

Summer 8-2019

911 Dispatchers: Investigating Their Knowledge of Eyewitness Evidence Collection

Samantha A. Kosziollek

CUNY John Jay College, samantha.kosziollek@jjay.cuny.edu

Follow this and additional works at: https://academicworks.cuny.edu/jj_etds

 Part of the [Law and Psychology Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Kosziollek, Samantha A., "911 Dispatchers: Investigating Their Knowledge of Eyewitness Evidence Collection" (2019). *CUNY Academic Works*.

https://academicworks.cuny.edu/jj_etds/121

This Thesis is brought to you for free and open access by the John Jay College of Criminal Justice at CUNY Academic Works. It has been accepted for inclusion in Student Theses by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.

911 Dispatchers: Investigating Their Knowledge of Eyewitness Evidence Collection

A Thesis in Partial Fulfillment of the Requirements for the Master's in Forensic Psychology

John Jay College of Criminal Justice

City University of New York

Samantha A. Kosziollek

Date: July 2019

Table of Contents

Acknowledgements	4
Abstract	5
Introduction	6
Malleability of Memory.....	9
Leading Questions.....	12
Source Monitoring.....	13
From Theory to Practice: Memory and the Law	13
Dispatcher Training.....	14
Current Study	16
Methods	17
Participants	17
Materials	18
Procedure	20
Results	20
Role of a Dispatcher	20
Eyewitness Knowledge	23
Training, Practice, and Policy	25
Adequate Follow-Up Questions: Training and Practice.....	28
Eyewitness Call “Prompts”.....	35
Discussion	35
Limitations/Implications for Future Research	38
Conclusion.....	39
References	40

Appendices

Appendix A	Dispatcher Questionnaire	44
Appendix B	Recruitment Email	56
Appendix C	Consent to Participate in Research	57
Appendix D	Debriefing Statement	58

Acknowledgements

I would like to express the deepest appreciation to my thesis advisor, Dr. Jennifer Dysart, who continually and convincingly conveyed a spirit of adventure in regard to our research; and an excitement in regard to teaching. Without her guidance and persistent help this thesis would not have been possible.

Finally, I must express my very profound gratitude to my parents and to my boyfriend for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them.

Thank you!

Abstract

911 dispatchers are often the first contact in an emergency, playing a critical role in the investigative process. Presently, a new bill is seeking to nationally reclassify these communications officers, recognizing them as vital first responders, as their initial collection of eyewitness evidence aid in the attainment of crucial information and detailed descriptions of an accident or crime. However, only one study (Kassis, 2017), to date, has examined the training of 911 dispatchers, as well as their self-reported knowledge of the potential influences their language could have on an eyewitness' memory. While this research highlighted disparities between the perceived role of a dispatcher and the adequacy of their knowledge on eyewitness evidence collection, our overall understanding of these concepts is in its infancy. The current study is a replication and extension of Kassis (2017), aimed to fill this knowledge gap through a survey methodology of 911 dispatchers. Similar to Kassis (2017), the results demonstrated that while a majority of the respondents recognized their role as evidence collectors, they had insufficient knowledge of the fragility of eyewitness memory, specifically the potential harm that "leading" language and post-event information can have on the accuracy of an eyewitness account. Therefore, training and knowledge regarding the collection and preservation of eyewitness memory appears to be largely absent or inadequate among dispatchers. Future directions and potential solutions to this problem are discussed.

911 Dispatchers: Investigating Knowledge of Eyewitness Evidence Collection

The first call to 911 was made nearly 50 years ago, in February 1968, in Haleyville, Alabama. This universal emergency number was created to ensure that anyone in the United States could quickly and easily dial public safety for help. Today, the 911 system is a critical service providing access to first responders in any time of need. An estimated 240 million calls are made to 911 in the United States each year (911 Statistics, 2018). With this volume of calls, it is critical that 911 dispatchers¹ are adequately trained to manage various scenarios and ensure the timely response of the appropriate emergency services.

Despite their current national classification that merely emphasizes clerical duties, 911 dispatchers, who are often the first contact in an emergency situation, have been described as the “heroes behind the calls,” which has prompted a re-evaluation of their status through Rep. Norma J. Torres' 9-1-1 Supporting Accurate Views of Emergency Services (SAVES) Act (Berry, 2019). The SAVES Act, which is currently under consideration by the U.S. House Committee on Education and Labor, is seeking to nationally reclassify communications officers from a non-protective service occupation to a protective one in the Standard Occupational Classification system, thus attributing dispatchers with recognition as first responders (Berry, 2019).

This specialized occupation requires its professionals to think critically and use extensive skills and training to help first responders save lives. Critically, 911 dispatchers must also understand the significance that their communication has when gathering information from callers. Specifically, dispatchers are given the first opportunity to gather detailed descriptions of a crime or perpetrator and are thus responsible for recording a witness' statements that may

¹ The terms “911 dispatcher” and “911 operator” are often used interchangeably. For clarity, the term dispatcher will be used in this thesis to refer to the individual who answers an emergency call.

become crucial in future legal proceedings. For example, in criminal investigations, eyewitness accounts can be essential in helping to identify a suspect or describing key details of a crime (Laney & Loftus, 2018). It has been suggested that eyewitness testimony is likely to be the most persuasive form of evidence presented in court; however, in many cases, its accuracy is dubious, given the fact that eyewitness accounts are susceptible to contamination and error (Laney & Loftus, 2014). The consequences of such errors can be seen in wrongful conviction cases, for example, where mistaken eyewitness testimony was a leading contributing factor in over 70% of DNA exoneration cases (Garrett, 2011; Innocence Project, 2019).

As the first point of contact in many cases, 911 dispatchers, tasked with the critical responsibility of initial evidence collection, must be precise in their interactions with callers so as to ensure that the eyewitness' memory is tested and probed correctly, without leading questions. Along this vein, Kassis (2017) referred to the role of 911 dispatchers as being "evidence collectors," a role that dispatcher participants in that study concurred with. Despite this, Kassis demonstrated the lack of training dispatchers receive pertaining to eyewitness memory. Critically, evidence of this inadequate training was found across regions. This may be due in part because 911 call centers across the United States are managed by a variety of different local and state agencies, including law enforcement, fire departments, and private EMS units, which may differ in training standardization and practices. Therefore, dispatchers may be more or less equipped with the skills and knowledge to adequately collect information from eyewitnesses depending upon their region and the size of the population they serve. In combination, this information demonstrates a need to standardize 911 dispatcher training on the topic of eyewitness memory so as to equip dispatchers, regardless of location, with the proper guidelines

to ask questions that are clear and appropriate in order to increase the likelihood that memory reports will be accurate.

Little is known about 911 dispatcher training on the topic of eyewitnesses, specifically whether there are any standardized procedures relating to what types of questions are used to gather information from witnesses. Therefore, in the event that there are no standardized protocols, it is essential to better understand dispatchers' knowledge of factors that can affect the reliability of eyewitness memory. The primary reason for this is that research has demonstrated that the wording (Harris, 1973; Loftus, 1975; Loftus & Palmer, 1974), structure, and style of questions (Leding, 2012; Lindsay, 1990; Sharman & Powell, 2012) all have the potential to influence memory. Further, as time passes, memories become more susceptible to error (e.g., Dysart & Lindsay, 2007), thus there is some need to record a witness' recollection for an event or persons as quickly as possible. The more we learn about dispatchers' awareness of these factors and practices that they engage in when collecting eyewitness evidence, the better we will understand what safeguards may be needed to prevent eyewitness errors that could arise from memory contamination through 911 calls.

Even though there has been one study on the topic, our understanding of the training and knowledge dispatchers have of their influence on callers is in its infancy. The current study is a replication and extension of Kassis (2017), whose examination of 911 dispatchers, the first of its kind, offered valuable insight into the training and knowledge of dispatchers in regard to the questioning and communication techniques used with eyewitnesses. Given their unique position in the criminal justice system and the impending SAVES Act (2019), it is critical for dispatchers to recognize their role as evidence collectors and understand the ways in which certain factors can influence eyewitness memory. This study focuses on two factors, language effects and post-

event information, given that they are likely the means by which dispatchers may influence eyewitness memory.

Malleability of Memory

More than a century of psychological research has provided evidence on the fallibility of memory. Memory, for example, becomes more susceptible to post-event information – that is encountered after an incident - without immediate recall following the event (Paterson & Kemp, 2006). There are a number of ways in which witnesses can be exposed to post-event information. One of the most common ways might be through conversation with those who have also witnessed the event, otherwise known as a co-witness (Laney & Loftus, 2018). According to witnesses who have been interviewed, the primary purpose of discussions following an event is to attain information and assure consistency (Zajac & Henderson, 2009; Thorley, 2013). However, *misinformation* from a co-witness has been shown to impair eyewitness accounts, sometimes leading witnesses to report details that they never actually observed (Zajac & Henderson, 2009). In a real-life example, on May 21, 2018, a 911 call was made regarding a robbery of pharmaceuticals at a Walgreens in Connecticut (Surveillance Video & 911 Call, 2018). The caller indicated there were two perpetrators involved in the crime, and provided details on the appearance of one. The following exchange is related to the inquiry about the second individual involved:

Dispatcher: What did the other one have?

Caller: Does anyone remember what the other one looked like?

The caller in this case is clearly asking co-witnesses for their knowledge of the second individual's appearance. A reading of the full transcript makes clear that no information was provided, but, if there had been, the likelihood of all witnesses adopting this information pertaining to the perpetrator would have increased dramatically.

