English summary
INTRODUCTION

In recent years, there have been several murder cases in the Netherlands that were initially misclassified as accidents or suicides. These cases were only reopened after relatives raised alarm or after the perpetrator reported himself. Information that is initially available plays an important role in the classification of a case and the subsequent potential criminal investigation. Information may come from the crime scene itself, but also from the public or other investigating officers and can include details about the manner in which the body was found, who the victim is, and what neighbours have heard or seen. Information can shape expectations of what we see and how we see it, which in turn can determine how a case is handled. In this dissertation I have examined the influence of information on crime scene processing. In order to study this influence, I focused on the most difficult crime scenes, namely suspicious deaths. With death investigations, the victim can no longer give an account of what has happened, and investigators have to rely on information, such as witness statements and environmental clues, to reconstruct events. The main research question henceforth was: If and to what extent does prior information influence the interpretation of a crime scene and the search for evidence? In order to answer the main research question several empirical studies were conducted.

STUDIES

In Chapter 2, I focused on the process of gathering and transferring information in practice. The goal was to examine which information a crime scene investigator receives before entering a scene. Results showed that crime scene investigators receive limited information from emergency call responders and forensic team leaders before they head to a crime scene. The information they do receive and do want to receive mainly concerns the location of the incident and the persons involved (e.g., victim, offender). Other parties, such as a uniformed police officer or the forensic medical examiner, provide most of the information they receive at the scene. Although emergency call responders and forensic team leaders offer relatively little information to the crime scene investigators, all parties rather quickly label an incident. Forensic team leaders acknowledge how difficult it is to be truly open-minded once the nature of an incident is labelled. Nevertheless they are not reluctant to use labels, and rely heavily on the so-called forensic vision as a protective tool against distorting assessments of the scene. Furthermore, there also appeared to be a lack of a genuine understanding of the danger that providing contextual information embodies and the concept of bias. The study revealed major differences in participants’ need for information. That is undesirable as differences in this information process may cause arbitrariness and could influence the
consistency with which similar cases are handled. This study also showed that there are no formal guidelines for the recording of investigative information that crime scene investigators receive in the initial stage of the investigation. As a result, crime scene investigators record information at their own discretion. That, again, means there is a great variety of working methods. It also means that not all information is given in their crime scene report.

The aim of the study presented in Chapter 3 was to gain additional insight in what kind of information is needed to reconstruct events at the crime scene. It was investigated how context information and receiving feedback in the form of answers to self-invented questions affected the reconstruction of events leading up to a crime scene. In this study, we asked the mock investigators to record their narratives of the crime. The results demonstrated that the crime stories mainly consist of Action items. In general, crime scene investigators are mostly interested in Person-items (i.e., information on both the victim and other people involved). That is in line with the findings presented in Chapter 2, namely, that crime scene investigators are foremost interested in background information about the persons involved. Furthermore, the narratives of participants who received contextual information contained significantly more factual elements than interpretations compared to the narratives of those who did not receive contextual information before assessing the scene. That effect was not present for participants who were allowed to ask questions while writing down their narratives. The narratives of participants who were allowed to ask questions did not contain more factual elements compared to the narratives of participants who were not allowed to ask questions. Thus, prior information seems to help in deriving factual information from crime scene photos.

In Chapter 4 it was examined whether different prior information influences crime scene investigators’ interpretations and decision-making at crime scene. For this experiment we used an ambiguous mock crime scene, a murder that was staged as a suicide. It was expected that the crime scene investigators would have a different view of what had happened at the crime scene and would secure different traces depending on the prior information they received. The analyses that were conducted to test these hypotheses showed that participants indeed interpreted the crime scene differently, based on the information they received beforehand. Firstly, the analyses showed that if crime scene investigators are primed for a suicide scenario, then their first impression is indeed more often suicide than expected. Moreover, fewer crime scene investigators in the suicide condition than expected remain indecisive about what happened. In the murder condition the opposite was found. When primed for a murder scenario, fewer crime scene investigators than expected have suicide as a first impression, and more investigators than expected remain indecisive for the time being. Furthermore, the results demonstrated that when primed for a suicide scenario, investigators are
more confident in their initial judgement of the crime scene compared to when they are primed for a murder scenario. At the end of the investigation, when the most likely scenario was provided, the majority of the participants in the murder condition thought that the scene was indeed a crime. Of the group of participants who received prior information indicating a suicide, almost half thought it was a suicide scene. In all conditions, participants secured roughly the same crime-related traces, irrespective of the prior information they received.

