Source	df	SS	MS	F	p
Negative	Between groups	1	294271.95	294271.95	22.01	.000
	Within groups	1	146687.38	146687.38	24.51	.000
	Between*Within	1	24490.70	24490.70	4.09	.049
Positive	Between groups	1	113262.50	113262.50	8.95	.005
	Within groups	1	2381.58	2381.58	.60	.444
	Between*Within	1	851.90	851.90	.21	.647

Interaction between group and time

We hypothesized that the increase in negative emotions and the decrease in positive emotions would be stronger in the group of participants with complaints. Table 2 shows the difference in means on negative emotions for both groups on the pre-measure and post-measure. The Mixed ANOVA shows a significant interaction effect with a medium effect size between negative emotions and the group, F(1,42) = 4.09, p < .05, partial $\eta 2 = .09$, indicating that the increase is stronger for the group participants without complaints. This contradicts our hypothesis, nevertheless participants with complaints still end up with higher negative post scores. However, there does not seem to be a significant interaction effect between positive emotions and the group, F(1,42) = .213, p = .647, partial $\eta 2 = .01$. Therefore it cannot be concluded that the decline in positive emotions was stronger for one of the groups.

Multiple regression analyses and predictors of negative and positive emotions

Two multiple regression analyses were performed to test whether sex, PTSD reactions, solidarity and recognition together predicted the increase in negative emotions and the decrease in positive emotions. In Model 1 the negative emotion scores at the pre-measurement

were entered. In Model 2 age and educational level were added as control variables. In Model 3 sex, PTSD reactions, solidarity and recognition were added. Model 1 showed to be significant F(1,41) = 14.86, p < .001. Adding the control variables age and education did not yield a significant improvement of the model F(3,39) = 9.125, p < .001. In the third model, the pre score on negative emotion (Beta = .530, p < .05), age (Beta = .323, p < .05), solidarity (Beta = .388, p < .05) and recognition (Beta = -.452, p < .05), explained the increase in negative emotions. The predictors in Model 3 account for 53% of the variance in negative emotions. The full regression table is presented in Table 4.

Regarding the positive emotions the variables were added to the models in the same way. In Model 1 the positive emotion scores at the pre-measurement were entered. In Model 2 the control variables age and educational level were added. In Model 3 sex, PTSD reactions, solidarity and recognition were added. Model 1 showed significance, F(1,41) = 19.742, p < .001. The second model did not yield a significant improvement, F(3,39) = 7.497, p < .001. In the third model, only pre-measurement score on positive emotions (Beta = .467, p < .005) and solidarity (Beta = .461, p < .05), explained the decrease in scores of the positive emotion. The predictors account for 47.4% the variance in positive emotions. The full regression table is presented in Table 5.

Table 4
Summary of regression analysis for variables predicting change in negative emotions

		Model 1			Model 2			Model 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
Negative pre scores	.527	.137	.516**	.576	.129	.565**	.541	.167	.530*
Age				5.657	2.060	.349*	5.231	1.832	.323*
Education				-18.16	24.238	098	-12.796	22.508	069
Sex							5.027	27.616	.021

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PTSD reactions			127	.942	023
Solidarity			22.868	7.649	.388*
Recognition			-27.555	7.653	452*
Adjusted R ²	.248**	.367**		.530**	
F for change in R ²	14.858**	4.860*		4.376*	

Note: Negative pre scores is a total score

Table 5
Summary of regression analysis for variables predicting change in positive emotions

		Model 1			Model 2			Model 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
Positive pre scores	.520	.117	.570**	.542	.117	.594**	.426	.116	.467*
Age				-1,397	1.672	110	-1.531	1.501	121
Education				21.057	19.367	.145	-4.430	18.694	030
Sex							-25.692	23.062	139
PTSD reactions							.089	.565	.021
Solidarity							21.233	6.320	.461*
Recognition							3.866	6.320	.081
Adjusted R ²		.309**			.317**			.474**	
F for change in R ²		19.742**			1.253			3.901*	

Note: Positive pre scores is a total score

Discussion

The current study aimed to examine the emotional impact of commemoration on the post-war generation of WWII in the Netherlands. The analyses revealed an increase in negative emotions for both groups, but the increase was stronger for the group participants without complaints. Solidarity and recognition explained the increase in negative emotions, while only solidarity explained the decrease in positive emotions.

