

Literature Review Paper: The Debate Over Flashbulb Memories

Sidney Hoolsema

300153361

Memory 325

Dr. Andrea Hughes

November 23, 2021

Do you remember where you were when you first heard that Osama bin Laden was assassinated? Or when Michael Jackson passed away? If you have a clear and detailed memory of either event and feel very confident about your recollection, you probably have Flashbulb memories (FBM) (Bohn and Berntsen, 2007). FBM are depicted as extremely vivid recollections of highly emotional events (Kraha and Boals, 2014). The highly emotional nature of the events causes people to recall the experience clearly. The memories remain intact for an extended duration which is accompanied with high confidence in the accuracy of the memories (Talarico et al., 2014). Studies of FBM find that participants remember in-depth details of the event, although it can include both irrelevant as well as relevant information. (Kraha and Boals, 2014). For example, a FBM could consist of remembering one's precise location, who they were with, and even what they were wearing when they first heard the news (Talarico et al., 2014). This type of detail encompasses information that would have been captured if the person was photographed at the event, hence the name Flashbulb memory (Talarico et al., 2014). The phenomenon of FBM has been studied many times, but the occurrence of FBM has mainly been studied after widespread negative public events (Kraha and Boals, 2014). Yet, it has been debated in the literature if FBM can occur from positive events just as strongly as negative ones (Talarico et al., 2014). This paper will look at whether FBM occurs from negative or positive events in public and private experiences.

One study examined if an unanticipated positive event results in the same memory formation and retention caused by negative FBM (Talarico et al., 2014). The researchers used the assassination of Osama bin Laden because many Americans found this event to be extremely positive. As an illustration, when the news of the assassination was announced, large crowds of people went on the streets in major cities in the United States to commemorate the event.

The method of the study consisted of 329 participants that were randomly put into three different groups (Talarico et al., 2014). The three groups determined the time between follow-up questionnaires: either 7, 42 or 224 days after the first session. In addition, all the groups were given a questionnaire 365 days after the original session. The study started with open-ended questions in the context of assassination, similar to other FBM studies (Talarico et al., 2014). The participants were asked about their location, who they were with, and the main emotion they felt when they first heard the news of the assassination. Participants had to answers comparable

questions about an event of their choice that happened on the weekend after they had heard the news of the assassination. The participants had to label the weekend event with a name that would act as a cue to prompt them to remember this event in a future questionnaire. Next, participants completed an Autobiographical Memory Questionnaire which looked at phenomenological memories in terms of the personal recollection of the event. For example, participants would respond to questions like 'I feel as though I am reliving' the event on a scale of one to seven, with one being not at all, and seven being as clearly as if it were happening now (Talarico et al., 2014, p 581). This type of questionnaire was used to determine how vivid and intense the memory was.

The researchers found that, unlike negative FBM, where people report the memories with the same intensity for many years, participants in this study of the positive event memories faded over time (Talarico et al., 2014). Furthermore, people's memories of the positive event did not have extreme confidence and clarity as negative FBM do. However, the researchers found that valance and sentiment to everyday events were rated higher than the assassination. Therefore, the researchers conclude that positive FBM are not different from common personal memories and can't be treated equally with negative FBM.

A study by Bohn and Berntsen looked at how different emotional reactions to the same event can cause altered effects on how FBM is processed and recalled (2007). The fall of the Berlin Wall in 1989 was a very shocking event for people all around the world. Although many people were elated with the fall of the Berlin Wall, some people viewed it as an adverse event. Therefore, this study aimed to see if those who had positive FBM about the event had more accurate and vivid recall than those who had a negative FBM. As a control, the study also included those who had neutral FBM about the event. This study differs from previous ones as it looked at how different emotions can affect the qualities of the FBM. However, there is debate around how valid this type of study is for FBM. For example, the participants in the study may not have had their life impacted enough by the fall of the Berlin Wall for a FBM to be triggered. Furthermore, this event may have been an expected inevitability by many German citizens on both sides of the Berlin Wall (Bohn and Berntsen, 2007).

