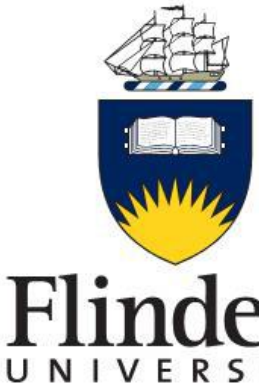


# Bystander decision-making in an emergency:
# A constructivist grounded theory

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# TABLE OF CONTENTS

# THESIS SUMMARY

Each year there are millions of emergency events around the world. These events can occur anywhere and at any time. Out-of-hospital emergencies are events which endanger or threaten to endanger life, including cardiac arrest, vehicle crashes, drownings and falls. Despite emergency services personnel doing their best to assist the victims, many are left with temporary or permanent disabilities and many others die. Up to one-third of these deaths are thought to be preventable if early application of simple first aid measures were implemented; for example, controlling bleeding, which can be administered by people (bystanders) who witness or encounter an emergency. These bystanders are faced with potentially traumatic scenes and are required to make the decision about whether to stop to provide assistance.

Discussion about bystander assistance in emergencies has intensified within the literature since the 1960s, after the rape and murder of Kitty Genovese in 1964. Kitty's attack was witnessed by thirty-eight bystanders who did nothing to help her, each believing that someone else was assisting. The body of research into helping behaviour in out-of-hospital emergencies supports the importance of bystander intervention in saving lives of victims of emergencies. If people are willing to provide assistance they have the potential to save lives. Yet despite evidence that bystander assistance increases the rate of survival of victims of emergencies, the rates of bystander assistance remain relatively low.

Current bystander research is skewed toward empirical methods limiting the ability to gather in-depth data concerning people's experiences of being a bystander. A constructivist grounded theory approach was used to examine the cues and factors that influence bystander decision-making for people who witness or encounter an out-of-hospital emergency. In-depth interviews were conducted with people who had an experience of being a bystander in at least one emergency. Some of these people stopped to provide assistance and others left the scene of the emergency without helping. The application of grounded theory methods facilitated the generation of a theory grounded in participants' experiences.

The substantive grounded theory constructed in this study was *Motivated Responsibility and the Construction of Reasoned Justification*, which helps to explain bystander decision-making

in an emergency. After witnessing or encountering an emergency, bystanders enact a series of analyses, assessments and decisions in order inform the decision of whether to provide assistance. Bystander decision-making is a complex, cyclical process, which is influenced by various cues and factors that form barriers and facilitators for bystander assistance in emergencies.

The theory encompasses the subjective variations in response to the multitude of cues and factors that influence the decision, including the dichotomy of being motivated by responsibility to provide assistance and constructing justification for either providing assistance or leaving the scene of the emergency without helping. Decision-making was influenced by people's beliefs, views and experiences and the analyses and assessments conducted upon witnessing or encountering an emergency. This substantive theory adds to the existing literature and knowledge of bystander decision-making in an emergency and has important implications for policy, education, future research and practice for health professionals and emergency services personnel.

# DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed..... Anna C Hall.....

Date.....December 2016.....

# LIST OF FIGURES

# LIST OF TABLES

# LIST OF APPENDICES

# LIST OF ABBREVIATIONS

| | |
|---|---|
| AIDS | Acquired immune deficiency syndrome |
| BCPR | Bystander cardiopulmonary resuscitation |
| CPR | Cardiopulmonary resuscitation |
| CVA | Cerebrovascular accident |
| CFS | Country Fire Service |
| GTM | Grounded theory method |
| HIV | Human immunodeficiency virus |
| ID | Infectious disease |
| MFS | Metropolitan Fire Service |
| NEMSIS | National Emergency Medical Service Information System |
| OHCA | Out-of-hospital cardiac arrest |
| PPE | Personal protective equipment |
| ROC | Resuscitation outcomes consortium |
| SBREC | Social and Behavioural Research Ethics Committee |
| SAAS | South Australia Ambulance Services |
| SES | State Emergency Service |
| TIA | Transient-ischemic attack |
| US | United States of America |

# WORKS ARISING FROM THIS THESIS

**Internal Publications**

Hall, A 2014, 'What influences peoples' decision-making in an emergency?', *Research Pulse*, vol.10, no. 3, p. 8.

**Media**

Hall, A 2014, The role of bystanders in emergencies, Television Interview, Channel 7 Network, 14th August 2014.

Hall, A 2014, Bystander decision-making in an emergency, Radio Interview, 891 ABC Radio Adelaide, September 2014.

Hall, A 2014, Bystander decision-making in an emergency, Radio Interview, 101.5 Radio Adelaide, 6th September 2014.

**Presentations**

Hall, A 2015, 'Bystander decision-making in an emergency', Rotary Club Edwardstown, 9th March 2015.

Hall, A 2015, 'Bystander decision-making in an emergency', Rotary Club Mitcham, 11th March 2015.

Hall, A 2015, 'Bystander decision-making in an emergency', Lions Club Hahndorf and Districts, 17th March 2015.

Hall, A 2015, 'Bystander decision-making in an emergency', Rotary Club Onkaparinga, 25th March 2015.

Hall, A 2015, 'Bystander decision-making in an emergency', Rotary Club Unley, 7th April 2015.

Hall, A 2015, 'Bystander decision-making in an emergency', Rotary Club Eastwood, 22nd April 2015.

Hall, A 2015, 'Bystander decision-making in an emergency', Lions Club Willunga, 28th April 2015.

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My mum, I so wish you had been here to see me walk across that stage. I can still hear you squeal with delight sometimes, and know this would have been one of those times! I miss you every day and know you would have been so proud of me.

Thank you to my brother Joe who was the true driver of this study, I dedicate this thesis to you. Lastly, thank you to the hero who saved his life.

# PREFACE

My research topic was not sourced from a university. Instead, it was summoned from a crash.

On a sunny day in August of 2013, my brother and his girlfriend were driving to a seaside town in South Australia for her mum's birthday dinner. Driving 110kms an hour down the highway, a car also doing 110kms an hour veers into their lane and crashes head on into their car. My brother was trapped, pinned by pieces of twisted metal. He drifted in and out of consciousness. His girlfriend was moaning in the seat next to him and he turned to see bone protruding from her upper arm. She managed to climb out of the car and he did not see her again for many days and he did not know if she was still alive.

The next thing he knew someone was speaking softly to him and fanning the smoke coming from the car's engine away from his face. She kept talking to him, reassuring him and stayed with him until the emergency services arrived. My brother was trapped in his car for three and a half hours until the emergency services managed to cut him from the wreck and air lift him to the nearest major hospital. I did not know any of this until I received a call from the intensive critical care unit, where I worked at the time. I eagerly picked up the phone thinking they were telling me I had leave without pay, which I had requested so that I too could go with my brother. Instead, I was told my brother had been involved in a crash and that I was to quickly but safely make my way to the hospital.

When I arrived my colleagues told me what had happened, and said they were unsure if my brother would make it through the night because of the extensive injuries he had sustained. I was immediately filled with anguish as we had lost our mum to cancer only three months prior to the crash.

Thanks to the efforts of the emergency services and the health care professionals within the hospital, both my brother and his girlfriend survived. They spent a long time recovering and after many surgeries and much rehabilitation the physical wounds have healed. But the mental scars remain, even all these years later.

One of the strongest memories I have of that time is talking to my brother and hearing the stories of the bystander who stayed with him, talking to him in his time of need. To this day,

he believes he would have died if it were not for her. As he drifted in and out of consciousness he kept hearing her, and felt her presence with him.