This type of co-witness sharing or contamination has far reaching consequences, with potentially costly (accuracy) implications for the subsequent investigation and legal proceedings, (Paterson & Kemp, 2005; Skagerberg & Wright, 2008). As way of example, the high-profile murder investigation of the Swedish foreign minister, Anna Lindh, in September of 2003, shows how the account of one witness may influence that of another (Granhag, Ask, Rebelius, Öhman & Giolla, 2013). In this case, in order to ensure all witnesses remained available to be interviewed, witnesses were placed together in a room. The witnesses later admitted to discussing the event with one another before individual interviewing commenced. During these discussions, witnesses considered the clothing of the perpetrator, inevitably revealing a subsequent pattern of corroboration following one witness' memory of a camouflage military jacket being worn by the perpetrator. Surveillance footage, however, revealed that the actual murderer, Mijailo Mijailovic, was actually wearing a grey hooded Nike sweatshirt. It is reasonable to assume that memory conformity was the main source of witness error regarding the perpetrator's attire, given the opportunity for witnesses to discuss the event with each other immediately following the crime.

Typically, eyewitness accounts become critical in criminal investigations when the only or main piece of evidence is an identification of the perpetrator. Therefore, it is important to consider the potential influences that dispatchers, as evidence collectors, may have on eyewitness memory. During a shift, dispatchers could receive multiple calls (from different callers) pertaining to the same incident. Whether they continue to gather information from additional callers or whether the second, third, etc. calls are simply handled quickly, with the minimum advisement of emergency personnel or law enforcement being in route, remains an important question in the research. The following 911 transcript is used to further demonstrate the

gathering of information from multiple callers. On March 2, 2016, 911 calls poured in relating to the horrific crash that killed former Chesapeake CEO Aubrey McClendon. The first three calls reported a vehicle engulfed in flames, but none of the callers were able to report whether there were individuals inside the vehicle. The following are the last two calls received by the same dispatcher before emergency personnel arrived on scene (911 Transcript, 2016):

Dispatcher: Oklahoma City 911.

Caller 4: Yeah, just before mile marker 138 on the northwest bound direction, on I-44, the turnpike at a bridge there, there is a bunch of black smoke coming out from underneath it. I didn't see anything on fire.

Dispatcher: There is a car accident down that way where the car is on fire.

Caller 4: Oh wow, ok. I didn't see anything down there.

Dispatcher: Ok, thank you.

Dispatcher: Oklahoma City 911.

Caller 5: Hi, yes, I'm at Midwest and Memorial and I just heard a big bang and now there is smoke coming out, something is on fire.

Dispatcher: Yes, there is an accident there. Is the fire department not on the scene?

Caller 5: I don't see any lights or anything.

Dispatcher: On Memorial and Midwest Blvd? Is that right?

Caller 5: Yes, ok wait, I hear sirens.

Dispatcher: Yeah, they're coming.

Caller 5: Ok, thank you, bye.

It is evident that the dispatcher ceased gathering information about the accident and instead offered information to the callers four and five. In both instances the dispatcher indicated that there was an accident in the area and the fire was caused by a vehicle involved.

Not only can dispatchers fail to obtain information from callers but they can also *share* information about an event or perpetrator that they have received from a previous caller, as shown in the example above. At this stage, there is no ability for dispatchers to be able to verify that the information they have received from other callers is accurate and, consequently, there is a greater possibility for a callers to receive incorrect information from another individual - through the dispatcher - and incorporate those details into their own memories of the event. Is it

possible that they contaminate the callers' memories, resulting in false memories of the incident? Unfortunately, the answer to the latter cannot be conclusively known, which is why it is critical to implement standardized training that demonstrates how language can affect memory.

Leading Questions

Thorley (2013) examined the degree to which memory conformity can also be predicted by levels of interrogative suggestibility, which refers to the levels at which individuals are susceptible to altering their accounts during questioning. Leading questions may also impact an overall response, even if no communication took place between two or more witnesses. Loftus and Palmer's (1974) classic study utilizing careful word choice to affect witness responses demonstrates such effect. After a video clip was shown, most notably, the question, "About how fast were the cars going when they smashed into each other?" (p. 588) elicited higher estimates of speed compared to questions in which verbs such as collided, bumped, contacted, or hit were used in place of "smashed." Those who were asked for speed estimates of the cars that smashed were more likely to answer "yes" to the question, "Did you see any broken glass?" despite there never being mention or presentation of broken glass in the film. These results are consistent with the demonstration that the way in which a question is asked can greatly influence the answer that is given. The initial question is considered a leading question based on its ability to prompt a subject to think about the event and answer in a certain way, thus influencing memory.

Question structure can also lead to negative effects on memory. Individuals tend to be misled more so when misinformation is enclosed within: a closed-specific question, which describes a question requiring a simplistic yes or no response that ultimately elicits acceptance of any suggested knowledge presented; or an open-presumptive question, which describes a

question that assumes knowledge and influences ponderance over suggested details (Sharman & Powell, 2012).

Source Monitoring

Furthermore, the questions asked subsequent to an event can affect the reconstruction of one's memory of that event, so as to lead to the consideration of the source monitoring framework. According to this framework, sources of information are not typically labeled in memory (Leding, 2012; Luna & Martin-Luengo, 2013). Over time, information stemming from one's own perception of an event and that of which is supplied afterward, which is considered post-event information, becomes integrated, making it difficult to identify which source a specific detail has been recalled from (Loftus & Palmer, 1974). Research also suggests that if a suggested item is vaguely familiar and seemingly "fits" into a situation (i.e. presence of a firearm at the scene of a robbery) there is a greater likelihood that the misled individual will recall having observed such details in the actual event (Johnson, Hashtroudi, & Lindsay, 1993). Additionally, misattributions are also more likely when subjects are exposed to misinformation in situation that is considered distressing (Lindsay, 1990), which corresponds with the atmosphere in which 911 calls are made. In this regard, if a dispatcher provides certain information not otherwise known or recognized by a witness, that witness may experience a source monitoring error.

From Theory to Practice: Memory and the Law

The legal system has implemented safeguards against opportunity for memory conformity to occur. For example, the hearsay rule is the basic ruling that any testimony or documents that quote persons not present in court are deemed inadmissible due to the inability to assess credibility. Another example lies within the court's efforts to limit interaction among

witnesses in order to dispel any communication in relation to the case. During trial procedures, witnesses, in addition to not having direct contact with others, are also prohibited from hearing other witnesses' testimony until they have testified themselves. There are guidelines in place for law enforcement personnel regarding the separation of witnesses in order to maintain the integrity of memory, but it has been found that police officers may ignore these guidelines based on perceived practicality (Paterson & Kemp, 2006). Though a 2005 study (Paterson & Kemp) revealed a controversial argument amongst police officers regarding co-witness discussion, the officers in support, most notably, claimed that they thought it helped witnesses recall facts they had not remembered, thus contributing to a stronger and more accurate account of an event. Even with guidelines, there is still disagreement over best practices. Problematically, the legal system presently lacks any safeguards to protect against contamination of witness memory by dispatchers, leading to the assumption of a lack of education on the matter as well as potential further disagreement. Ultimately, these factors all provide valid reasoning as to why it is necessary to understand the knowledge and training of 911 dispatchers, especially if they are to be considered true "evidence collectors".

Dispatcher Training

The National 911 Program, a government organization housed within the National Highway Traffic Safety Administration at the U.S. Department of Transportation and joint with the National Telecommunication and Information Administration in the Department of Commerce, facilitated the Telecommunicators Project (2016) in order to establish minimum training guidelines for dispatchers. The goal has been to identify nationally recognized topics that can be used to train aspiring and current 911 dispatchers, thus providing a concrete foundation for ongoing professional development. Some of the topics examined are as follows:

911 call processing, emergency management, legal concepts, interpersonal communication, stress management, and “on-the-job” training guidelines. It has been noted that supplemental training is also required for these dispatchers. Two topics, legal concepts and interpersonal communication, were assumed to highlight the concerns in question – more specifically, regarding the absence of education on the fragility, and thus, preservation of eyewitness memory. Instead, the training on legal concepts remains focused on issues surrounding liability, confidentiality, and negligence, while training on interpersonal communication involves comprehension of diversity and demographics and problem-solving techniques.

Insight on training standards for dispatchers has begun to emerge from Hamilton County in Noblesville, Indiana as part of an ongoing series that describes training programs at emergency communication (dispatch) centers. An interview with dispatchers from this area reveals that there are no current minimum standards in the state for emergency dispatchers. Furthermore, it was shared that the training available is rather inadequate, with one dispatcher stating, “I was personally looking for something that had a little more teeth to it and went beyond a bare minimum” (“Training Standards,” 2017). Furthermore, it was stated that not until recently has there been a funding source for training in the state, which is assumed to include both urbanized and rural areas. Basic telecommunicator training was not being met prior to the approval for funding by the State 911 Board, leading to the strong assumption that training regarding psychological aspects, such as memory, and their relation to the law were not addressed at all. As discussed, dispatcher training standards do vary based upon agency and location, and so, while some departments may be equipped to effectively extract information from eyewitnesses with regard to the malleability of memory, others may be subjected to inadequate training programs,

like that in Noblesville, Indiana, leaving them with a lack of awareness and understanding of factors that influence eyewitness memory.