The study's method consisted of only German citizens, but with 63 percent of the participants from East Germany (Bohn and Berntsen, 2007). The study focused on participants

who were older than 30 years old when the wall fell. All participants answered a questionnaire similar to most FBM studies, which they rated from one to seven. Then the participants stated how much of an impact the removal of the Berlin Wall had on their lives. Next, the participants indicated how often they conversed or consumed news about the event. Also, they reported how interested they were in politics and how unusual they found the event. The subjects also had to answer seven questions on facts surrounding the event, such as "who was leader of the state in East and West Germany" (Bohn and Berntsen, 2007, p.569).

Consequently, the results showed several key findings. Most subjects of both groups were educated, which was measured by having a university degree (Bohn and Berntsen, 2007). Past studies have found a fading effect bias for negative memories. The current study assessed this by comparing affective attitudes when the event first happened and at the follow-up study 13 years later. The positive group saw no significant change in affective attitudes over time which would support the pleasantness bias. By contrast, members in the negative group saw a significant decrease in pessimistic attitudes towards the event. Interestingly, the results showed that participants in both groups remembered the facts about the event quite accurately. Although the positive groups responded to more questions in the 13-year follow-up than the negative and neutral groups, no group had more correct answers. When comparing participants who answered all seven questions, the negative group answered more correctly than the positive and neutral groups. Therefore, the negative FBM groups had the most accurate memories, which does not support the fading affect bias (Bohn and Berntsen, 2007). The researchers attributed this finding to bottom-up processing, as those who felt the event was very negative experienced more arousal and perceived the event with more detail (Bohn and Berntsen, 2007). Therefore, they found that having negative or positive FBM about an event led to unique and disparate effects on how the memory was processed and recalled as time went on (Bohn and Berntsen, 2007).

Demiray and Freund looked at public FBM and compared the memories to a private FBM event, including FBM that were both positive and negative for each (2014). Their study differed from previous studies on private versus public FBM because the researchers assessed self-continuity and social bonding regarding the memories. Also, the study looked at age-related differences in FBM by assessing young and middle-aged adults. Previous research on FBM primarily looks at widespread adverse public events rather than private ones. Therefore, this

study assesses both positive and negative events that occurred publicly and privately while comparing age differences. For the public FBM events, the study used the death of Osama bin Laden as a positive event and the death of Michael Jackson as an adverse event. Also, for the private FBM events, the researchers used the example of when a person finds out that they or a loved one is pregnant as a positive event and discovering the death or illness of a loved one as a negative event (Demiray and Freund, 2014).

The study's method consisted of 389 young adults aged 18 to 39 years and 176 middle-aged adults who were 40 to 68 years old (Demiray and Freund, 2014). The researchers picked the deaths of both Michael Jackson and Osama bin Laden because they both occurred in 2011, and both involved death, which kept the valence similar. Like other FBM studies, participants recounted the location and what they were doing when they first heard about the event. In addition, they reported how unexpected, significant, and intense the events were for them. Unlike the other papers' methods, the researchers conducted a pilot study and found that it was widely held that Osama bin Laden's death was a positive event and that Michael Jackson's death was a negative event for people in the United States. They also found that 36% of participants said the death of a loved one was the most common negative news, and 32% said sickness of a loved one. Therefore, the researchers combined the death or illness of a loved one as a negative event for their study. Whereas only 26% of participants said that finding out they or a loved one were pregnant was considered good news for a positive personal event (Demiray and Freund, 2014).

The study results found that just the positive private FBM scored higher on self-continuity than both public FBMs (Demiray and Freund, 2014). Also, retelling the positive private FBM scored higher for social bonding than the other three types of FBM. However, the two private FBM scored higher on directive function than both public FBM, but both the positive and negative private FBM scored similarly. The results supported the hypothesis that people would feel emotionally closer to the positive FBM, whether it was a public or private event. The study also found differences in the age groups were significant for the self-continuity and social bonding of the memories but not for directiveness and the distance function of FBM. This is because the younger-aged adult group had weaker functions of self-continuity and social bonding (Demiray and Freund, 2014).