^{*}p < .05

^{**}*p* < .001

^{*}*p* < .05

^{**}p < .001

We hypothesized that both people with and without psychological complaints related to WWII would be emotionally touched by the commemoration and that negative emotions would increase and positive emotions would decrease in both groups after watching the clip. Conform the hypothesis the analysis revealed an increase in negative emotions. It is essential to not necessarily translate the higher negative emotions as an adverse result of commemoration, because it also could trigger the grieving process and improve mental health (Musaph, 1990). Contradictory to our hypothesis, there was no substantial decrease in positive emotions after watching the clip. A possible explanation for this result would be that the Trauma Film Paradigm specifically aims to show the effect of exposure and reactions to psychotrauma, which without exception are negative emotional reactions (Clark, Mackay, & Holmes, 2015; James et al., 2016). Contradictory to our hypothesis the results of our study showed substantial increase in negative emotions which is stronger for individuals without psychological complaints and that is different for the group with psychological complaints. We expected that participants with complaints would be more triggered by the commemoration, resulting in greater change in negative emotions than people without complaints would experience. A possible explanation for the unexpected finding is the considerable difference in pre scores between both groups, resulting in more room to increase in negative emotions for the group participants without complaints. Furthermore, people with complaints had a substantial higher mean score on negative emotions and a lower mean score on positive emotions than people without complaints had. This result is consistent with literature on trauma and PTSD diagnosis, where people with PTSD experienced more negative emotions such as anger and sadness and people who experienced psychotrauma in early life reported lower subjective happiness (APA, 2013; Ogle, Rubin, & Siegler, 2013). Moreover, there was no substantial effect between positive emotions and the group, therefore it cannot be concluded that the decline in positive emotions was stronger for one of the

groups. A possible explanation could be situated in the nature of the paradigm as a model to measure negative emotions and PTSD reactions (James et al., 2016), and not positive emotions.

Furthermore we examined the effect of sex, PTSD reactions, solidarity and recognition on the increase in negative emotions and the decrease in positive emotions. We hypothesized that women tend to be more emotional and therefore sex could have an effect in experiencing emotions. Mental health appears to influence trauma-related reactions in response to commemoration, therefore we hypothesized that PTSD reactions were accountable for the change in negative emotions. Additionally we expected that feelings of solidarity and recognition would be accountable for the change in emotions. Partly conform the hypothesis solidarity and recognition explained the increase in negative emotions. The more support and connection someone experienced with others, the more negative emotions, but more feelings of recognition for war victims and injustice resulted in less negative emotions. A possible explanation could be that connection intensifies emotions, which increases sadness and anger, while unity increases the empathy people have for war victims, which decreases negative emotions (Beristain et al., 2000). Contrary to our hypothesis PTSD reactions did not seem to explain the change in negative emotions. This is presumably due to high negative pre scores of people with war-related complaints. Nevertheless, considering the impact of mental health on commemoration (Gishoma et al., 2015) and the already large amount of negative feelings these individuals experience, future research is recommended.

Regarding positive emotions, only positive pre scores and solidarity explained the decrease in positive emotions, meaning that less solidarity accounts for the decrease in positive emotions. On the contrary, sex, PTSD reactions and recognition did not account for the decrease. A possible explanation could be that in general commemoration appears to be more related to a change in negative emotions than to a change in positive emotions.

Strengths and Limitations

The current study is considerably unique for focusing on the impact of commemoration on emotions of the post-war generation.

A first limitation of the current research are the small sample sizes of both groups. We should be careful with drawing conclusions from a small sample size and it is hard to generalise the results to the general population. Further research is needed with more participants from the post-war generation of WWII. However, recruiting more participants with psychological complaints related to WWII can be challenging, as some of them do not want to participate in topic-related research. As a second limitation, the negative emotion scores were non-normal distributed. Normality is required for the performed analyses, therefore we should be careful with interpreting the results. A larger sample size would be more helpful in increasing normality. As a third limitation, the date of participation could have had some impact on the results. Participants completed the questionnaires in different months. In some cases the commemoration of 2019 already happened and therefore would be fresh in the memory of the participants, while in other months the media attention for the commemoration was limited. This may have affected participants' responses. As a fourth limitation, the emotions were only measured immediately before and after watching the visualisation of the commemoration, therefore the long term effects on the emotions were not measured, in spite of benefits of rituals that take longer time to develop such as strengthening social bonds (Rimé, 2007). Longitudinal studies are recommended to measure the difference between the short and long term consequences and to see its influence on emotional impact over the months.

Conclusions

Altogether the results in the current study have shown that there is a difference in impact of commemoration over time between both groups. Besides, the findings emphasize

how support by others and connection with them was related to more negative emotions, whereas more feelings of recognition for war victims and injustice resulted in less negative emotions. Furthermore, less solidarity accounts for the decrease in positive emotions. These results can be important for mental health care professionals to gain insight into how the postwar generation emotionally responds to WWII commemoration. Besides, it is necessary to examine the effect of commemoration to provide understanding for policy makers and adapt the findings in a commemoration program where vulnerable people are taken into account. The current findings emphasize the importance of additional research on the impact of commemoration on emotions and the role of solidarity and recognition.

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