After hearing these stories and knowing how grateful he was to have her with him, I started to think about bystanders and their roles in emergencies. I wondered how some people made the decision to provide assistance and what prevented others from helping. I began reading everything I could find on bystanders in emergencies and found a gap in the research. The majority of research that had been undertaken was dated and gathered the data via experiments, datasets or surveys. There was a lack of research that could truly understand the bystanders' experiences.

I decided to undertake Honours research to investigate the experiences of bystanders at car crashes. This research fuelled my intrigue of bystanders, the pre-hospital experience and my love of research. After completing my Honours I immediately began the long and tumultuous PhD process. Despite the ups and downs that come with a PhD I have loved every second. My research has allowed me to speak with people who witnessed or encountered an emergency, some decided to assist and others left the scene without providing assistance. I have gained the perspectives of these forgotten heroes, and hope my research will inform future policy and research, public education and practice.

# DEFINITION OF KEY TERMS

The following key terms are used throughout the thesis.

*Bystander* – a person who is not a health care professional '… who witnesses an incident or comes across a victim who has collapsed or is injured' (Australian Resuscitation Council 2014a).

*Emergency event* – an event, actual or imminent, which endangers or threatens to endanger life, property or the environment and which requires a significant and coordinated response (Australian Government Emergency Management Australia 1998, p. 38).

*Bystander assistance* / *help* / *intervention* / *first aid* – when a bystander provides '… helping behaviours and initial care … for an acute illness or injury' (Australian Resuscitation Council 2014b).

*Decision-making* – the action or process of making important decisions (Oxford Dictionaries 2016a).

*Cues* – '… a circumstance or piece of information which aids the memory in retrieving details not recalled spontaneously … used in the brain's interpretation of the perception' (Oxford Dictionaries 2016b).

*Factors* – 'A circumstance, fact, or influence that contributes to a result' (Oxford Dictionaries 2016c).

# CHAPTER ONE: INTRODUCTION

## 1.0 Introduction

This chapter provides the background, aims and significance of the research study. Background information on emergencies, bystander assistance and bystander decision-making is provided. The purpose and aim of the study is presented, followed by its significance. Key terms important to the study are defined and finally an overview of the thesis is outlined.

## 1.1 Background

Each year there are millions of emergency events around the world some resulting in mortality or temporary or permanent disabilities. Emergencies are unexpected and can occur at any time. In Australia alone in 2014/2015 there were 3.4 million emergency events (Australian Government Productivity Commission 2016). Emergencies can take many forms including car crashes, cardiac arrests, falls and fires. People often witness or come across these emergency incidents and are potentially faced with broken bones, severed limbs, burning flesh or death (Van de Velde et al. 2009). Many of the deaths caused by out-of-hospital emergencies are unavoidable (Pfeifer et al. 2016; Schoeneberg et al. 2014; Settervall et al. 2012), however research shows that approximately one-third could be prevented by administration of simple first aid interventions, for example controlling bleeding by applying pressure to a wound (Ha et al. 2016; Hussain & Redmond 1994). This study provides valuable insight into the cues and factors which influence these bystanders when making the decision of whether to provide assistance in an emergency.

In 2013/2014 within capital cities of Australia, 50% of ambulances arrived at the scene of code one / priority one emergencies within 8.3 to 11.2 minutes (Australian Government Productivity Commission 2016). Code one / priority one emergencies refer to 'potentially life threatening situations that necessitates the use of ambulance warning devices' (Australian Government Productivity Commission 2016, p. 9.51). If no one stops to assist, victims are potentially on their own for some time. Upon witnessing or encountering an emergency, bystanders are faced with the decision about whether to provide assistance. Although rates

are not recorded, it is likely people have witnessed and left the scene; remain in attendance but did not assist; or remain in attendance and provided assistance.

If these bystanders are willing to provide assistance they have the potential to save lives. Bystanders can instigate the initial links in the chain of survival, increasing the victim's chance of survival (Hasselqvist-Ax et al. 2015). The chain of survival lists steps to reduce mortality in an emergency situation, for example in cases of cardiac arrest (Stromsoe et al. 2015), drowning (Szpilman et al. 2014) and cerebrovascular accident (Chenaitia et al. 2013). The initial links in the chain consist of recognition that someone needs assistance, activation of the emergency response system (American Heart Association 2016) and initiation of first aid intervention (Cone & Middleton 2015; First Aid Brisbane 2015).

Reported rates of bystander first aid vary considerably. Deasy et al. (2012) described the characteristics and profile of adult traumatic out-of-hospital cardiac arrest (OHCA) in Australia, and found that bystander cardiopulmonary resuscitation (BCPR) was performed in only 10.2% of cases; although this finding may be related to the traumatic nature of the OHCA reported. Further, Sasson et al. (2011) investigated the influence of neighbourhood and individual characteristics on CPR performance in the United States of America (US) and found that 25% of people received BCPR. Fosbol et al. (2014) undertook a study in the US to examine the incidence of OHCA and BCPR, and found of the 2022 incidences of OHCA 36.5% received BCPR. Further, within Australia rates of bystander CPR for OHCAs have been reported as 37.9% (Zeitz et al. 2010), and more recently as 42% (Victoria Ambulance Cardiac Arrest Registry 2016). In contrast, rates of BCPR were reported to be 62.4% in an Australian study on areas with higher incidence of OHCA and low rates of BCPR (Straney et al. 2015). However, this result may be related to being restricted to witnessed OHCA.

Survival rates attributed to bystander assistance during emergencies in general are not documented. However, survival rates from cardiac arrest are recorded and vary significantly (Cone & Middleton 2015). Sasson et al. (2010) performed a meta-analysis on 79 studies reporting on 142,740 OHCAs, and found survival to discharge was 7.6% when unwitnessed and 13.5% when witnessed by a bystander who performed BCPR. An observational cohort study looking at 139 emergency medical services at ten resuscitation outcomes consortium (ROC) sites found if a victim of OHCA received BCPR before emergency services arrived their survival to discharge from hospital increased from 10.4% 30.3% (Daya et al. 2015).

With regard to other types of medical emergencies, Murad and Husum (2010) conducted a study to determine if laypeople can improve trauma outcomes in Iraq. They found that with extended prehospital transport times mortality rate was 5.8% lower when a bystander had provided early, simple intervention prior to arrival of emergency services. Although the rates of survival from cardiac arrest and trauma have remained relatively low over the years (Cone & Middleton 2015), many studies, mentioned above and in the *preliminary literature review*, highlight how important bystanders are in the chain of survival.

There is no doubt that bystander assistance can and does save many lives. However, the current body of research does not thoroughly uncover the cues and factors that influence bystander decision-making in an emergency. After witnessing or encountering an emergency, bystanders are faced with the decision of whether to provide assistance or leave the scene of the emergency. The ultimate decision is made through a complex, cyclical, interdependent, interconnected series of assessments and decisions. Cues and factors derived from analyses and assessments of the situation, scene, people and risks influence the dynamic process of decision-making.

Current research into bystander assistance in emergencies is skewed toward empirical methods limiting the ability to gather in-depth data of people's experiences of being a bystander (further detailed in the *preliminary literature review* chapter). The majority of these studies either used mock scenarios, surveys / questionnaires or retrospectively analysed data. Very few studies gathered data from people who had actually experienced being a bystander. Thus, the extant literature may not adequately capture the real world perceptions and behaviours of this important group of people.

The literature suggests many reasons why bystanders decide to either help or leave the scene without providing assistance. For example, it has been suggested a person needs to feel a responsibility toward the emergency if they are going to provide assistance (Darley & Latane 1968; Latane & Darley 1968, 1969). However, if other people are present and the responsibility is diffused to them (detailed later), then the person may leave the scene of the emergency (Vaillancourt et al. 2014; Venema, Groothoff & Bierens 2010). Barriers and facilitators to providing assistance in an emergency are presented in the *preliminary literature review* chapter.