In the study presented in Chapter 5, I attempted to gain more understanding of the process of finding traces at the crime scene, by comparing experts and novices. In this study, the role of expertise was examined in the same ambiguous crime scene as presented in Chapter 4. Experienced crime scene investigators who had limited knowledge of cognitive bias but had extensive experience with crime scene investigations were compared to applied forensic science students who recently had courses on cognitive bias but had limited experience with crime scene investigations. The results showed that the students secured more crime related traces compared to the experienced crime scene investigators, irrespective of the total number of secured traces. The results furthermore demonstrated that there is no difference between experienced crime scene investigators and inexperienced students in how the crime scene is interpreted at the start of the investigation and after finishing the investigation.

CONCLUSION

The results of the studies were synthesized and discussed in Chapter 6. With this dissertation, I have tried to gain more insight into the hitherto relatively unexploited research area of decision-making at crime scenes. Investigating a crime scene involves complex information processing with different types of visual, oral and written information that all have to be weighed and considered carefully. In the current dissertation, I have demonstrated that contextual information impacts decision-making at a crime scene. It can be beneficial as well as detrimental. Although this may be in line with findings from previous psychological research on expectancy effects, this conclusion may come as a surprise to the field of police practice. Too often, one relies on experience and the ‘forensic vision’ as a protective tool against bias. The crime scene investigation is often the start of the criminal investigation, and the initial assessment of the crime scene is an important first step in the investigation. All further decisions about physical evidence are based on the initial perception and interpretation of a crime scene. A proper crime scene investigation is thus of vital importance to the criminal investigation that follows. It is important to think about where crime related traces might be found at each specific crime scene. Instead of banning information from the crime scene investigation, the focus of future research should be on managing that
information to maximise the utility of the information at the scene and minimise the risk of bias.

PRACTICAL IMPLICATIONS

As argued in this dissertation, evaluating information is an integral part of processing crime scenes. It is impossible, as well as undesirable, to try and keep information away from crime scene investigators. The research presented in this dissertation shows that context information can help to focus on the facts at a crime scene. However, the studies presented in this dissertation also show that information can unduly influence interpretation and decision-making at a crime scene. It is therefore of great importance to consider that information with care. Crime scene investigators have great professional autonomy, and, to date, there are few guidelines on how they should collect and record information. Moreover, some crime scene investigators do not consider the handling of context information to be a key element of their job. The findings presented in this dissertation show this is a misconception. Decisions made at the crime scene can have a major impact on the rest of the criminal investigation. In order to gain more insight into decision-making at the crime scene, it is necessary to know what information crime scene investigators have at their disposal. Also, the scenarios an investigator considers, as well as the way in which collected information contributes to a particular scenario should be explicitly stated.

Therefore, guidelines on how this information should be recorded are crucial. Missing elements of information in crime scene reports make it difficult to reconstruct decision-making at a crime scene in hindsight. It is crucial that crime scene investigators feel more responsible for properly recording information, as it is an integral part of their job. It is also important that reports are written soon after an incident has taken place in order to prevent forgetting the information over time. Without a proper recording of information, it is impossible to recall why certain decisions regarding trace evidence and the crime scene investigation were made at a certain time during the investigation. Proper documentation is vital in order to make well-founded inferences at crime scenes. It also enables all parties involved to learn from mistakes and prevent them in the future.