Current Study

Dispatchers are in a position of great importance in terms of collecting initial information for immediate emergency response and, potentially, future legal proceedings. There is limited information on dispatcher training, specifically concerning whether dispatchers learn about the factors, such as language effects and any post-event information, and possible consequences of memory contamination. What is currently known is that training protocols for dispatchers vary depending on agency and location, even amongst different counties and organizations within the same state (Hauer et al., 1998; Virginia Information Technologies Agency, 2017; 911 Dispatcher, 2019). This lack of uniformity raises concerns about whether dispatchers are being properly trained.

The current study is aimed at understanding how dispatchers view their role, the training received pertaining to evidence collection, and how that training, or lack thereof, translates into practice. Based upon Kassis (2017), we expect dispatchers to identify themselves as being vital communication links, yet we theorize that dispatchers will not endorse items similarly to eyewitness experts, thus indicating little knowledge of the factors that have been discovered to influence the accuracy of eyewitness memory. Consequently, an additional hypothesis predicts that dispatchers, in fact, receive inadequate training to sufficiently collect accurate information from eyewitnesses, especially when considering the suggestive structure of questions. We are also interested in studying the differences among 911 dispatchers housed in urban versus rural jurisdictions, hypothesizing that dispatchers stemming from rural centers may showcase a significantly lower understanding of the factors that affect eyewitness memory, given the

differentiation in overall training and the potential impact of reduced funding for continued training in those areas.

Methods

The current study examined the role of dispatchers as evidence collectors and the adequacy of training received on eyewitness evidence collection using a survey methodology. This study aimed to assess a broad sample of dispatchers that were representative of both urban and rural dispatchers throughout Arkansas and Georgia. The use of self-report measures, utilizing a combination of multiple-choice and open-ended questions, allowed dispatchers to provide insight into their perceptions and experiences in an unrestricted way. Statistical analyses compared dispatchers' responses to those of eyewitness experts (Kassin et al., 2001) and other dispatchers (Kassis, 2017). These comparisons aided in answering key questions related to the knowledge dispatchers possess and the training received on evidence collection involving eyewitnesses.

Participants

The inclusion criterion for participation involved having professional experience as a dispatcher being 18 years or older, and having access to the Internet in order to complete the survey. The respondents were 69 dispatchers, who had a range of experience from less than 1 year to 33 years on the job ($M=9.34$, $SD=8.61$). Over the course of their careers, the participants had received an average of approximately 21,379 calls ($SD=31,888$), with an average of 3,611 “eyewitness” calls ($SD=3,601$), which are calls characterized by a witness’ description of a crime and/or a perpetrator.

Of the respondents who disclosed their gender, 69.8% (37) were female and 26.4% (14) were male (2 participants responded “prefer not to say”). The age of the participants ranged

between 20 and 72 years old ($M=39.9$, $SD=11.9$). In terms of racial/ethnic identity, the majority of participants (90.6%) self-identified as White, while 3.8% self-identified as African-American, 1.9% as Hispanic or Latinx American, 1.9% as American Indian or Alaska Native, and 0.0% as Asian or other Pacific Islander. An additional 1.9% chose “other” as their racial origin, identifying as biracial or mixed-race.

Participants worked an average of 39.8 hours per week ($SD=8.9$), with 98.1% considered to be full-time employees and 1.9% considered to be part-time employees. As mentioned, this study’s sample was comprised of dispatchers located in two states, with the majority coming from Arkansas (81.1%) and the remaining (18.9%) coming from Georgia. In order to gain further understanding of the locations in which these dispatchers worked, participants were asked to indicate their area of responsibility in terms of whether the population size rendered a large urban department or a smaller rural center. Of those who responded to the question (76.8% of sample), 56.6% indicated “urban” as the best option to describe the population area they serve as a 911 dispatcher; 34.0% chose “rural” as the best option; and 9.4% selected “other,” describing the area they serve to be a mix of both urban and rural jurisdiction. Due to the small sample size, and thus subsequently minimal amount of data gathered in regard to potential training differences within contrasting jurisdictions, meaningful comparisons could not be made between dispatchers stationed in urban versus rural centers.

Materials

A 911 Dispatcher Questionnaire (Appendix A), originally developed by Kassis (2017), was revised for the present study. The questionnaire’s aim was to capture dispatchers’ experiences and training, as well as their perceptions of their role as evidence collectors. The questionnaire, comprised of 42 questions, was organized using a combination of multiple-choice

and open-ended questions that establish three major sections: knowledge, training and practice, and policy.

In the knowledge section, dispatchers were prompted to answer: “In general, what role do dispatchers play in criminal investigations?” followed by: “Do you believe a dispatcher plays the role of an evidence collector?” Another prompt asked, “In your opinion, whose responsibility is it to obtain a detailed description of a perpetrator from a witness?” This question format asked participants to select all answers that may apply; so, in this instance, the options included police, prosecutors, and dispatchers. These and other related questions gathered information regarding dispatchers' perceptions of job duties and responsibilities.

In addition, dispatchers were asked questions regarding their required training for the job. For example, dispatchers were asked: “Have you ever received specific training on how to gather information and ask questions of crime witnesses?” To assess application of acquired training, participants reflected on two call synopses that required an evaluation of the described situation and involved persons, ultimately prompting participants to identify appropriate protocol as well as additional information needed for advancing an investigation. In conjunction, dispatchers were also asked how often particular circumstances occur during a 911 call; such as, “how often is the criminal known to the witness?” and “how often does a caller report multiple perpetrators involved in an incident?” These items were answered by using a five-point Likert scale (1=Never; 5=Always).

Lastly, dispatchers were asked about responsibilities that they engage in on the job, thus providing insight into practices and present policies in place regarding certain behavioral responses. For example, dispatchers were asked: “When there are multiple perpetrators involved in an incident, how often do you ask the caller to describe what each criminal did?,” and “how

often do you ask witnesses if they are certain about their description of the criminal(s) they are calling about?” Additionally, dispatchers were also asked if they advise callers not to engage in conversation with other eyewitnesses prior to police arrival.

Procedure

During the initial phase of recruitment, an email was sent to the supervisors of several 911 dispatcher groups in Arkansas and Georgia, ranging from large urban departments to smaller rural centers, requesting their assistance in the identification and recruitment of dispatchers who matched relevant study criteria (Appendix B). Upon agreement, supervisors were asked to circulate the study link to dispatchers by distributing an email that contained a description of the study, terms of compensation, and a link to the survey on SurveyMonkey.com. After clicking on the link and completing the consent form (Appendix C), participants completed the survey anonymously. The duration of the survey lasted approximately 24 minutes. At the conclusion of the survey, participants were debriefed (Appendix D).

Results

Role of a Dispatcher

Through thematic analysis (Braun & Clarke, 2006) of participant responses to the open-ended question, “In general, what role do dispatchers play in criminal investigations?” Kassis (2017) identified a total of 7 underlying roles that 911 dispatchers commonly fulfill. Using these identified roles, we developed a series of closed-ended questions with the goal of assessing the level of agreement our sample of dispatchers had with these roles. Table 1 presents the roles and the percent of participants that endorsed each item, highlighting the varying perceptions dispatchers’ hold in regard to their role in the investigative process.

Kassis' (2017) sample indicated the top three reported roles as being that of information gatherers (72.70%), first responders/first lines of communication (31.30%), and information broadcasters (27.30%). Our participants also endorsed those items at a high frequency with 100.0% saying yes to all three items, resulting in significant differences for all three roles when compared between the two samples (all $p < .05$). It is possible that these differences were found because Kassis used free recall whereas we used closed-ended questions, allowing our participants to simply match their experiences with options provided for them rather than proposing descriptions themselves.

When specifically asked in a closed-ended question whether dispatchers play a role as evidence collectors, 76.5% of participants in the current study endorsed such a role, while 14.7% asserted that it is *not* their responsibility to collect evidence and 8.8% indicated uncertainty.

Table 1

Perceived roles of dispatchers endorsed by participants (frequency in parentheses).

Role	% of participants that endorsed each role
Gather Information	100 (67)
First Line of Communication/Responder	100 (68)
Relay Information	100 (68)
Use their resources to assist law enforcement	100 (68)
To dispatch assistance	100 (68)
Record calls	97.1 (66)
To interview the caller	50.0 (34)

Kassis' findings were virtually the same with 79.2% of participants endorsing the role of an evidence collector, while 16.8% dissented that assumption and 4.0% remained unsure. As predicted, there were no significant differences between dispatchers' identification as evidence collectors, $X^2(1, N = 170) = .17, p > .05$, nor were there any significant differences between samples in regard to their disagreement with that particular role, $X^2(1, N = 170) = .13, p > .05$. Further analyses revealed that 95.6% of respondents in the current study indicated that it is their responsibility to ask for detailed descriptions of perpetrators from eyewitnesses. Likewise, 93.4% of respondents in Kassis' (2017) study believed that they, too, were responsible for obtaining detailed descriptions of perpetrators from callers.

Despite this, both samples demonstrated low frequencies in regard to obtaining detailed descriptions of an event and/or perpetrator in practice. For example, while the 95.6% of respondents in the current study indicated that it is their responsibility to ask for detailed descriptions, only 70.6% affirmed that they always do so. Similarly, of the 93.4% of respondents in Kassis' (2017) study who believed that they are responsible for obtaining detailed descriptions, only 74.5% acknowledged that they always seek out that information. Expectantly, there were no significant differences in dispatchers' recognition of their responsibility to collect detailed narratives of perpetrator descriptions between samples, $X^2(1, N = 170) = .37, p > .05$, nor were there any significant differences regarding frequency of practice in seeking out that information between samples, $X^2(1, N = 170) = .31, p > .05$. Together, these results appear to suggest that dispatchers sometimes overlook the importance of obtaining detailed information from eyewitnesses even though they believe they should be asking for this information.