Bystander research intensified in the 1960s after the brutal rape and murder of Kitty Genovese in 1964. Kitty's attack was witnessed by thirty-eight bystanders who did nothing to help her, each believing that someone else was assisting (Manning, Levine & Collins 2007). Following the murder, Darley and Latane (1968) began to research the effect of group size on helping behaviour and found that as the number of people at the scene of the emergency increases the likelihood of someone helping decreases (known as diffusion of responsibility). Subsequent bystander research has continued for nearly fifty years and is spurred on by similar incidents, for example the case of James Bulger in 1993. James was abducted from a shopping centre by two ten year old boys, tortured over a number of hours before being murdered (Levine 1999). Thirty-eight people witnessed James being abducted and led around the city, distraught and injured, yet no one came to his assistance (Levine 1999).

Conversely, there are many examples in which bystanders have provided assistance and saved lives. In 2010 an earthquake destroyed much of the infrastructure of Haiti, killing more than 220,000 people and injuring over 300,000 (Ashkenazi et al. 2012). A report into the rescues in the immediate aftermath of the Haiti earthquake found that 71% of all survivors were pulled from the wreckage by a bystander and that only 1% reported being rescued by a professional rescue group (Ashkenazi et al. 2012). Similarly, high levels of bystander assistance were reported in a descriptive opinion piece by Walls and Zinner (2013) who described the aftermath of two bombs that exploded near the finish line of the 2013 Boston marathon killing three people and injuring many others. They attributed the high survival rate in part to health professionals and to bystanders who rapidly responded to the emergency situation by evacuating people and controlling haemorrhage.

The focus of the current study is bystanders with no health care qualifications. Bystanders who are health care professionals were excluded from this study as the focus was to understand laypeople's' experiences of decision-making in an emergency. Hereinafter the term bystanders is used to mean a person who is not a health care professional '… who witnesses an incident or comes across a victim who has collapsed or is injured' (Australian Resuscitation Council 2014a). People who had first aid training were not excluded because this training is readily available to the general public. The concept of first aid training for bystanders came about in 1859 after the battle of Solferino. Henry Dunant, the founder of the Red Cross, implemented a form of training for laypeople so they could provide assistance to the wounded (Pearn 1994). Although there is evidence to suggest a link between first aid

training and increased willingness to provide first aid intervention, this thesis does not focus solely on first aid training. People who have never undertaken first aid training can and do provide intervention for people in emergency situations (Sasaki et al. 2015).

## 1.2 Research aim

The purpose of this research is to generate a substantive grounded theory of bystander decision-making in an emergency. The aim of this study is to explore the cues and factors that influence bystander decision-making in an emergency.

## 1.3 Research significance

The current literature explored reasons why bystanders provided assistance, and some of the perceived barriers and facilitators for helping in emergencies. The current study is significant because it enhances the understanding of bystander decision-making in an emergency. The study employs constructivist grounded theory methodology / methods package to enable deeper understanding of the phenomenon. Participant's meanings and behaviours are explored and explained, as they cycle through the series of assessments and decisions, until the ultimate decision is made to provide assistance or to leave the scene of the emergency. Cues and factors that interact and influence the assessments and decisions are explored in-depth.

The findings and substantive grounded theory help to inform and fill the gap in the body of evidence on bystander decision-making in an emergency. Implications and recommendations developed from the grounded theory have the potential to inform policy, education, research and practice.

## 1.4 Thesis outline

Throughout this thesis the use of first person has been intermittently incorporated, as recommended by Charmaz (2014). The purpose of using this style of writing is to situate myself in the research to highlight my role of co-constructor of the substantive grounded theory (Charmaz 2014). The following section presents an overview of the eleven chapters that make up the thesis.

**Chapter one** provides background information on emergencies around the world and within Australia. Contextual information on bystander intervention is presented along with an overview of bystander decision-making in an emergency. This is followed by the purpose, aim and significance of the research.

**Chapter two** presents a preliminary literature review of research conducted on bystanders in emergencies to provide context for this thesis. A justification for the review is provided to explain the use of a constructivist grounded theory method (GTM) study. The article search strategy is outlined before presenting a summary of the literature, including the methodologies utilised and location of the studies. Themes from the current literature are presented followed by a discussion of the literature surrounding bystanders in emergencies.

**Chapter three** addresses the research methodology and theoretical framework employed within this study. Charmaz's (2014) constructivist grounded theory method is discussed along with the theoretical perspectives of symbolic interactionism and social constructionism to highlight how the aim of the research was able to be met.

**Chapter four** details methods used to conduct the study including recruitment of participants, ethical considerations and the process of grounded theory method from data collection to theory construction. Methods used to ensure the rigour of the study are also presented.

**Chapter five** is the first of the findings chapters. Study participants are introduced, followed by an overview of the grounded theory and the conceptual model which explains the theory of *Motivated Responsibility and the Construction of Reasoned Justification*. Each of the findings chapters (five to ten) incorporate literature to situate the current study and to explicate how the substantive theory builds on the current body of evidence (Charmaz 2014; Glaser & Strauss 1967; Strauss & Corbin 1998).

**Chapters' six to eight** present three of the major categories of the substantive grounded theory, including *internal drivers*, *assessing personal attributes and assessing competing factors*.

**Chapter nine** discusses the category *assessing the scene*. The major category that encompass the analyses and assessments is presented as four separate sub-categories;

*analysing the situation*, *assessing the situation*, *assessing the people* and *assessing the risk*. Although chapters six to nine present the series of assessments and decisions as separate categories, they interact to influence the core category (*motivated responsibility and reasoned justification*). The relationships between categories and subcategories are explicated to highlight their role in the grounded theory.

**Chapter ten** presents and discusses the substantive grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification*. The theory explains participants' behaviour when decision-making in an emergency. This chapter situates the theory and illuminates how it builds on existing knowledge.

**Chapter eleven** details the contributions of the study followed by the limitations of the research. Implications and recommendations are presented under the four areas of policy, education, research and practice.

# CHAPTER TWO: PRELIMINARY LITERATURE REVIEW

## 2.0 Introduction

The previous chapter provided background information on bystander assistance in emergencies, identified the research problem and aim, illuminated the significance for exploring bystander decision-making in an emergency and provided an outline of the thesis. Chapter two presents the preliminary literature review which examined the research surrounding the broad research topic of bystander assistance in emergencies. The following section justifies the use of a preliminary literature review in the study. The search strategy to locate articles for the review is outlined, followed by a summary of the literature. The findings of the literature review will follow, organised into themes. Finally recommendations drawn from the literature are discussed.

## 2.1 Justification for a preliminary literature review

There is much debate about the timing of the literature review in grounded theory method (GTM) research (Charmaz 2006, 2014; Giles, King & de Lacey 2013; Glaser & Strauss 1967). Classical grounded theory, developed by Glaser and Strauss (1967), suggests the literature review should be delayed until data collection and analysis begins, or until after the theory has been generated. This view was attributed to a belief that any knowledge on the area under study would contaminate the data and emerging codes and concepts as the researcher would view the data through the lenses of existing theories (Glaser & Strauss 1967). However, Glaser and Strauss contradicted this view in their seminal text when they suggested researchers need to be theoretically sensitive in order to conceptualise and formulate a theory, and suggested data can be used to aid understanding of the area and formulation of hypotheses (Glaser & Strauss 1967).

