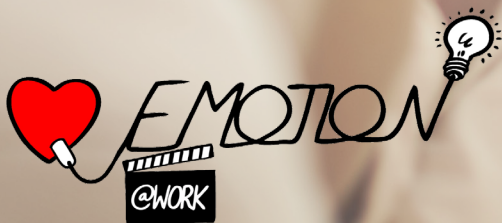


Memory Matters: Is This the Key to Successful Workplace Investigations?

Research Article by Gabriella Williams



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1. Workplace Investigations and Memory

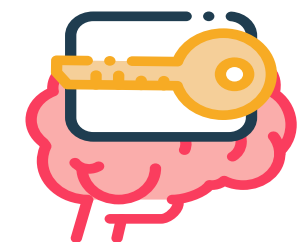
Memory is of great significance during workplace investigations. Incidents that happen in the workplace must be dealt with carefully, but one aspect that can be missed and overlooked from these investigations is how the memories of people involved may be affected. Knowing how memories can be affected and what can be done to avoid this may help interviewers to gather more accurate information about what may have happened and make interviews more effective.

Throughout this article, we will discuss some issues with memories that may arise during a workplace investigation and find solutions to ensure that you have the ability to adapt an interview to suit the needs of your interviewee. It is helpful to know that not only do these techniques improve the interview and information gathered, but they are also useful for providing comfort to the workers you are interviewing.

2. What is Memory?

Memory is broken down into encoding and retrieval of information, with flows being used to move this information around. To make memories, we must be able to transform our experiences into information which can be stored in our short and long term memories. Short term memory (STM) only holds information for around 18 seconds unless rehearsed (**Peterson & Peterson 1959**), and it is only able to encode 5-9 words, numbers, or small pieces of information at a time before we forget (**Miller 1956**). As for long term memory (LTM), this is much more impressive. It is assumed to have an unlimited capacity for information and studies suggest that LTM can successfully store information for many years, and some may last a lifetime (**Bahrick 1975**). Though LTM can store information for a very long time, it is not always trustworthy as information can decay over time.

Once memories are made and stored, we then need to be able to recall them. We must understand that memory is not like a video; we cannot always press play and have the memory recalled immediately. Researchers have been very interested in what obstacles we encounter that may stop us from being able to remember everything properly, and when we want it. Many people think that the biggest obstacle we face when trying to remember is time, but here I will talk more about other main causes of forgetting and reduced information recall, through a workplace scenario.



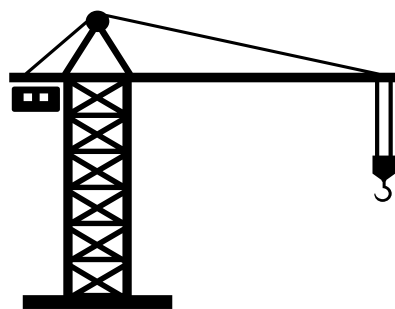
3. Emotion, Memory and Their Interaction



Imagine you are a manager at a construction company. Recently, while your workers were on a job, some equipment malfunctioned leading to a part breaking and narrowly avoided hitting another worker. We will discuss 3 people within the scenario who you may need to interview in order to get a better understanding of what happened and why.

As you read, it is important to remember that **forgetting**, **inaccuracy** and **deception** are not all the same. Someone can be inaccurate with the information they give you, without lying or could forget something happened without deliberately withholding information. There may be times when people do try to deceive you, however in lots of situations inaccurate information can simply be down to the inability to recall information, and it is helpful to know how best to help people access their memories.

Worker A was an onlooker working nearby. They recently started at your company after being at another company for the last 5 years. In that time, they have encountered other issues such as this, where equipment has malfunctioned.



Now, this may become a problem when you begin your investigation. This is because of a theory used to explain forgetting called 'interference theory'. This explanation for forgetting suggests that occasionally when we want to remember something, especially a memory in our long-term memory, it may be blocked by another memory. In our scenario here, our worker is struggling with proactive interference, where an older memory (the incident at their old job) overshadows a much newer memory (what recently happened at your company).