Eyewitness Knowledge

Like Kassis (2017), we examined dispatchers' knowledge of several eyewitness factors (displayed in Table 2). Table 2 showcases the percentage of dispatchers who agreed (selected strongly agree or agree) with each statement regarding eyewitness memory, while also comparing those responses to that of which was obtained from eyewitness experts (Kassin et al., 2001) and other dispatchers (Kassis, 2017). These constructs were coded according to the frequency of correct versus incorrect answers as compared with eyewitness experts (*not* Likert scale). To compare the responses of dispatchers with those experts and other dispatchers on their overall knowledge of eyewitness information, chi-square goodness of fit tests were performed.

Table 2

Percentage of agreement rate between dispatchers and experts on eyewitness knowledge. Questions adapted from Kassin et al. (2001).

	Dispatchers (Current) (n = 69)	Dispatchers (Kassis) (n = 101)	Experts (n = 64)
System Variables			
Wording of Questions	94.2	86.1 ^c	98
Confidence Malleability	75.3 ^b	75.2 ^c	95
Estimator Variables			
Post Event Information	85.5 ^a	71.3 ^c	94
Cross-Race Bias	50.7 ^b	38.6 ^c	90
Weapon Focus	82.6 ^a	50.5 ^c	87
Forgetting Curve	52.1 ^b	41.6 ^c	83
Stress	92.7 ^b	82.2 ^c	60

Note: Superscript a indicates a significant difference between dispatchers in this study and Kassis' (2017) sample at

p<.05. Superscript *b* indicates a significant difference between dispatchers in this study and experts at *p*<.05. Superscript *c* indicates a significant difference between Kassis' (2017) sample and experts at *p*<.05.

With respect to dispatchers' knowledge when compared to the groups discussed above, several significant differences are worthy of mention. As hypothesized, there was a significant difference between dispatchers in the present study and experts on their knowledge of cross-race bias, $X^2(1, N = 133) = 24.06, p < .05$. This significant difference was also present between Kassis' (2017) sample of dispatchers and experts, thus indicating a collective lack of awareness of cross-race bias among dispatchers. Additionally, when compared to experts, dispatchers in our sample, $X^2(1, N = 133) = 14.22, p < .05$, as well as Kassis' (2017), exhibited unfamiliarity with the forgetting curve hypothesis (Ebbinghaus, 1885), indicating a lack of insight into the importance of retrieval cues necessary for strengthening memory following an event.

Furthermore, eyewitness confidence, described as the most intuitively appealing variable for use in assessments of identification accuracy (Sporer, Penrod, Read, & Cutler, 1995), was examined. Critically, similar to that of Kassis' (2017) findings, a significant difference was found between dispatchers in our sample and experts regarding the relationship between eyewitness confidence and identification malleability, $X^2(1, N = 133) = 9.91, p < .05$, indicating that dispatchers lack awareness to the myriad of variables that can highly influence eyewitness confidence in their identification accuracy. Given that dispatchers are often the first lines of communication for eyewitnesses, this knowledge gap may leave them at a disadvantage to obtain accurate information, since the preservation of useful details must occur immediately in order to avoid influence from other external variables.

Finally, similar to Kassis' (2017) findings, dispatchers in the present study were found to significantly differ from experts in regard to their beliefs in the effects of stress on memory, $X^2(1, N = 133) = 19.88, p < .05$. Unlike some of the other issues highlighted in Table 2, dispatchers

from both samples supported the proposition that stress affects memory significantly more than did the experts. Given that the last published study on experts' knowledge of stress effects is dated over 15 years ago (2001) (with data likely being collected in the late 1990's), it is hypothesized that experts may now exhibit an increased understanding of these effects, if surveyed again.

Contrary to our prediction, no significant difference was found between the current sample of dispatchers and experts in relation to their knowledge of post-event information and its effects on eyewitness memory, yet there was a significant difference between the two samples of 911 dispatchers, $X^2(1, N = 170) = 4.65, p < .05$. Moreover, in contradiction to that of Kassis' study, no significant difference was found between dispatchers sampled in the present study and experts in regard to the weapon focus variable, $X^2(1, N = 133) = 0.49, p > .05$.

Training, Practice, and Policy

The majority (79.25%) of participants in our study received 26 or more hours of training throughout their career as dispatchers. The completion of initial job training is typically followed-up by additional required trainings. Of those who reported receipt of ongoing or continuous training (73.6%), 24.5% indicated that they are trained once per month; 3.8% take part in additional training once every six months; 5.7% are trained once per year; and 39.6% receive training with no specific timeframe. In other words, there appears to be no uniform time frame for continued training for dispatchers. An additional 17.0% described particular circumstances under which follow-up training is received. For example, some responses included: at least 16 hours of additional training a year, only "terminal operations" requiring additional training, and unmandated continuing education. Finally, 9.4% indicated that they are not required to complete subsequent training after beginning their duties as a 911 dispatcher.

Together, the current results and those of Kassis (2017) reveal inconsistencies in whether dispatchers receive ongoing training, thus provoking questions of the adequacy of training in regards to updated protocol.

Our questions relating specifically to eyewitness training revealed that 75.0% of participants had received training on how to gather information from eyewitnesses; however, of those respondents, 42.7% believed this training to be insufficient, in that it did not adequately teach them how to accurately and efficiently gather information from witnesses. Surprisingly, Kassis (2017) found that approximately 84.0% of participants believed training on gathering information from eyewitnesses to be sufficient, thus revealing a significant difference between the two samples of dispatchers on this question, $X^2(1, N = 170) = 31.56, p < .05$.

To demonstrate the lack of knowledge surrounding how to appropriately gather information from eyewitnesses, 75.9% of participants were trained to ask follow-up questions when an eyewitness provides a limited description of a perpetrator, but 60.0% did *not* believe that questions containing specific pieces of information, essentially suggesting particular responses or confirmation of seemingly known facts, could taint an eyewitness' memory of the event. Comparatively, 75.3% of participants in Kassis' (2017) study were trained to ask follow-up questions when an eyewitness provides a limited description of a perpetrator (similar to our sample), yet more of Kassis' participants (77.2%) believed that asking detailed questions of a witness would *not* taint the eyewitness' memory of the event. Therefore, a significant difference exists between the two samples of 911 dispatchers, indicating a disparity in the understanding of wording effects on eyewitness memory, $X^2(1, N = 170) = 5.77, p < .05$.

Furthermore, participants were asked about everyday practices and policies that specifically target the existence and effectiveness of training and protocols relative to interaction

with eyewitnesses. Table 3 highlights the training and practices of various investigative measures that ultimately aid in suspect identification and the assurance of public safety. The responses in Table 3, similar to Kassis' (2017) findings, display an absence of policy for practices concerning proper eyewitness interrogation, despite evidence of training and application. Critically, only 23.5% were trained to advise against co-witness conversation about an incident, with only one respondent of that item revealing that there is an agency policy in place for that practice, which is consistent with the 57.6%² of respondents who reported *never* advising callers not to engage in conversation with other eyewitnesses prior to police arrival. Importantly, this signifies an overall lack of knowledge on co-witness contamination among 911 dispatchers.

Table 3

Percentage (and frequency) of dispatchers who responded "yes" to the training, practice and policy questions regarding the collection of eyewitness statements. Only Kassis' (2017) findings on policies in place are included in this table.

Topic	Trained	Do this in practice	Agency policy in place	Kassis (2017) Policy
If a caller provides a vague description of the perpetrator, I ask follow-up questions to gather more details.	75.9 (44)	77.6 (45)	27.6 (16)	55.4 (56)
I ask callers if they are under the influence of alcohol or drugs.	65.8 (25)	71.1 (27)	21.1 (8)	35.6 (36)
I ask callers if there are other witnesses to the event.	61.1 (22)	77.8 (28)	11.1 (4)	21.8 (22)
I ask callers how far away they were from the perpetrator.	50.0 (17)	67.7 (23)	8.8 (3)	19.8 (20)

² Percentage derives from responses to question 25 in the survey, see Appendix B.

I ask callers if they got a good look of the perpetrator.	68.8 (33)	66.7 (32)	14.6 (7)	14.9 (15)
I ask witnesses if they notice anything unusual about the perpetrator.	47.8 (22)	82.6 (38)	10.9 (5)	9.9 (10)
If more than one witness, I ask witnesses not to discuss the incident with other witnesses.	23.5 (4)	76.4 (13)	5.9 (1)	4.9 (4)
I ask witnesses about the lighting at the scene of the incident.	23.5 (4)	88.2 (15)	0.0 (0)	5.9 (6)

Adequate Follow-Up Questions: Training and Practice

During situations in which a caller initially provides a vague description of a perpetrator, it is critical for dispatchers to gather an adequate amount of information from the caller in order to accurately inform responding public safety personnel. In this study, participants were asked how often they ask callers to provide information about the following specific physical characteristics (of the perpetrator) and if they had received training to ask about each of the following items: gender, height, weight, clothing, hair characteristics (to include color, length, style), noticeable accent, distinct features, and if the individual reminds the witness of anyone they know (see Table 4).