Since the seminal text on GTM, contentious debate has occurred regarding this advice (Giles, King & de Lacey 2013). More recent texts suggest that delaying the literature review is not necessary and that a preliminary literature review can be undertaken and then put aside until codes and categories begin to emerge from the data collection and analysis phases (Charmaz 2006). However, Charmaz (2006) cautions against undertaking an in-depth literature review, related to the risk of being influenced by the literature and attempting to

fit data into predefined categories. As such, this preliminary literature review, undertaken prior to data collection, looked at the broad area of bystander assistance in emergencies and did not delve deeply into the literature, as is done when employing other methodologies.

Epistemologically, I believe that one cannot undertake research without prior knowledge. Prior to the current study I had undertaken research on bystander assistance in motor vehicle accidents, thus had read widely on the area of bystander assistance in emergencies. As a result, I became aware of a gap in the current body of literature. A preliminary literature review was therefore undertaken to provide a framework and direction for the study (Bryant & Charmaz 2007), while increasing sensitivity to issues, and providing direction for interview questions for the data collection and analysis phases (Charmaz 2006). I ensured preconceived ideas and perspectives did not influence the direction of the study by incorporating the process of reflexivity. Reflexivity is a process whereby the researcher acknowledges experiences, beliefs and preconceptions to prevent influencing the findings (Corbin & Strauss 2008; Giles, King & de Lacey 2013; McGhee, Marland & Atkinson 2007). Charmaz (2007) suggests that reflexivity is an essential component in GTM studies as it enhances the credibility of the research by increasing self-awareness and self-critical appraisal of the researcher. The use of reflexivity in the current study has been discussed in detail in chapter four *methods* (see page 67).

As suggested by Glaser and Strauss (1967), Strauss and Corbin (1998) and Charmaz (2014) a secondary literature review was undertaken while analysing data and writing up the study to link the theoretical concepts, properties, relationships and emerging theory from the current study with previous research. Literature from the secondary review is woven through the findings chapters (chapters six to ten) to position and support the current research, and to elucidate how the study and the grounded theory fits within and extends upon existing literature.

## 2.2 Article search strategy

A comprehensive search of the literature was conducted between March and September 2013 and was updated in May to July 2016. Primary research articles were accessed through online databases: CINAHL, PsychINFO, Scopus, Web of Science, Medline and Google Scholar. Key words used in the searches included: *bystanders*, *responders*, *lay-person, witnesses,*

*onlookers, observers, emergencies*, *out-of-hospital emergencies*, *pre-hospital*, *cardiopulmonary resuscitation*, *CPR*, *out-of-hospital cardiopulmonary resuscitation, car crashes*, *vehicle crashes*, *car accidents*, *vehicle accidents*, *traffic accident*, *first aid*, *intervention, help, assistance, trauma* and *medical emergency*. Approximately 5000 articles on bystander assistance in emergencies were located using these terms. The abstract of all 5000 articles were read to ensure relevancy to the aim of the current study. Article inclusion criteria were then applied to refine the search. Any article that did not meet the inclusion criteria (see Table 1) was removed from the review. The references of each article that met the inclusion criteria were reviewed in order to locate any additional literature.

A date restriction was not applied to the search as the majority of literature on bystander assistance in an emergency was conducted between the 1960s and 1980s. Secondary sources of data were excluded including literature reviews and conference abstracts as their discussion or results did not add to the argument. Duplicates, studies that did not fit the inclusion criteria and secondary sources were removed. This led to the inclusion of ninety four studies.

**Table 1: Inclusion and exclusion criteria for preliminary literature review**

| Inclusion criteria | Exclusion criteria |
|---|---|
| Primary research | Secondary research |
| Published in English | Published in languages other than English |
| Main focus on bystanders | Focus on emergency services personnel / health care professionals / interventions i.e. CPR training courses |
| Out-of-hospital emergencies | Emergencies that occurred in a hospital setting |
| Medical emergencies | Other types of emergencies i.e. sexual harassment |

## 2.3 Summary of the literature

As mentioned in chapter one, research on bystander assistance in emergencies was first conducted in the late 1960s after the murder of Kitty Genovese. The attack prompted bystander research, spanning decades. The majority of research utilised empirical methods

to explore bystanders in emergency situations, however, few studies employed interpretive or mixed method approaches. Table 2 presents the studies included in the preliminary literature review and their associated method/methodology.

**Table 2: Methodology of reviewed studies**

| Methodology | Design | No. of studies |
|---|---|---|
| Empirical | Experimental<br>Analysis of data<br>Questionnaire/survey<br>Observational | 33<br>27<br>25<br>3 |
| Interpretive | Interviews<br>Community-based participatory action - focus groups / interviews | 3<br>2 |
| Mixed Method | Prospective - Patient records and semi-structured interviews | 1 |

### 2.3.1 Empirical studies

The majority of studies employed an empirical design (n = 88) (see Appendix 1 (see page 215) and 2 (see page 218) for the bibliographic details of each study). Positivist methods are used to understand the relationship between variables (Creswell 2014; Yardley 2000), for example the relationship between the number of bystanders present at an emergency and helping response. Empirical studies are highly systematic and follow strict guidelines (Creswell 2014), thus are thought to be able to endure scrutiny and be generalisable to various populations and environments (Creswell 2014).

The majority of the empirical studies located for the preliminary literature review were either experimental (n = 33), analysed data (n = 27), or utilised a questionnaire/survey (n = 25), the remaining articles utilised observational methods (n = 3). The experimental studies created a simulated medical emergency to test how the bystander reacted in various contexts, with varied measures. Simulated emergencies cannot predict how a person will react in a real emergency with associated stressors, concerns and dangers. Almost all of the experiments used undergraduate university students (some studies did not specify which students others used psychology students) as their sample which may create a biased sample, or one that is not representative of the wider population. Further, a large number of subjects were young, for example Levine et al. (2005) and Bickman (1971) studied students

between the ages of 17 and 21 years old which may limit the maturity and life experiences of their sample.

Other studies used people who lived independently and who were over fifty-five years old (Vaillancourt et al. 2014); children of certain school grades (Staub 1970); people who lived in certain neighbourhoods (Sasson et al. 2013); people who were riding the subway at the time of the experiment (Piliavin, Piliavin & Rodin 1975; Piliavin & Rodin 1969); and people who had been bystanders at an emergency and who had taken the victim to the participating hospital (Tomruk et al. 2007). These studies relied principally on either mock or hypothetical scenarios whereby people were either observed or self-reported on behaviours they may have exhibited had they been in an actual emergency. Sample size of experimental studies ranged from 17 (Hortensius & de Gelder 2014) to 319 subjects (Solomon, Solomon & Stone 1978). Approximately half of the experiments had small sample sizes (between 17 and 50), limiting the generalisability.

A number of studies (n = 27) used previously collected data in their studies including large datasets from patient care records, ambulance records, autopsy records, and rescue reports. These data were analysed to determine the variables that affect bystander response, and the number of bystanders who provided intervention. Studies analysing previously collected data had between 112 (Ashour et al. 2007) and 16.2 million (Faul, Aikman & Sasser 2016) emergency incidents, and collected data from between one (Ashour et al. 2007; Faul, Aikman & Sasser 2016; Moncur et al. 2016; York Cornwell & Currit 2016) and eighteen years (Adielsson et al. 2011). For those that reported it, rates of bystander intervention ranged from 9.4% (Dietze, Cantwell & Burgess 2002) to 62.4% (Straney et al. 2015). A limitation of the studies that relied on retrospective analysis of data was the reliance on emergency medical personnel and health care professionals to accurately document information about bystanders.