They may struggle to remember details of what happened here, or their memory may be distorted, causing them to combine details of the past incident with this most recent one. They likely do not know they are doing it, but their inaccurate testimony means you cannot be sure what happened.

As the interviewer, you must be mindful to look out for signs of this and be able to adjust your technique to mitigate its effects. After greeting the worker, you may start by asking them to talk about the experiences of equipment malfunction they have had in the past, including details of what happened and how this made them feel. They might describe faulty machinery or human error, but the task is to allow them to recognise a timeline of past events.

You can ask them specifically to describe, in as much detail, what happened during the event you are trying to find out about in this interview. You should pay particular attention to the language they are using when speaking, as analysing this can help determine whether they are remembering correctly or mixing up events. For example, when describing the recent event, they may use words such as 'normally' or 'usually' to describe what typically occurs. But you do not want this. Try to bring them back to recounting using language specific to the recent event.

Worker B is the person responsible for operating the equipment at the time of its malfunction. You call them into your office to conduct the interview, but they are really struggling to remember the details of what happened.

Here, we are encountering another reason for forgetting called retrieval failure: the inability to retrieve information (memories) even though we have them stored away in our minds.

Tulving (1983) suggested that this is because we do not have enough cues to trigger the memories to be recalled. His Encoding Specificity Principle stated that we need cues in order to recall things, and for these cues to be helpful to us, they have to be 2 things. Firstly, they must be present at the time of encoding (making the memory) and secondly, they must be present at the time of retrieval (remembering).

There are also 2 different types of forgetting due to lack of cues that would be helpful to understand in order to help you get the most accurate information: **context dependent** and **state dependent forgetting**.

Let's think of this in our workplace setting. Firstly, we will look at context dependent forgetting. The place of encoding is the construction site where the incident happened, and the place of retrieval will be the interview room where you are asking the worker to remember. This type of forgetting happens when our external cues such as the place we are in or the weather, do not match between encoding and retrieval.

The environment in which we learn something is vitally important for recall, as recall has been found to be 40% lower in non-matching conditions (Godden & Baddeley). This suggests that if external cues are not present, memory recall may be worse.

Secondly, state dependent forgetting refers to weakness in recall when physical or mental states do not match at the time of encoding and retrieval. This could be for a number of reasons; medicines or drugs, mood, amount of sleep, pain, or fear may all be factors that affect state dependent memory.





In order to help Worker B recall the details of the incident, you as the interviewer may consider the following:

Taking the worker back to the site.

Taking the worker back to the site and allowing them to stand in the place they were when the incident happened may trigger memories they could not recall when in the interview room. Depending on the incident you are dealing with in your workplace, you may be able to allow them to do the same work they were doing when the incident took place (but this will vary depending on the situation).



Show the worker pictures of the equipment and the site.

This may be a more suitable suggestion rather than being taken back to the place of the incident. These pictures may be of the site as it should be in its working condition, and pictures as it was when the incident occurred. This may help to trigger memories of anything they might have seen that was out of the ordinary. The images may also be from different angles and points of view of other workers at the time. (This may therefore require finding out where everyone was before conducting the interview).

State dependent conditions are much harder to recreate, but finding out what state the worker was in may be beneficial to understanding what may be interfering with recall.

In any interview scenario, an important consideration is the impact that our measures may have on the individual's psychological safety. In our example, the risk of psychological damage is fairly low for most people involved, so working on techniques to combat context and state dependent forgetting pose low risk.

However, had this been a scenario which resulted in fatalities or something else with a highly negative psychological impact, these suggestions for techniques must be reviewed. As an interviewer you must assess all ethical issues and impact on the welfare of your employees, so consider whether putting someone back in a highly stressful situation would be beneficial or worthwhile for your investigation.

Worker C is the individual who was put in the position of danger due to the equipment malfunction.