Table 4

Percentage of participants who ask specific questions related to a perpetrator's appearance and who have received training on these topics. Kassis' (2017) percentages appear in "(.)."

Feature	Always Ask	Received Training
Sex (Gender)	86.4 (93.1)	54.2 (58.4)
Clothing	84.8 (93.1)	55.9 (58.4)
Height	40.7 (51.5)	40.7 (48.5)

Weight	31.0 (50.5) *	36.2 (48.5)
Hair color	69.0 (50.5) *	50.0 (44.6)
Distinct features	37.9 (34.7)	44.8 (47.5)
Hair Length	37.3 (24.8)	39.0 (39.6)
Accent	10.3 (5.9)	13.8 (15.8)
Reminds me of...	3.5 (2.0)	10.3 (9.9)

*Note: * Indicates a significant difference between dispatchers in the current study and Kassis' (2017) sample at $p < .05$.*

As can be seen from Table 4, the majority of participants ask about the sex (86.4%) and clothing (84.8%) in all calls involving perpetrators, despite the fact that just over half of the participants received training on these features (54.2% and 55.9%, respectively). More specific physical characteristics, such as hair length, height, and weight, however, are seemingly not routinely inquired about in either sample. Interestingly, significant differences did appear between both samples of dispatchers in regard to routine inquiry of a perpetrator's weight, $X^2(1, N = 170) = 6.34, p < .05$, and hair color, $X^2(1, N = 170) = 5.73, p < .05$. Despite these differences, both samples were comparable in their receipt of training on these topics.

Noticeably, illustrated by the low frequency of items reaching a 50.0% consensus for received training, there appears to be a general lack of training with respect to obtaining detailed perpetrator descriptions. This finding is consistent with Kassis' (2017) results, as only two topics (sex and clothing) seeking more general information about an individual, surpassed a 50.0% rate of training received. Overall, aside from the two differences found between inquiry of perpetrator weight and hair color, these results demonstrate remarkable consistency between the two samples of dispatchers.

In order to gain a better understanding of how dispatchers may actually respond in certain situations when interacting with eyewitness callers, we created two scenario-based questions into the questionnaire. Scenario 1, described in Appendix A, prompted participants to propose follow-up questions to obtain critical information regarding a possible sighting of a gun amidst a fight on the street. Table 5 represents the additional information dispatchers would obtain from the caller in this scenario.

Table 5

Responses to an open-ended question regarding the additional information that respondents would ask a caller in Scenario 1.

Question Asked / Information Gathered	Percentage (frequency)
“Fixed” Perpetrator Description Items	
Number of Perpetrators	47.6 (30)
Hair	22.2 (14)
Approx. Height/Weight	11.1 (7)
General Description of Perpetrator	9.5 (6)
Tattoos	7.9 (5)
Unique Features / Marks	6.3 (4)
Sex (Gender)	3.2 (2)
Race	1.6 (1)
Age	1.6 (1)
Scars	1.6 (1)
“Changeable” Perpetrator Description Items	
Clothing	42.9 (27)
Shoes	9.5 (6)
Hat	7.9 (5)
Accessories/ Bags	1.6 (1)

Piercings	1.6 (1)
Facial Hair	4.8 (3)
Glasses	1.6 (1)
Perpetrator Familiarity Items	
Perpetrator's Name	14.3 (9)
Perpetrator Known	11.1 (7)
Seen Perpetrator Before	9.5 (6)
Crime Characteristics	
Weapon Description	28.6 (18)
Weapon Implied v. Shown	28.6 (18)
Direction of Travel (perp)	23.8 (15)
Location of Emergency	25.4 (16)
Weapon Presence	20.6 (13)
Vehicle Description	12.7 (8)

Similar to the results displayed in Table 4, responses to Scenario 1 indicate a low frequency of questions targeting specific descriptors that would enhance the overall identification of the involved subject(s). As a note, questions relating to gender were asked at a low frequency likely because the gender of the “main” subject was given in the scenario. Proposed questions relative to crime characteristics did not fluctuate as greatly as did those regarding more personal features. Compellingly, approximately 28.6% of respondents to this question attempted to verify actual presence of a firearm on scene by inquiring if the weapon was merely implied or shown, thus authenticating the caller’s report. Not only is this question critical for maximizing public safety in the surrounding area, but it is also essential for

responding law enforcement and medical assistance personnel as it provides a more detailed description of the situation unfolding.

Interestingly, despite there being no mention of a vehicle involved, 12.7% of respondents asked for a vehicle description, thus indicating a clear assumption was made. Directly asking this of an eyewitness, without confirmed knowledge of subjects using a motorized vehicle either for means of travel or weaponry, could potentially contaminate the caller's recollection of the scene.

Subsequent to this free response question, participants were asked to consider the suitability of a list of possible questions to ask the eyewitness in Scenario #1, following receipt of an initially limited description of the scene. Table 6 represents the likelihood that dispatchers would ask the proposed questions in order to gain a more detailed and holistic view of the scene.

Table 6

Percentage (and frequency) of the likelihood that dispatchers would ask the listed follow-up questions subsequent to the eyewitness' initially limited description of the scene/perpetrator(s).

Question	Yes	No	Not Sure
Did you see a gun?	98.4 (62)	0.0 (0)	1.6 (1)
How many teenagers are there?	98.4 (62)	1.6 (1)	0.0 (0)
Do you recognize or know any of the teenagers?	93.7 (59)	3.2 (2)	3.2 (2)
Are they boys, girls, or both? If both, how many of each group?	93.7 (59)	6.4 (4)	0.0 (0)
What is/are the race of the other teenagers?	92.1 (58)	6.4 (4)	1.6 (1)
What is the approximate age of the teenagers?	82.5 (52)	12.7 (8)	4.8 (3)
Can you describe the sports jacket in more detail?	84.1 (53)	14.3 (9)	1.6 (1)

Can you describe the clothing of any of the other people you see?	93.7 (59)	4.8 (3)	1.6 (1)
How far away are you from the fighting?	68.3 (43)	17.5 (11)	14.3 (9)
Are there other witnesses to the fight you are calling about?	58.7 (37)	20.6 (13)	20.6 (13)

Compared to the results obtained through the open-ended question, displayed in Table 5, the information in Table 6 reveals a discrepancy between the percentage of dispatchers that would ask questions yielding of more detailed descriptions in the scenario. For example, further inquiry regarding the race of those involved saw a very low percentage in the open-ended section, with only 1.6% of respondents asking for that information, yet a significantly higher percentage (92.1%) in the close-ended section indicated that they would ask about that characteristic. The close-ended question appears to have prompted participants to think about more specific questions to ask the eyewitness regarding changeable features of the perpetrator(s). For instance, compared to the open-ended responses where only 42.9% of participants said they would ask about general clothing, a full 84.1% said they would inquire more about the jacket in the closed-ended question.

In relation to public safety, a larger percentage of respondents (98.4%) stated that they would ask if the eyewitness had seen a gun after being presented with that option in the close-ended section, compared to free recall response rate of only 28.6%. Further, compared to the 47.6% of respondents who would ask about the number of additional subjects present at the scene (from the open-ended section), 98.4% indicated they would ask this question when they were specifically given that option. Interestingly, participants were more likely to ask follow-up questions regarding those additional subjects when they were presented with this option (from

closed-ended question). For example, an average of 88.1% would ask more questions about the general make-up of the group in terms of gender and age, and, critically, 93.7% would inquire further about the clothing of other subjects – thus potentially aiding law enforcement who are responding to the scene. These findings strengthen the argument for using established prompts, discussed in the next section, including “description checklists” to aid dispatchers in obtaining more detail from eyewitnesses.

The second scenario (see Appendix A) specifically challenged participants to evaluate the structure and wording of follow-up questions and comments made by a 911 dispatcher in a hypothetical call. Of those who responded to this question (n = 33), 57.6% indicated that the 911 dispatcher should have asked for a suspect description from the present caller without providing information from previous callers. Several of the responses to this open-ended question underscore the importance of collecting an eyewitness’ report before the memory may become distorted by discussing the notion of “implanting a memory” following “leading” questions. For example, one respondent stated the following, “Each caller perceives events differently and by telling the caller what others saw, they are more inclined to "see" what everyone else sees.”

Critically, however, some respondents (3) did not find anything wrong with the presence of leading questions in the scenario, with a few even stating that the dispatcher’s decision to share information provided by other callers was correct. One respondent stated that sharing description information of the suspect was correct because it *saved time*. Further, another respondent seemingly blamed the caller for not having more accurate information of the suspect, thus suggesting this participant’s expectation of eyewitnesses as having every detail needed to

piece together an incident or suspect identification upon reporting, without additional prompt from the dispatcher.

Eyewitness Call “Prompts”

We asked participants whether they believed a “prompt” system or tool be helpful when handling eyewitness-related calls. This tool is often used to aid dispatchers during emergency calls requiring CPR by equipping them with the necessary information needed to accurately describe life-saving steps. Sixty participants responded to this question, with the vast majority of participants (75.0%) agreeing that prompts would be helpful when handling eyewitness calls. Over three quarters of the participants (76.2%) surveyed by Kassis (2017) also indicated that prompts would be helpful. Following a chi-square analysis, $X^2(1, N = 170) = .03, p > .05$, it is evident that there is no difference in endorsement rates between dispatchers in the present study and Kassis’ (2017) sample. Conclusively, there appears to be a general consensus of the value and aid a “perpetrator description” checklist might have to 911 dispatchers in conducting their job.