Studies that utilised questionnaires or surveys gave them to emergency medical service personnel, who then reported on bystanders; lay people, who self-reported using mock scenarios; or people who had assisted in an emergency. This form of data collection yielded large numbers of respondents, between 173 (Swor et al. 2000), and 4853 (Sasaki et al. 2015) questionnaire or survey responses were included in these studies. Limitations of these studies vary between the contexts, such as the relying on emergency services personnel to

fill in a questionnaire immediately after completion of a trauma call when limited by the time constraints of taking the victim to hospital. Other studies used a questionnaire based on mock scenario questions to explore their perceptions of the scenario; however answers to questions were based on what subjects said they would do, which may not be what they would actually do. Some studies sent surveys to randomly selected people from a general population; again these questions were likely based on scenarios as they were not specifically directed at people who had been a bystander in an emergency. Four studies surveyed people who had actually been a bystander in an emergency. The results from these studies provide a representation of what a bystander would do in an emergency. Several of the studies utilised data collected from two or more cities (Pelinka et al. 2004; Thierbach et al. 2004), increasing the generalisability of these studies.

Empirical research is useful to gather large amounts of data on bystanders in emergency scenarios. However, it does not allow for in-depth exploration of bystanders experiences, perceptions and interpretations of the emergency. Many of the empirical studies relied on hypothetical or mock scenarios limiting the bystander's emotional response of actually witnessing or encountering the emergency. It may be difficult to determine what affects bystander decision-making when only utilising empirical methodology and methods for data collection.

Only sixteen studies out of ninety-four conducted research using people who had been bystanders at actual emergencies and the majority were retrospective analyses of data collected by emergency or medical personnel. The small number of studies examining actual bystander experiences highlights the lack of research using real-life emergencies and experiences. The current study focused on the experiences of bystanders who had witnessed or encountered an emergency, using a wide range of ages (19-81 years old) (see Appendix 3, page 220) thus helping to bridge the gap in the body of evidence.

### 2.3.2 Interpretive studies

Interpretive studies use flexible guidelines to enable the researcher to explore the phenomenon in detail (Polit & Beck 2012; Yardley 2000). Interpretive studies can be used to understand human nature and explore meaning, context, perceptions, process and experiences (Yardley 2000).

The five interpretive studies included in this preliminary literature review utilised either interviews or focus groups to gather data. The studies had between 19 (Axelsson, Herlitz & Fridlund 2000) and 64 participants (Sasson et al. 2015) and used purposive recruitment methods. Each study had ethical approval to conduct the research. Interpretive research is useful to gather in-depth data on bystanders' experiences in an emergency; however, only two studies recruited participants who had actually been a bystander in an emergency (Axelsson, Herlitz & Fridlund 2000; Dombrowski et al. 2012). The other three studies utilised hypothetical scenarios to explore perceived barriers and facilitators to performing cardiopulmonary resuscitation (CPR) (Sasson et al. 2015; Sasson et al. 2013; Vaillancourt et al. 2014). Despite this, the aim of each study aligned with the approach taken and the recruitment strategies were well described.

### 2.3.3 Mixed method studies

Mixed method designs are used to gather quantitative data to quantify the phenomenon and qualitative data to further explain the quantitative data (Creswell 2014). The phenomenon is examined in detail by gathering multiple data, using complementary designs (Burke Johnson & Onwuegbuzie 2004). One study used a mixed method design to explore bystanders in emergency situations. Breckwoldt, Schloesser and Arntz (2009) undertook a prospective study to interview people who had been bystanders at an out-of-hospital cardiac arrest (OHCA) to recall their perceptions and assessment of the patient. Case notes and hospital records were also accessed and analysed. The study was conducted over a twelve month period and included 138 participants (Breckwoldt, Schloesser & Arntz 2009). Despite the length of time and number of participants minimal information was gained regarding barriers and facilitators to providing CPR, thus failing to illuminate what might affect bystander decision-making.

### 2.3.4 Location of studies

The studies included in the preliminary literature review were undertaken in various locations around the world including the United States of America (US), Europe, Asia and Australia. The majority of research conducted on bystander assistance in emergencies (included in the review) was undertaken in the US (n = 49), where the original bystander research was conducted (Darley & Latane 1968; Latane & Darley 1968). Only six studies located for the review were undertaken within Australia.

### 2.3.5 Summary

There has been a large amount of research undertaken on bystander assistance in emergencies, however, the majority of research utilised empirical methods and was conducted outside Australia. The lack of interpretive research has led to the phenomenon being explored without much depth. With little research conducted in Australia it is difficult to understand the experiences of decision-making for bystanders within this context and culture. The gap in the literature provides justification for the current study to be conducted within Australia, utilising GTM to explore in-depth bystander decision-making in an emergency. Conducting this study will enhance knowledge and understanding of the cues and factors which are barriers and facilitators to bystander decision-making in an emergency.

## 2.4 Themes from the literature

The aim of a preliminary literature review in GTM is to provide an overview of study results on a broad area, not to provide specific outcomes of studies (Charmaz 2006; Giles, King & de Lacey 2013; Hickey 1997). As recommended by Glaser and Strauss (1967) and Charmaz (2014), findings relevant to the substantive grounded theory have been woven through chapters six to ten. The preliminary literature review examined broad study findings on bystander assistance in emergencies and presents these broad finding rather than specifically reporting on outcomes of each study. As recommended by Elliott (2007) the findings have been arranged into themes to identify gaps in the body of evidence and to situate the current study. The main themes identified within the studies included: the bystander, the victim and the emergency and the many sub-themes sit within these themes (see Appendix 4, page 221, for themes from the preliminary literature review).

### 2.4.1 The bystander

#### *2.4.1.1 Knowledge and skill to provide assistance*

The most common theme in the reviewed literature was having the *knowledge and skills to provide assistance* in an emergency situation. Forty-nine of the ninety-four studies reported on this theme, which incorporated both barriers and facilitators for bystanders when deciding to provide assistance. Barriers included not having confidence they could provide intervention, a perception of insufficient knowledge of first aid, including its importance and

when to administer it, being unsure of the current first aid guidelines, and their physical ability to provide first aid.

The majority of barriers to providing first aid, related to *knowledge and skill to provide assistance*, were associated with first aid training. For example, Vaillancourt et al. (2014) identified fifteen main barriers to providing assistance, four of which related to this theme. Their participants lacked confidence. They were concerned about their physical ability, concerned with skill decay and worried about giving poor intervention (Vaillancourt et al. 2014). Within the theme *knowledge and skill to provide assistance*, confidence was most commonly cited as a barrier to proving bystander intervention (n = 30). For example Kuramoto et al. (2008) assessed the perception and attitude of the general public toward CPR and found that many people were not willing to perform CPR because they lacked the confidence to do so. Similarly, Cho et al. (2010) examined the effect of basic life support (BLS) training on laypersons' willingness to perform CPR; they found 50.1% of people (n = 270) would not provide assistance because they lacked confidence in their knowledge and skills.

Eight studies reported people were unsure of when to administer first aid intervention (Axelsson, Herlitz & Fridlund 2000; Breckwoldt, Schloesser & Arntz 2009; Dombrowski et al. 2012; Larsson, Martensson & Alexanderson 2002; Pergola & Araujo 2008; Sasson et al. 2015; Swor et al. 2006; Vaillancourt et al. 2014) which led to a concern they would not perform it correctly and further harm the victim (detailed later in this chapter). Again this concern appears to be linked to confidence to administer help in an emergency. An example was the study undertaken by Dombrowski et al. (2012) which explored factors that influenced behaviours in response to a cerebrovascular accident (CVA). They found that two-thirds of bystanders did not recognise the symptoms of a CVA, which may be related to a lack of knowledge and skills to provide assistance.