Now, in this situation, emotion is the central element to be focussed on in terms of memory recall. For this worker, this was a scary event. Worker C may have felt high levels of anxiety surrounding the incident.

Here, I am defining anxiety as a state of physical or emotional arousal, resulting in having worried thoughts and physical symptoms such as increased heart and breathing rate. Of course, there are other elements to anxiety, and it can be diagnosed as an ongoing illness, but it can also be present for short periods of time, such as in our scenario.

Research has shown there are conflicting ideas as to the influence anxiety might have on accuracy of recall and memory. Some studies such as Johnson and Scott (1976) suggest that anxiety reduces accuracy, but others like **Yuille and Cutshall (1986)** say that anxiety can actually increase accuracy.

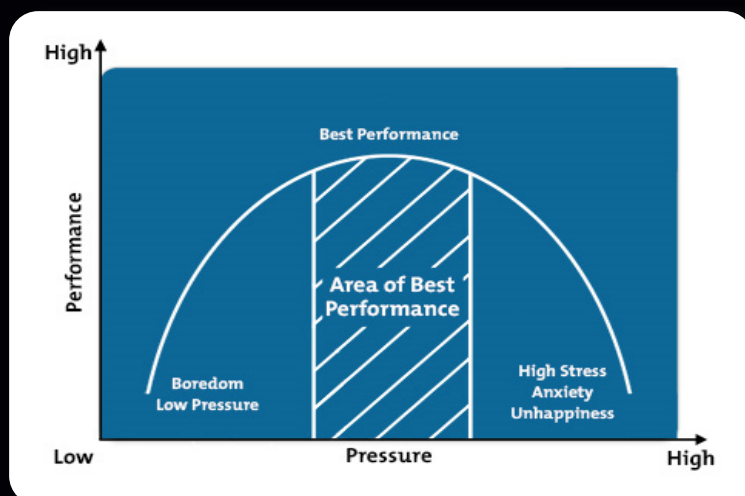


Image 1: Yerkes-Dodson Law

An explanation for this may be the **Yerkes-Dodson Law** (image 1) which suggests that as levels of anxiety increase, so will the accuracy of memory, and this will reach an optimal level. However, after this point, we see a drastic decline in memory recall even though anxiety is increasing.

Worker C is showing signs that the anxiety of the situation is negatively impacting their ability to remember what happened accurately. This might mean that they only be able to remember more general details, or certain time surrounding the event may not be able to be recalled.

Another important aspect to consider is the emotions of the worker during the interview. This doesn't just apply for Worker C, but for anyone who is interviewed. This situation may be stressful or may induce feelings of nervousness.

In order to get the most accurate recount, try to make the interviewee feel as safe and calm as possible. Make sure to create an environment where they will be able to relax and focus on their experience of the situation.



4. Memories and Testimonies

In investigations, misleading information should be avoided, though it may be hard to pick up on and can be accidentally introduced. It may lead people to give false or incorrect information, without even realising it.

While carrying out your investigation and providing your employees with the best environment to improve recall, your investigative technique must be considered. Misleading information can take 2 main forms, leading questions, and post event discussion.

Leading questions can be purposeful or accidental, but both situations are equally as damaging for information gathering. A leading question can be defined as a question which sways someone to answer in a particular way; sometimes it can lead to the researchers desired answer to the question.

Loftus and Palmer (1974) conducted an experiment in which participants watched a video of a car crash and were then asked questions about it. The first question was to estimate the speed of the cars, but different verbs were used to describe what happened ('hit', 'contacted', 'bumped', 'collided' and 'smashed' into each other).

Mean speed for the word 'contacted' was 31.8mph whereas mean speed for 'smashed' was 40.5mph. Though all participants were shown the same video, very different answers were given, suggesting that even a small change in how questions are asked can lead someone to have a distorted memory of what they saw.

Also in this experiment, participants were asked whether they saw broken glass or not (there was no broken glass in the video), and the results were that in the questioning where it is implied the cars were going faster, people were more likely to say they saw broken glass.