Discussion

The primary purposes of this study were to further examine how dispatchers view their role and to gain a better understanding of the training dispatchers received pertaining to eyewitness evidence collection, chiefly the susceptibility of an eyewitness’ memory upon exposure to post-event information and language effects. Furthermore, we inquired about the everyday practices of dispatchers during emergency calls in order to evaluate the adequacy of the training received among this population.

The results suggest that a majority of 911 dispatchers recognize their importance as the primary contact in an emergency situation, and thus further endorse an understanding of their

role as primary evidence collectors. However, when compared to the percentages of those who did not identify as evidence collectors, there appears to be a discrepancy among dispatchers between their role-identification and their practice of asking questions pertinent to constructing detailed and holistic views of reported incidents. It is likely that the apparent disconnect is in the language of “evidence collector.” Dispatchers may attribute the title “evidence collector” to personnel who gather physical pieces of information as opposed to mere verbal descriptions of an event and/or individuals involved.

For those who endorsed a role-identification other than “evidence collector” the variance may be consequential to differing guidelines or training protocols present within the agencies and areas surveyed. Training, a major concern for this research study, was suggested to be implemented to the majority of respondents even after initial instruction had been completed. Critically, however, our results suggest that 42.7% of participants believe that they have received insufficient training on eyewitness evidence collection, which can be further evidenced through their overall knowledge of factors that can affect eyewitness reliability. This discrepancy between training and knowledge indicates that dispatchers do not receive adequate training (initial and additional) concerning eyewitness evidence collection, thus threatening the overall quality of eyewitness evidence collected during emergency calls.

Our findings demonstrate that 911 dispatchers, similar to those surveyed by Kassis (2017), possess limited knowledge of how language effects, to the extent of leading questions, and post-event information can interfere with an eyewitness’ memory of an event. For example, when asked if follow-up questions could potentially taint the memory of an eyewitness, more than half (60.0%) of participants reported disbelief in the suggestive nature of questions containing specific pieces of information, potentially unknown to the eyewitness, and their

ability to taint an eyewitness' memory of the event. Comparatively, Kassis' (2017) study also revealed a sizeable percentage (77.2%) of dispatchers who believed detailed questions would not taint an eyewitness' memory of an event. Contrary to assumption, however, dispatchers in the current study did not appear to significantly differ from experts in regard to language effects and post-event information. As these findings contradict each other, an apparent disparity in overall understanding of these factors exist among 911 dispatchers, indicating the need for more standardized and explicit training on these issues.

Furthermore, despite being the first contacts in an emergency situation, dispatchers, dissimilar to eyewitness experts, exhibited minimal knowledge related to the concept of the forgetting curve and its impending interference with an eyewitness' memory of an event or crime. Dispatchers processing these calls are responsible for not only obtaining relevant information from an eyewitness, but also processing the call and relaying accurate information to responding emergency personnel. With a lack of insight into the effects of the forgetting curve, dispatchers risk losing vital information and/or contaminating existing details needed for further investigation.

Dispatchers are faced with stress in their jobs everyday due to urgent manner in which calls need to be processed, and thus it may become quite easy for dispatchers to forget valuable steps/questions to ask callers. Similar to Kassis (2017), our participants expressed that prompts, mirroring those presently used for communicating CPR steps, indicating necessary questions to ask of eyewitnesses would be useful during eyewitness calls. Thus, with the standard eyewitness call lasting approximately 4-6 minutes, it seems feasible to implement prompts for dispatchers during eyewitness calls in order to ensure vital information is being obtained and the potential for contamination of eyewitness memory is reduced.

Limitations/Implications for Future Research

Since there is no published research on 911 dispatchers and the specific training tailored to their role in the investigative process, aside from work by Kassis (2017), self-report measures (i.e. survey) allowed for a glimpse into the perceptions of 911 dispatchers in regard to recognized significance in the evidence collection process, training received, and practice implemented within certain departments/jurisdictions. This self-reporting platform, however, also posed as a limitation of the current study, as it is commonly related to the potential for response bias. To combat this, however, we ensured confidentiality, encouraging honest disclosure of thoughts, in order to minimize the potential for response bias. Despite this, participants were able to skip multiple questions throughout the survey, thus contributing to an inconsistency of responses.

To alleviate any shortcomings of a study solely reliant upon self-report measures, we suggest that future studies utilize both observational and self-report measures in order to ascertain a clear understanding of dispatchers' roles. Observational research may also provide additional insight into how stress impacts a dispatcher's ability to effectively perform job duties. This kind of research may involve active listening to calls between dispatchers and eyewitness callers.

Furthermore, another possible limitation of this study is that it was strictly administered via the Internet (surveymonkey.com). While this allowed participants to complete the survey in a location of their choosing and at their leisure, allowing for comfortability, external factors such as background noise or interruptions may have impacted respondents. Additionally, discussion with other dispatchers (just like co-witness discussion) regarding the questions may have also influenced certain responses, though this cannot be known for sure.

Lastly, with consideration to the limitations of Kassis' (2017) findings in terms of their scope, we believed it would have been beneficial to examine a more geographically diverse sample of dispatchers so that the results could be compared. Specifically, we sought to investigate the differences in dispatcher training within urban versus rural jurisdictions; however, as data collection yielded a small sample size, no meaningful comparisons could be made. Therefore, future research should attempt to refocus on this issue.

Conclusion

In conclusion, the 911 dispatchers who participated in this study provided greatly needed and valued insight into their job experiences. Our participants describe themselves as evidence collectors, but there is a clear lack of proper training in regard to eyewitness evidence collection. Although the generalizability of this study is limited, the majority of participants reported having a significant amount of experience on the job, which included extensive training throughout their career as dispatchers. With that, we are confident the data gathered during this research study can be used to help further build the foundation for future studies in this emergent area of research.

References

- 911 Dispatcher (2019). Retrieved from <http://www.911dispatcheredu.org/careers/>
- 9-1-1 Statistics (2018). Retrieved from <https://www.nena.org/?page=911Statistics>
- Benton, T. R., Ross, D. F., Bradshaw, E., Thomas, W. N., & Bradshaw, G. S. (2006). Eyewitness memory is still not common sense: Comparing jurors, judges and law enforcement to eyewitness experts. *Applied Cognitive Psychology, 20*, 115-129.
<http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1002/acp.1171>
- Berry, J. (2019, April 29). Bill would make dispatchers first responders nationally. Retrieved from <https://www.firehouse.com/careers-education/news/21078407/bill-would-give-dispatchers-first-responder-status-nationally-firefighter>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>
- Dysart, J. E., & Lindsay, R. C. L. (2007). The effects of delay on eyewitness identification accuracy: Should we be concerned? In R. C. L. Lindsay, D. R. Ross, J. D. Read, & M. P. Toglia (Eds.), *The handbook of eyewitness psychology, Vol II, Memory for people* (pp. 361-376). Mahwah, NJ: Lawrence Erlbaum.
- Franklin, D. (2016, March 03). Read full transcripts of 911 calls related to crash that killed former Chesapeake CEO Aubrey McClendon. Retrieved from <https://kfor.com/2016/03/03/read-full-transcripts-of-911-calls-related-to-crash-that-killed-former-chesapeake-ceo-aubrey-mcclendon/>
- Garrett, B. L. (2011). *Convicting the innocent*. Cambridge, MA: Harvard University Press.
- Harris, R. J. (1973). Answering questions containing marked and unmarked adjectives and adverbs. *Journal of Experimental Psychology, 97*, 399-401.
<http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1037/h0034165>

- Hauer, J., Feige, J. M., & Bombach, V. (1998). *9-1-1 Dispatching*. Retrieved from <http://www.auditor.leg.state.mn.us/ped/bp/911d98.htm>
- Innocence Project (2019, December). Eyewitness misidentification. Retrieved from <https://www.innocenceproject.org/causes/eyewitness-misidentification/>
- Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. *Psychological Bulletin*, *114*, 3-28.
- Kassin, S. M., Tubb, V. A., Hosch, H. M., & Memon, A. (2001). On the 'general acceptance' of eyewitness testimony research: A new survey of the experts. *American Psychologist*, *56*, 405-416. <http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1037/0003-066X.56.5.405>
- Kassis, B. P. (2017). "911 dispatchers: Their role as evidence collectors." *CUNY Academic Works*. https://academicworks.cuny.edu/jj_etds/48
- Laney, C., & Loftus, E. F. (2013). Eyewitness testimony and memory biases. In R. Biswas-Diener & E. Diener (Eds.), *Noba textbook series: Psychology* (pp. 156-166). Champaign, IL: DEF publishers. DOI: nobaproject.com
- Leding, J. K. (2012). False memories and persuasion strategies. *Review of General Psychology*, *16*, 256-268.
- Lindsay, D. S. (1990). Misleading suggestions can impair eyewitnesses' ability to remember event details. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *16*, 1077-1083. <http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1037/0278-7393.16.6.1077>
- Loftus, E. F. (1975). Leading questions and the eyewitness report. *Cognitive Psychology*, *7*, 560-572. [http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1016/0010-0285\(75\)90023-7](http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1016/0010-0285(75)90023-7)
- Loftus, E. F., & Greene, E. (1980). Warning: Even memory for faces may be contagious. *Law and Human Behavior*, *4*, 323-334.