Insufficient knowledge and a lack of understanding of the importance of first aid was reported to be a barrier to administering help in an emergency in 22 studies. These studies reported a deficit in knowledge and the skills to administer first aid which often contributed to people having little understanding of why first aid should be implemented. For example, in a study which assessed the role of bystanders during rescue and resuscitation of drowning victims, only 59 of the 109 people who performed bystander CPR (BCPR) performed it

according to guidelines (Venema, Groothoff & Bierens 2010). This was related to a lack of knowledge and the skills to administer first aid adequately. Similarly, in a study to determine how social group membership and inclusiveness of group boundaries shape helping behaviour, Levine et al. (2005) found that people were often unable to determine the seriousness of emergencies, which is likely related to a lack of knowledge. Similarly, Sasson et al. (2013) undertook a study to identify barriers and facilitators to learning and performing CPR in low income, predominately black neighbourhoods, and again found that one of the most common barriers to performing CPR was a perceived knowledge deficit, including knowing when to perform intervention.

Several studies found that individuals were concerned about being up-to-date with the current first aid guidelines (Sasson et al. 2015; Sasson et al. 2013; Urban et al. 2013). For example, Urban et al. (2013) undertook a study to determine current knowledge of, and willingness to perform hands-only CPR, and found that only 23.3% of subjects (n = 124) had knowledge of hands-only CPR and less than 50% were confident to perform it. Several studies reported physical ability as a barrier to performing first aid in an emergency (Coons & Guy 2009; Dami et al. 2010; Lu et al. 2016; Sasson et al. 2013; Swor et al. 2006; Vaillancourt et al. 2014). People were concerned they would not have the physical strength to provide intervention and often decided not to intervene.

Having the *knowledge and skill to provide assistance* was also reported to be a facilitator to providing bystander intervention. Having undertaken first aid training at some point increased confidence and knowledge of what, how and when to administer first aid. Many of the studies drew the direct connection between first aid training and having increased confidence in knowledge of, and the skills to administer, first aid. Bakke et al. (2015) undertook an eighteen month prospective study examining the role of bystanders in trauma responses, they found that bystanders who had undertaken first aid training at some point provided more effective first aid intervention. Similarly, Cho et al. (2010) compared questionnaires before and after administration of first aid training and found that confidence in knowledge and skills increased after training.

Having some form of experience with an emergency, for example the person had undertaken BCPR previously, or someone they knew required first aid intervention, was described as a facilitator to providing bystander intervention in an emergency (Axelsson et

al. 1996; Axelsson et al. 1998; Dombrowski et al. 2012; Dwyer 2008; Sasaki et al. 2015; Urban et al. 2013). Again this links to the theme *knowledge and skill to provide assistance* as the studies which detailed this drew the connection between a past experience and knowledge. For example, in a study to determine the psychological factors that inhibit family members' confidence to initiate CPR, it was found that if a person had undertaken BCPR previously they were more confident and willing to do it again (Dwyer 2008). Similarly, Sasaki et al. (2015), researched factors which affected laypersons' confidence in performing resuscitation, and found that having performed BCPR previously increased confidence and willingness four fold. Urban et al. (2013) found that if someone they knew required CPR at some time, they in turn were more likely to perform BCPR on someone else.

#### *2.4.1.2 Fears and concerns*

Fears and concerns were evident for many bystanders and impacted on their decision to provide assistance in an emergency. These included the fear of performing the intervention incorrectly, the fear of causing further harm to the victim, fear of litigation, fear of contracting an infectious disease, a fear or concern of being injured while administering first aid and the concern about what other people think. Each of these fears and concerns were barriers to administering first aid intervention, however, the extent to which studies reported on the fears and concerns differed depending on the aim of the study.

##### *2.4.1.2.1 Performing the intervention incorrectly, causing further harm and litigation*

The fear of performing the intervention incorrectly, thereby causing further harm to the victim, was a common barrier to performing bystander assistance in an emergency (n = 18) (Cacioppo, Petty & Losch 1986; Cho et al. 2010; Coons & Guy 2009; Dwyer 2008; Kliegel et al. 2000; Ross, Winter & Mossesso 2000; Sasaki et al. 2015; Sasson et al. 2015; Sasson et al. 2013; Savastano & Vanni 2011; Shibata et al. 2000; Smith, Smythe & Lien 1972; Staub 1970; Swor et al. 2006; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012; Thierbach et al. 2004; Vaillancourt et al. 2014). If the bystander was concerned they may not perform the first aid intervention correctly and thereby cause harm to the patient, a fear of litigation often ensued (n = 9) (Cho et al. 2010; Coons & Guy 2009; Johnston et al. 2003; Lu et al. 2016; Ross, Winter & Mossesso 2000; Sasson et al. 2015; Sasson et al. 2013; Savastano & Vanni 2011; Vaillancourt et al. 2014). For example, Sasson et al. (2013) reported being unsure participants would recognise what was wrong with the victim and might perform the

intervention incorrectly, causing further harm to the victim. They believed the victim's family or friends would need someone to blame and thus would litigate the bystander (Sasson et al. 2013).

The bystanders were often concerned they may administer first aid incorrectly as they were unsure what was wrong with the victim, or were not confident they had the skills to perform the intervention. This links to the sub-theme *knowledge and skills to provide assistance*, as being unsure of what was wrong or lacking confidence in one's ability related to a lack of first aid knowledge and skills. The studies which reported this as a theme found bystanders were concerned they may either harm or kill the victim because they performed the intervention incorrectly.

The fear and concern about causing further harm to the victim, resulting in litigation, was a barrier to many subjects in the reviewed literature; it appeared they lacked confidence in their knowledge of first aid, thus did not feel competent to help. As suggested by a number of studies having this fear and concern may result from having little to no knowledge of the Good Samaritan laws and their aim to protect people who provide first aid assistance (Sasson et al. 2013; Thierbach et al. 2004; Vaillancourt et al. 2014).

*2.4.1.2.2 Infectious diseases*

The fear of contracting an infectious disease, for example acquired immune deficiency syndrome (AIDS), was reported directly by sixteen studies (Axelsson et al. 1996; Bobrow et al. 2010; Cho et al. 2010; Coons & Guy 2009; Dwyer 2008; Johnston et al. 2003; Lam et al. 2007; Lu et al. 2016; Ross, Winter & Mossesso 2000; Sasson et al. 2015; Sasson et al. 2013; Sasson et al. 2011; Savastano & Vanni 2011; Taniguchi et al. 2012; Thierbach et al. 2004; Vaillancourt et al. 2014); and alluded to by five studies disease (Axelsson et al. 1998; Nagao et al. 2007; Shibata et al. 2000; Swor et al. 2006; Taniguchi, Omi & Inaba 2007). Bystanders were concerned they would administer first aid intervention, for example mouth-to-mouth resuscitation, and would contract an infectious disease from the victim. This fear was reported to be one of the biggest barriers for bystanders when deciding to provide assistance in an emergency. However, the only infectious disease specifically mentioned was AIDS, and the route of contamination was only via the mouth when performing CPR. Fewer people were concerned about disease transmission if the victim was a child or a relative (Taniguchi et al. 2012). Vaillancourt et al. (2014) suggested the concern about contracting an

infectious disease resulted from a lack of knowledge of the actual risk when performing mouth-to-mouth ventilation.

The five studies mentioned above, which alluded to a fear or concern about contracting an infectious disease looked at the willingness to provide CPR with or without mouth-to-mouth ventilation (Axelsson et al. 1998; Nagao et al. 2007; Shibata et al. 2000; Swor et al. 2006; Taniguchi, Omi & Inaba 2007). The majority of bystanders were more willing to provide assistance if they could perform compressions only. Different types of intervention have been further discussed in the theme *the emergency* (see page 28).