The fourth study looked at FBM for the positive event of getting an invitation to a university social club (Kraha and Boals, 2014). The study started with 122 undergraduates; however, only 47 participated in the seven-month follow-up, and only 28 participants for the one-year follow-up. The participants filled out a questionnaire that consisted of open-ended questions like the previous FBM studies, and they ranked their experiences on a scale from one to seven. Later, a rater went through all the questions and determined if the details remained the same or changed throughout time.

The results showed that getting an invitation to a sorority could result in a positive FBM (Kraha and Boals, 2014). Participants rated the experience as vivid, surprising, emotional, believed they were accurate, and recalled the setting. At the seven-month measure, the researchers found that participants' recollection of the memory was very accurate. In addition, the recall of the event was again consistent at the one-year follow-up, but the sample size was small. Although there were mixed findings on previous studies for positive FBM's, this study reported that a significant amount of the event details remained consistent.

This study has several limitations compared to the other three papers referenced above (Kraha and Boals, 2014). Firstly, the sample size decreased drastically after each follow-up. Although they did find a significant effect for 28 participants, the results do not reflect the recall of all 122 original participants. Another limitation is that getting an invitation to a sorority is not generalizable to other populations. For example, only a small number of young adults attend a college with sororities, and an even smaller ratio are invited to one of these clubs. Also, since those who get invited to join a university club are relatively the same age, this event is not relatable to many middle and older adults. Therefore, by using this type of private FBM event, the findings cannot be applied to people outside this study. In comparison, Demiray and Freund assessed a private FBM regarding pregnancy and illness that are much more universal experiences compared to a sorority invitation.

To conclude, the four studies' results provide evidence for different points of view on the positive FBM debate. Talarico et al.'s found that positive memories do not cause FBM as the positive event of Osama bin Laden's assassination did not cause the same long-term recollection and vividness as negative events (Talarico et al., 2014). By contrast, Kraha and Boals found that a positive private event could result in FBM that remained accurate and vivid over time (2014).

Although the studies differ because one is a private event and one is public, the underlying mechanism of FBM remains the same. The limitation of the previous two studies is that the researchers assumed what type of emotion the event would cause. In contrast, Bohn and Berntsen corrected for this by letting participants choose what emotion the event evoked (2007). Their study found that people who thought the fall of the Berlin Wall was a positive event experienced a vivid and highly emotional memory, similarly to the negative group. On the other hand, those in the negative group scored higher on accuracy for the event than the positive group due to bottom-up processing and heightened arousal (Bohn and Berntsen, 2007). Finally, Demiray and Freund built off the limitations of the previous studies by contrasting four types of FBM (2015). Their study compared positive, negative, public, and private FBM incidents instead of only assessing one event (Demiray and Freund, 2015). They also found a difference for FBM based on age groups; however, the study included significantly more young adults than middle-aged adults (Demiray and Freund, 2015). Moreover, another limitation of all three studies that used a follow-up method was that all of them had vastly different levels of participation. Therefore, the data found in the follow-up studies may be subject to some error due to smaller sample sizes. Future studies will need to look at a method that helps ensure similar participation for each follow-up measure. Based on all four studies, the debate on the effect of positive FBM continues.

References

- Bohn, A., Berntsen, D. Pleasantness bias in flashbulb memories: Positive and negative flashbulb memories of the fall of the Berlin Wall among East and West Germans. *Memory & Cognition* 35, 565–577 (2007). <https://doi.org/10.3758/BF03193295>
- Demiray, B., & Freund, A. M. (2015). Michael Jackson, Bin Laden and I: functions of positive and negative, public and private flashbulb memories. *Memory (Hove, England)*, 23(4), 487–506. <https://doi.org/10.1080/09658211.2014.907428>
- Kraha, A., & Boals, A. (2014). Why so negative? Positive flashbulb memories for a personal event. *Memory (Hove, England)*, 22(4), 442–449. <https://doi.org/10.1080/09658211.2013.798121>
- Talarico, J. M., Kraha, A., & Boals, A. (2014). Unexpected positive events do not result in flashbulb memories. *Applied Cognitive Psychology*, 28(4), 579–589. <https://doi.org/10.1002/acp.3039>