<http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1007/BF01040624>

Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behavior*, 13, 585-589. [http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1016/S0022-5371\(74\)80011-3](http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1016/S0022-5371(74)80011-3)

Luna, K., & Martin-Luengo, B. (2013). Monitoring the source monitoring. *Cognitive Processing*, 14, 347-356.

National Institute of Justice (U.S.). (1999). *Eyewitness evidence: A guide for law enforcement*. Washington, D.C: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

Paterson, H. M., & Kemp, R. I. (2005). Co-witness discussion: A survey of police officers' attitudes, knowledge, and behavior. *Psychiatry, Psychology and Law*, 12, 424-434. <http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1375/pplt.12.2.424>

Paterson, H. M., & Kemp, R. I. (2006). Co-witnesses talk: A survey of eyewitness discussion. *Psychology, Crime & Law*, 12, 181-191.

Police release 911 calls from Walgreens robbery. (2018, May 30). Retrieved from https://www.wfsb.com/news/police-release-calls-from-walgreens-robbery/video_2cb37d04-2f0e-54a7-a255-2723d093012c.html

Search Legal Terms and Definitions. (2016). Retrieved from <http://dictionary.law.com/Default.aspx?selected=859>

Sharman, S. J., & Burwood, V. (2012). A comparison of adult witnesses' suggestibility across various types of leading questions. *Applied Cognitive Psychology*, 26, 48-53. <http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1002/acp.1793>

- Skagerberg, E. M., & Wright, D. B. (2008). The prevalence of co-witnesses and co-witness discussions in real eyewitnesses. *Psychology, Crime & Law, 14*, 513-521.
<http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1080/10683160801948980>
- Snowden, M. (2017). Training standards. *The Journal of Emergency Dispatch*. Retrieved from <https://iaedjournal.org/training-standards>
- Sporer, S., Penrod, S., Read, D., & Cutler, B. L. (1995). Choosing, confidence, and accuracy: A meta-analysis of the confidence-accuracy relation in eyewitness identification studies. *Psychological Bulletin, 118*, 315-327.
- Telecommunicators & Training. (n.d.). Retrieved from https://www.911.gov/issue_telecommunicatorsandtraining.html
- Thorley, C. (2013). Memory conformity and suggestibility. *Psychology, Crime & Law, 19*, 565-575. <http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1080/1068316X.2011.648637>
- Virginia Information Technologies Agency. (2017). *Public safety call processing best practice*. Retrieved from <https://www.vita.virginia.gov/media/vitavirginiagov/integratedservices/pdf/PSCPPv2.pdf>
- Zajac, R., & Henderson, N. (2009). Don't make my brown eyes blue: Co-witness misinformation about a target's appearance can impair target-absent line-up performance. *Memory, 17*, 266-278.
<http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1080/09658210802623950>

Appendix A

Dispatcher Questionnaire

Knowledge Section

1. Please select your level of agreement for each of the following statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Strongly Disagree	Not Sure
Very high levels of stress impair the accuracy of witness memory.					
The presence of a weapon impairs a witness' ability to accurately describe the perpetrator.					
The rate of memory loss for an event is greatest right after the event and then levels off over time.					
A witness' memory about an event often reflects not only what they actually saw but also information they obtained later on from other sources.					
A witness' memory about an event can be affected by the wording of the questions they are asked.					
Witnesses are more accurate when identifying members of their own race/ethnicity than members of other races/ethnicities.					
A witness' level of confidence in their identification can be influenced by factors that are unrelated to identification accuracy.					

Please answer the following questions based on your knowledge and experience as a dispatcher.

2. In general, what role do dispatchers play in criminal investigations?

	Yes	No	Not Sure
First Line of Communication/Responder			
Gather Information			
Relay Information			
Use Resources to Assist Law Enforcement			
Dispatch Assistance			
Interview			
Record Calls			

Other (please specify): _____

3. Do you believe a dispatcher plays a role as an evidence collector?

Yes No Not Sure

4. In your opinion, whose responsibility is it to obtain a detailed description of a perpetrator from a witness? Select **all** that apply.

Police Officers____ Dispatchers____ Prosecutors____

5. From your experience, how often are witnesses asked for a detailed description of a perpetrator by members of the following groups?

	Always	Very Often	Sometimes	Almost Never	Never	Not Sure
Police Officers						
Dispatchers						
Prosecutors						

6. In your opinion, do the following groups receive sufficient training in how to accurately gather information from crime witnesses?

	Yes	No	Not Sure
Police Officers			
Dispatchers			
Prosecutors			

Testimony Section

7. Have you ever been called to criminal court to testify in your capacity as a dispatcher?

Yes, and I testified Yes, but I didn't end up testifying No

8. You answered "Yes" to having been called to testify in court. Please indicate how many times you have been called by the prosecutors and the defense attorneys.

Prosecutors _____

Defense Attorneys _____

9. (Again, having answered "yes" to question 7) When you were testifying, were you asked any questions about the training you have received as a dispatcher?

Yes No I Don't Recall

Practice Section

Please answer the following questions based on practices you engage in during a typical work shift.

10. In calls you receive that are related to the reporting of a crime, are there specific questions or prompts that your agency currently asks you to use when gathering information from a caller?

- Yes, there are questions we are required to use
- Yes, there are questions but we are not required to use them
- No
- Not Sure

11. To the best of your ability, please list the questions you ask. (Open-ended)

Please read the following scenario and answer the questions that follow. *(Not based on real events)*

Scenario #1

Call synopsis: A lady calls and says there are teenagers on the street corner near her home fighting, and she believes one has a gun. She describes the boy she believes has the gun as a Hispanic male, about 15 years old, wearing a sports jacket and dark jeans.

12. What additional information would you obtain from this caller? (Open-ended)

13. According to the call scenario above, would you ask the following questions?

	Yes	No	Not Sure
Did you see a gun?			
How many teenagers are there?			
Do you recognize or know any of the teenagers?			

Are they boys, girls, or both? If both, how many of each group?			
What is/are the race of the other teenagers?			
What is the approximate age of the teenagers?			
Can you describe the sports jacket in more detail?			
Can you describe the clothing of any of the other people you see?			
How far away are you from the fighting?			
Are there other witnesses to the fight you are calling about?			

14. Do you feel that if you ask detailed questions of a witness that you may potentially taint their memory?

By detailed questions we mean asking questions that direct a witness' attention to specific or unique characteristics of a perpetrator, such as "did the perpetrator have any distinguishing tattoos or piercings?"

Yes

No

Not Sure

Please read the following scenario and answer the following questions. *(Not based on real events)*

Scenario #2

Call Synopsis: Multiple witnesses have called 911 regarding a burglary of a house in progress. This scenario captures the call between a 911 dispatcher and the fifth caller, who resides across the street from where the burglary is taking place.

911 Dispatcher: 911, what's your emergency?

Caller: I heard a crash, like glass being broken. I think it came from my neighbor's house.

They are on vacation, and I see that the lights are on.

911 Dispatcher: What's your address?

Caller: xx-xx xxth Ave.

911 Dispatcher: Yes, we have received numerous calls regarding the situation, and the police are on their way.

Caller: Wait! I see someone going around the side of the house.

911 Dispatcher: Other callers have described the individual as a white male wearing a green jacket. Is that what you see?

Caller: It's kind of dark, but that could be right... Yes, I think it's green.

911 Dispatcher: Thank you for calling.

– *Call ends* –

15. Can you identify what the dispatcher did well in this call? (Open-ended)
16. Can you identify anything that, in your opinion, should have been asked differently? Please explain. (Open-ended)
17. At your agency, how are emergency calls recorded?
- Automatically Manually They are not recorded Other (please specify)_____
18. To the best of your ability, please estimate the length of an average call in which a witness is reporting a crime and describing seeing a perpetrator. (Drop-down menu)

(The drop-down menu includes the following choices):

- 3 minutes or less
- 4-6 minutes
- 7-10 minutes
- 11-19 minutes

- 20 minutes or more

19. To the best of your ability, please indicate how often each of the following situations occur in your job as a dispatcher?

	Always	Very Often	Sometimes	Almost Never	Never	Not Sure
A witness reports that they know a crime perpetrator by name/nickname.						
A witness reports that they are familiar with the perpetrator.						
A witness reports that the perpetrator is a stranger (unknown to them).						
A witness reports there were multiple perpetrators of the crime.						
A witness reports that they see a perpetrator from a crime that they witnessed in the past.						

20. When a witness calls to report a crime involving multiple perpetrators, do you ask the caller to separately describe what each perpetrator looks like separately?

- Always
- Very Often
- Sometimes
- Almost Never
- Never
- It Depends (Please explain)_____

21. When a caller describes an emergency situation requiring CPR, a set of prompts, including a checklist, often assists a dispatcher in processing the call. The prompt helps a dispatcher to accurately describe the steps for CPR, to ask relevant questions, and to ensure nothing is missed on the checklist.

Similar to the CPR prompts described above, would it be helpful to have prompts and checklists for calls in which a witness is describing a crime and/or perpetrator?

Yes No Not Sure

Training Section

Please answer the following questions based on the training you have received as a dispatcher.