*2.4.1.2.3 Possibility of being injured*

The possibility of being injured while providing first aid in an emergency was a barrier for some participants in five of the reviewed studies (Clark III & Word 1972; Faul, Aikman & Sasser 2016; Sasson et al. 2015; Sasson et al. 2013; Sasson et al. 2011). The concern related to being injured by other people while trying to provide intervention, for example either being set up by someone (pretending to be injured or unwell), or being attacked by whoever was assaulting the victim. A perceived higher risk was related to where the emergency occurred, for example in a low-income neighbourhood (Sasson et al. 2015; Sasson et al. 2013; Sasson et al. 2011) or in an area where more bystanders were present (public street, highway, public building) (Clark III & Word 1972; Faul, Aikman & Sasser 2016). Participants in these studies were less willing to provide assistance if they believed they were at risk, and had a tendency to diffuse the responsibility to someone else.

Several studies reported on the socioeconomic location of the emergency (discussed in more detail later) (Chiang et al. 2014; Fosbol et al. 2014; Moncur et al. 2016; York Cornwell & Currit 2016), yet did not report reasons for being more or less likely to provide assistance. Reasons may have been related to the fear of possibly being unsafe, and as a result injured, while trying to provide assistance in a lower income neighbourhood.

*2.4.1.2.4 Concerned about what others think*

Being concerned about what other people would think about them was reported to be a barrier and a facilitator to providing bystander assistance in an emergency. Eight studies reported that this concern negatively influenced participant's decision to provide help (Ashton & Severy 1976; Cacioppo, Petty & Losch 1986; Lu et al. 2016; Sasson et al. 2015;

Sasson et al. 2013; Smith, Smythe & Lien 1972; Staub 1970; Tice & Baumeister 1985). For example, in a study looking at bystander similarity on helping behaviour, it was found that a concern about what people would think of them if they provided assistance reduced helping by 45% (Smith, Smythe & Lien 1972).

Again this concern relates to the main theme of *knowledge and skills to provide assistance*. The bystanders were unsure if what they were seeing was an emergency, whether the person needed intervention, what intervention was required, and whether they would perform it correctly. This was attributed to a deficit in the required knowledge and skills to provide assistance, the bystanders felt concerned that other people around them would judge them on their intervention, which in turn was a barrier to providing assistance.

Conversely, eight studies reported that when a person was concerned about what others would think of them if they provided assistance, helping behaviour was positively influenced (Axelsson, Herlitz & Fridlund 2000; Axelsson et al. 1998; Bickman 1994; Dombrowski et al. 2012; Gottleib & Carver 1980; Rutkowski, Gruder & Romer 1983; Staub 1970; Vaillancourt et al. 2014). For example, in a study aimed at identifying factors that influence bystanders psychological reactions to performing CPR, Axelsson et al. (1998) found that helping increased from 41% to 59% when other people were present. This result was related to social influence and the concern for what others would think of them if they did not provide assistance. Similarly, in an interpretive study which explored factors that influenced bystander response to a CVA, results showed that helping increased when other people were present. Again, this was attributed to being socially influenced to provide assistance because of a concern for what others would think of them if they did not provide assistance.

#### *2.4.1.3 Bystander characteristics*

##### *2.4.1.3.1 Gender*

Gender was reported to be both a barrier and a facilitator to providing first aid in an emergency. Of the sixteen studies that reported on gender, twelve mentioned male gender as being a facilitator to helping in an emergency (Bakke et al. 2015; Coons & Guy 2009; Dwyer 2008; Johnston et al. 2003; Pelinka et al. 2004; Piliavin & Rodin 1969; Sasaki et al. 2015; Sasson et al. 2011; Senneker & Hendrick 1983; Shotland & Heinold 1985; Tomruk et al. 2007; Venema, Groothoff & Bierens 2010). For example, Venema, Groothoff and Bierens (2010) conducted an analysis of rescue reports and deduced 77% of all rescuers were male;

similarly, Pelinka et al. (2004) examined how well bystanders perform trauma care and found that 60% of all bystanders who assisted were male. However, none of the studies explored why males were more willing to provide assistance, or whether it was related to a greater population of males in the areas where the studies were located.

Only four studies reported female gender as being a facilitator to providing bystander assistance in an emergency (Dombrowski et al. 2012; Faul, Aikman & Sasser 2016; Lu et al. 2016; Swor et al. 2006). Faul, Aikman and Sasser (2016) found that females were slightly more likely to provide intervention than males (46.64% vs 40.08%), although reasons for this result were not explored.

*2.4.1.3.2 Age*

Another factor attributed as either a barrier or a facilitator to providing assistance in an emergency was the age of bystanders. As with gender the results were complex. Although not reported as often as some of the other themes age influenced willingness to assist in an emergency in nine studies. Faul, Aikman and Sasser (2016) was the only study to report a higher incidence of older people (60-99 years) (38.96%) followed by younger people (0-19 years) (21.31%) being more willing and likely to provide assistance. Takei et al. (2014) who investigated the factors associated with good-quality bystander CPR found people over 65 years performed CPR effectively 13.5% of the time, but poorly 28% of the time. The lack of research highlighting the complexity of age as a factor for bystanders when deciding whether to intervene in an emergency leaves a gap in the research.

Two additional studies mentioned older age as a facilitator to providing assistance in an emergency. Staub (1970) investigated the influence of age and number of witnesses on helping, and Sasaki et al. (2015) who researched bystander confidence when performing CPR, found that with older age came an increased capacity and confidence (respectively) to help. Conversely, Dwyer (2008) found participants of both older and younger age had lower confidence to provide assistance. It is possible the results from Staub (1970) are no longer relevant as the study was conducted many years previously and society and roles within society may have changed.

In contrast several studies reported younger age as a facilitator to providing bystander assistance in an emergency. Urban et al. (2013) investigated bystanders' knowledge of and

willingness to perform hands-only CPR and found that although older people had more knowledge of CPR and the current guidelines, younger people were more willing to perform CPR. Similarly, Coons and Guy (2009), Larsson, Martensson and Alexanderson (2002) and Swor et al. (2000) all reported younger age as being a facilitator to providing assistance in an emergency. However, none of these studies delved into reasons why age influenced bystander assistance.

*2.4.1.3.3 Ethnicity*

The ethnicity of the bystander was reported by several studies to impact the decision to intervene in an emergency. Piliavin and Rodin (1969) conducted an experiment to investigate the effect of several variables on helping behaviour, and found that of the people who chose to assist the 'victim' 64% were Caucasian. Similarly, Urban et al. (2013) found that Caucasians had more knowledge of first aid interventions. However, neither study reported reasons for the findings, nor reported on the demographics of the population. Undertaking the simulated emergencies in a predominately Caucasian neighbourhood might explain the results. In contrast, Ross, Winter and Mossesso (2000) conducted a study to understand why African American people are less likely to receive bystander CPR (BCPR) and found that 20.4% of Caucasian bystanders (n = 94) reported they lacked confidence in their skills to provide assistance, while only 16% of African Americans (n = 74) lacked confidence. Reasons were not reported.

***2.4.1.4 Level of education***

Seven studies found a correlation between higher level of education and willingness to help in an emergency. Kuramoto et al. (2008) surveyed 1132 people from the general population about their perception and attitude toward CPR and found 62% of people with higher than high school education were willing to help. Similarly, Tomruk et al. (2007) surveyed 318 people to assess the level of first aid knowledge and factors that affected knowledge, they too found a link between higher education and willingness to perform first aid (80.6%). The link between education level and willingness to undertake first aid training was also found by Larsson, Martensson and Alexanderson (2002), Savastano and Vanni (2011), Swor et al. (2006) and Urban et al. (2013), who all indicated that as the level of education increased so did the willingness to intervene in an emergency. Again none of the studies provided reasons for the finding. However, Kuramoto et al. (2008) hypothesised it was related to a belief in

their role as a responsible member of society and their awareness of CPR. Although what people say they might do and what they do in reality can vary considerably.