So, how are you as an interviewer going to mitigate your influence over worker testimonies in your interviews?

Let's consider our construction site scenario. It would be safe to assume that the construction site will not be silent, as a variety of factors will contribute to sounds being made. One piece of information you want to find out from all the workers is what they could hear either before or when the incident occurred.

"What sounds did you hear?"

This question may seem like a fairly good thing to ask, but in reality, this is a leading question. The verb 'did' in this question suggests that there was definitely something to be heard, so interviewees may come up with something they think they should have heard, based on the **schemas** they have developed. This might mean that they say they heard a snap as they relate this sound to something breaking, even if there was no snap sound.



A **schema** is an organised group of past experiences and associations, which can be used in future decision making. An event schema you may have could be knowing how to act at a restaurant. You may go to a new restaurant you have never visited before, but from your past experiences of restaurants, you know to wait near the door until someone comes over to seat you.



“What noises could you hear?”

The noun ‘noises’ in this question connotes the idea that the environment was loud, and they may have heard something unusually loud, or it may focus their attention on only trying to remember loud sounds that they heard, rather than also the quiet sounds.

“Did you hear a thud or a snap?”

This type of question has 2 options. Questions like these should be avoided as they leave room for interviewees just to pick one of the two options. One problem with this is that the worker may assume that one of the options must be the correct answer, so will be led into picking one, even if this is not how they would have described the sound, or maybe they heard no sound at all!

The best way to avoid leading questions is to ask open-ended questions. This allows a detailed answer to be given, with more scope for the interviewee to discuss any details they like, without being confined to the borders of the question you have posed. This not only stops leading questions but also it helps you gain valuable insight about the context of the situation, as you can gather more seemingly unimportant details.

Post-event discussion is as it sounds: it is the interaction between witnesses after an event, which can lead to individuals influencing each other in relation to what they think they saw.

In an experiment by Gabbert (2003), participants all watched a video of the same crime, but each person saw it from a different angle and then they were allowed time to discuss what they saw. They found that 71% of participants recalled seeing details of the event which had not been shown in their video but had instead been mentioned in the post-event discussion.

This is a significant figure, particularly when we contrast this finding to the findings of the control group (0%) where no discussion was allowed. The participants in this experiment really believed they had seen the details in the video shown to them, and this perfectly highlights how without meaning to, the accuracy of someone's testimony will decrease vastly.

This means that if there happens to be an incident in your workplace, you must act quickly in thinking about how you might avoid post event discussion. Though it may not always be easy, avoiding post event discussion in more serious incidents such as those with injuries or fatalities is extremely important.

5. So What?

So, why is all this information so important when talking about investigations in the workplace?

Due to the circumstances in which workplace investigations will need to take place, they can be of high impact, especially as outcomes may affect the working environment, therefore they must be dealt with appropriately.

It is again important to remember that **forgetting is normal**, and having some gaps in memory is fine. There becomes a bigger issue when people try to be helpful by filling in the blanks by guessing what they think could have happened, rather than acknowledging that they simply do not remember. As an interviewer, you are able to help fill those blanks through the techniques we have talked about, but you cannot know when someone has guessed missing information. Therefore, it is important that in any interview, you make it clear that forgetting information is perfectly okay and it should be brought to your attention when the interviewee cannot remember, so you are able to work through the issue together.

We feel that this is a vitally important topic to highlight, as memory in interviews may be something that goes overlooked. For example, **ACAS** only mentions **'if an investigation is necessary, then an employer should act promptly. Unnecessary delay may cause memories to fade or give the perception of an unfair process'**. The lack of information available surrounding the importance of focussing on memories in interviews may mean that there are some investigations taking place that will suffer from some of these issues we have covered.

We hope that the insight we have given you has been valuable, and will spread awareness to factors that can be at play in terms of someone's memory. By highlighting the importance of understanding what this means for interview technique, you can make your interviewing as effective as it can be.

6. What Now?



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