22. Have you received specific training on how to gather information and ask questions of crime witnesses?

Yes No Don't Recall

23. When did you receive that training? (Select all that apply)

- When I was initially trained for the job
- Subsequent voluntary training I attended
- Subsequent mandatory training I attended

24. When multiple witnesses call in separately about the same incident, do you ask the same questions for each caller?

- Yes, this is how I was trained
- Yes, this is how I always do it
- Yes, this is how I usually do it
- Yes, this is how I sometimes do it
- No, I do not
- Other (please specify)_____

25. When multiple witnesses call in separately about the same incident, do you advise callers not to engage in conversation with other eyewitnesses about what they saw before the police arrive?

- Always
- Very Often
- Sometimes
- Almost Never

Never

It Depends (please explain)_____

26. If a caller initially provides no description of a perpetrator, how often do you ask the witness to provide the specific physical characteristics below? In the last column, indicate if you have received training to ask each item.

	Always	Very Often	Sometimes	Almost Never	Received Training (check if yes)
Gender					
Height					
Weight					
Clothing					
Hair Color					
Hair Length					
Noticeable Accent					
Distinct Features (tattoos, scars, etc.)					
Reminds the caller of someone					

27. Have you received training that advises you to allow an eyewitness to freely recall the details of an event? The free recall would occur before any follow up questions would be asked of the witness.

Yes No Don't Recall

Procedures Section

The below questions are regarding a witness calling about a crime.

28. For each statement below relating to callers who are witnesses to a crime, indicate if you have received training, do this in practice, or both. Finally, please indicate if there is a policy for this action within your organization. (Select **all** options that apply)

	I was trained	I do this in practice	There is a policy for this
If a caller provides a vague description of the perpetrator, I ask follow-up questions to gather more details.			
I ask witnesses if they are under the influence of alcohol or drugs.			

I ask witnesses if there are other witnesses to the event.			
I ask witnesses how far away they were from the perpetrator.			
I ask witnesses if they got a good look of the perpetrator.			
I ask witnesses if they notice anything unusual about the perpetrator.			
If there is more than one witness, I ask witnesses not to discuss the incident with other witnesses.			
I ask witnesses about the lighting at the scene of the incident.			

Demographics Section

Please answer the following questions to the best of your ability.

29. Please indicate the gender you identify with.

Female

Male

Prefer Not to Say

Other (Please specify) _____

30. What is your age? (Numbers only, scale provided: 0-100)

31. What is your ethnicity? (Drop-down menu)

(The drop-down menu includes the following choices):

White or Caucasian

Black or African American

Hispanic or Latino American

Indian or Alaskan Native Asian or Other Pacific Islander

Prefer Not to Say

Other (please specify)_____

32. Please choose the option that best describes your current job as a dispatcher.

Paid Employee

Volunteer

Intern

Other (Please specify) _____

33. What state do you work in as a dispatcher? (Drop-down menu, which includes all 50 states)

34. Please select the best option that describes the population area you serve as a 911 dispatcher.

Urban

Rural

Other (please specify)

35. How many dispatchers work within your department/center? (Numbers only).

36. Are you considered?: Full-time Part-time Hours vary between full and part-time

37. On average, how many hours per week do you work as a dispatcher (whether this is volunteer or paid)? (Numbers only, scale provided: 1-80 hours).

38. How many years have you been a dispatcher? (Indicate 0 if less than 1 year) (Sliding scale provided, with marks at 0 years, 25 years, and 50 years).

39. Over your career, how many hours of training have you have received as a dispatcher? (Drop-down menu)

(The drop-down menu includes the following choices):

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26 hours or more

Not Sure

40. After your initial job training, are you required to complete additional training?

Yes, once per month

Yes, once every six months

Yes, once per year

Yes, but no time frame specified

No

Other (Please specify) _____

41. Over your career as a dispatcher, how many calls would you estimate you have received? (Numbers only, scale provided: 0-200,000).

42. Over your career as a dispatcher, how many eyewitness calls - where a witness is describing a crime and/or perpetrator - would you estimate you have received? (Numbers only, scale provided: 0-10,000).

Appendix B

Recruitment Email to Dispatchers

Subject: Participate In a Research Survey of 911 Dispatchers

Dear Dispatcher,

You are invited to participate in a research study examining 911 dispatcher training. This study is being conducted by Dr. Jennifer Dysart and Samantha Kosziollek at John Jay College of Criminal Justice in New York City. In this study, you will be asked to complete an online survey asking questions about training and other questions relating to calls involving eyewitnesses. The survey is likely to take approximately 20 minutes to complete. All participants must be at least 18 years of age or older, and should have experience as a 911 Dispatcher. Please disregard this email if you do not meet this criterion.

If you have any questions regarding the survey or this research project in general, please contact Dr. Jennifer Dysart at jdysart@jjay.cuny.edu. The results will be instrumental in developing improving training for 911 dispatchers. If you have any questions concerning your rights as a research participant, please contact the CUNY Research Compliance Administrator at (646) 664-8918. Your participation is appreciated. Please click on the following link to continue to the survey: <https://www.surveymonkey.com/r/R75WFSZ>

Sincerely,

Jennifer E. Dysart, PhD
Associate Professor of Psychology
John Jay College of Criminal Justice
524 West 59th Street, Room 10.65.09 NB
New York, NY 10019
Phone: 212-484-1160

Appendix C

The City University of New York
John Jay College, Department of Psychology
Consent to Participate in a Research Study

You are invited to participate in a research study that is focused on 911 dispatchers' knowledge and training. The purpose of this research is to help us better understand and develop insight into a dispatcher's job and knowledge of eyewitness research.

If you decide to volunteer to participate in this research study, we will ask you to complete an online survey. All participants must be 18 years old or older. This survey has been approved by the City University of New York (CUNY) Institutional Review Board. The survey will take approximately 20 minutes to complete. The survey will consist of both multiple-choice questions and a variation of open-ended questions. No identifying information of any respondent will be collected by the survey. All of the responses in the survey will be recorded confidentially.

The foreseeable risk of participation in this study is that participants may feel uncomfortable answering particular questions regarding their job and daily duties. Your participation in this online survey involves risks similar to a person's everyday use of the Internet, and confidentiality will be maintained to the degree permitted by the technology used. In order to minimize these risks, you may discontinue your participation at any time if you feel any discomfort during the study. The benefit of this study is that we will better understand dispatchers' and their knowledge. This study will expand our information on the different training and responsibilities a dispatcher attends to. The potential benefit to society is the insight into the successfulness and possible improvement on dispatcher training.

Your participation in this study is completely voluntary. You have the right to refuse to participate without consequences. You can decide to withdraw your consent and stop participating in the research at any time without penalty. Information gathered from you in this study will remain confidential. You will not be individually identified in anyway due to your participation. Your responses will be kept in a secured survey account with a password that only Dr. Jennifer Dysart and her research assistant will have access to.

By clicking the "Next" button below to continue to the survey, you are agreeing to have read this consent form and that you fully understand the nature and consequences of participation in this study. If you have any further questions, comments, or concerns about this research please feel free to contact Dr. Jennifer Dysart at jdysart@jjay.cuny.edu or 212-484-1160.

If you have any questions regarding your rights as a research participant, please feel free to contact the CUNY Research Compliance Administrator at (646) 664-8918.

Appendix D

Debriefing Statement

This study is concerned with dispatchers' perception of their role as evidence collectors, their training, and their knowledge of eyewitness research and the effects of language on memory. Past research has focused on law enforcement personnel, experts, jurors, judges, and attorneys; however, dispatchers are at the start of an investigation and thus their training and roles need to be better understood.

How was this tested?

In this study, you were asked to complete an online survey to the best of your ability. The survey consisted of knowledge questions, and questions aimed at identifying your training, experience, practices, and relevant agency policies.

Aims:

The current study aims to help us better understand how dispatchers perceive their role as evidence collectors. Additionally, we want to know the type of training dispatchers receive in regard to evidence collection concerns related to "eyewitness" calls, as eyewitness recall can be affected by questions asked following an event. Moreover, we want to gain insight into the practices dispatchers use during emergency call situations, as measured by scenario-based questions in the survey.

Why is this important to study?

Persons employed as 911 dispatchers are often the first person of contact after an individual is in an accident, needs emergency assistance, or witnesses a crime. Language has a powerful impact on memory; therefore, dispatcher training should be standardized to include the ability to gather accurate and unbiased information. In an emergency involving a crime, a dispatcher can play an important role in assisting the investigative process and collecting evidence, such as an eyewitness' description of a suspect. The fact that dispatchers play a vital role in the investigative process especially when a crime has been committed, is unquestionable in current research. Published research does not examine how dispatchers are trained to ask questions so the witness presenting information is not lead into revealing "facts" or drawing conclusions based on questions asked by the dispatcher. The current study aims to better understand a dispatcher's role as an evidence collector. Considerations of how language may influence memory accuracy are investigated. Additionally, implications for 911 dispatcher training,

specifically related to the inclusion of adequate questioning prompts for callers (eyewitnesses to accidents or crimes), are made.

What if I want to know more?

If you are interested in learning more about the different ways in which language may influence memory, you may want to review:

Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behavior*, 13, 585-589. [http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1016/S0022-5371\(74\)80011-3](http://dx.doi.org.ez.lib.jjay.cuny.edu/10.1016/S0022-5371(74)80011-3)

—

If you have concerns about your rights as a participant in this survey, please contact the CUNY Research Compliance Administrator at (646) 664-8918.

If you have questions or concerns about the current study, please contact Dr. Jennifer Dysart at jdysart@jjay.cuny.edu or 212-484-1160. Thank you again for your participation.