#### *2.4.1.5 Too busy to help*

Being busy was reported to be a barrier to providing bystander intervention in five studies (Batson et al. 1978; Darley & Batson 1973; Faul, Aikman & Sasser 2016; Ross, Winter & Mossesso 2000; Vaillancourt et al. 2014). When people were in a hurry to get somewhere, especially if someone else was relying on them (i.e. family), they were less likely to stop to provide assistance. Darley and Batson (1973) conducted an experiment with 40 university students to examine the influence of variables on helping behaviour, they found that only 10% of people in a hurry to get somewhere (vs. 63% not in a hurry) stopped to provide assistance to the person pretending to be in need of help. In a study conducted several years following, Batson et al. (1978) further explored time constraints and helping behaviour and found the same results. They explained this by concluding the bystander decides who requires their assistance the most, either the person relying on them (i.e. family) or the victim (Batson et al. 1978). Many of the studies mentioned are many years old thus may no longer be relevant because of societal changes.

### 2.4.2 The emergency

#### *2.4.2.1 Other people present*

The most common theme in the reviewed literature, related to the emergency, was *other people present*, which explained the effect of having other people present at the scene of the emergency (n = 32). The majority of the time, having other people present was reported to be a barrier to providing assistance in an emergency, however, several studies did report this as being a facilitator to bystanders helping.

Having other people present at the scene of an emergency was reported to be a barrier in 28 studies which claimed participants diffused the responsibility of helping to the other people. This phenomenon, known as diffusion of responsibility, was originally researched after the gruesome murder of Kitty Genovese in 1964. In the seminal bystander research Darley and Latane (1968) and Latane and Rodin (1969) found that as the number of people present at the scene of an emergency increases there are more people among whom to diffuse the responsibility of helping, thus reducing the responsibility the individual feels and making them less likely to provide assistance.

Faul, Aikman and Sasser (2016) found that in a busy street or public building, fewer people provided bystander assistance. They hypothesised this was in part related to the likelihood of having an increased number of people present at the scene. Likewise, Schwartz and Clausen (1970) examined whether helping behaviour was influenced when another person's life is endangered, and found that helping dropped from 31% to 13% in the presence of other people. Each of these studies hypothesised their results were related to diffusion of responsibility (Faul, Aikman & Sasser 2016; Schwartz & Clausen 1970). Several studies reported other non-responsive bystanders as attributing to the results (see below).

Six studies found that when other people at the scene of the emergency were non-responsive, helping behaviour was reduced (Bickman 1994; Clark III & Word 1972; Darley, Teger & Lewis 1973; Gaertner, Dovidio & Johnson 1982; Piliavin, Piliavin & Rodin 1975; Ross 1971). Ross (1971) found that people look to others for how to act in an emergency. If the other person was acting as though nothing was wrong, helping behaviour decreases (Ross 1971).

In contrast to the findings presented above, having other people at the scene of an emergency was also reported to be a facilitator (Axelsson et al. 1998; Nishi et al. 2013; Staub 1970; Takei et al. 2014; Vaillancourt et al. 2014; Venema, Groothoff & Bierens 2010). Venema, Groothoff and Bierens (2010) found that more people were likely to perform BCPR on drowning victims when other people were present. Staub (1970) found that helping increased to 61.3% (n = 142) when other people were present, compared with 31.8% (n = 74) when alone. However, this was only documented in the younger participants. Staub (1970) hypothesised this was related to younger subjects feeling less scared with other people present, and older people diffusing the responsibility to others.

#### *2.4.2.2 Location of the emergency*

Location referred to a number of aspects including the associated income of the neighbourhood, whether the emergency occurred in a public or private area, and whether it was in an urban or rural location. Location also referred to whether the emergency was witnessed. The theme *location of the emergency* incorporated both barriers and facilitators for bystanders when deciding whether to provide assistance in an emergency.

The income of the neighbourhood was shown to affect bystander intervention in seven studies (Chiang et al. 2014; Dwyer 2008; Fosbol et al. 2014; Moncur et al. 2016; Sasson et al.

2011; Vaillancourt et al. 2008; York Cornwell & Currit 2016). Each of these studies used census data to determine the income of the neighbourhood and found bystander intervention is increased in higher income areas and decreased in poorer neighbourhoods. Fosbol et al. (2014) and Moncur et al. (2016) undertook studies which utilised data on OHCAs to determine characteristics that affected BCPR rates and both found that rates were reduced in the lower income neighbourhoods. Moncur et al. (2016) found that BCPR rates increased from 14.5% in lower income neighbourhoods to 23.2% in higher income neighbourhoods. Similarly, Sasson et al. (2011) found that in neighbourhoods with a higher income people were more than twice as likely to receive bystander assistance. However, none of the studies explored reasons for the correlation.

The theme *location of the emergency* also referred to whether it occurred in a public place (i.e. on the street), or in a private location (i.e. in the home), which influenced bystander helping behaviour in nine studies. In the majority of the reviewed studies; bystanders were more likely to intervene when the emergency was located in a public place. For example, Sasson et al. (2011) found that bystander intervention increased from 20.8% in a private location to 39.5% in a public area. Similarly, Breckwoldt, Schloesser and Arntz (2009) found that a cardiac arrest which occurred at home was less likely to receive bystander assistance, thus this location was a barrier to receiving BCPR.

Conversely, Faul, Aikman and Sasser (2016), found rates of bystander intervention significantly decreased when the emergency was located in a public area (3.73%) as opposed to a more private area such as home (14.77%). They hypothesised this was related to diffusion of responsibility in a public area. Adielsson et al. (2011) found that of the 7187 OHCAs included in their study, 55% occurred at home, of those all received BCPR. However, the rates associated with OHCAs that occurred in public were not highlighted.

The increased incidence of people helping in private locations may be related to whether the emergency was witnessed. Nine of the reviewed studies reported on the effect of witnessing an emergency on helping behaviour. Each of the studies reported helping increased when the emergency was witnessed. For example, Sasson et al. (2011) found that helping increased from 19.7% (n = 121) when not witnessed to 32.1% (n = 157) when witnessed. Similarly, Piliavin, Piliavin and Broll (1976), explored witnessing as opposed to encountering

an emergency and the effect on helping behaviour and found that when an emergency is witnessed more people are willing and quicker to respond.

This finding links with location of the emergency in relation to whether the emergency occurred in an urban or rural location. Five studies reported on the effect of the emergency occurring in either an urban or rural location (Faul, Aikman & Sasser 2016; Jennings et al. 2006; Straney et al. 2015; Takei et al. 2014; York Cornwell & Currit 2016). Three studies reported bystanders as more likely to provide assistance in urban areas. Takei et al. (2014) undertook a prospective assessment of BCPR at the scene of an emergency and found when an emergency occurred in an urban area incidence of BCPR increased (56.3% urban vs. 39.3% rural). Conversely both Jennings et al. (2006) and York Cornwell and Currit (2016) found that helping behaviour was increased in rural areas.

#### *2.4.2.3 Perception of severity of the emergency*

The perception of severity of the emergency was reported by ten studies to be either a barrier or a facilitator to providing bystander intervention. Five studies incorporated severity of the emergency when exploring bystander assistance and found people were less likely to provide assistance if they perceived the emergency as severe (Ashour et al. 2007; Axelsson, Herlitz & Fridlund 2000; Bakke et al. 2015; Dami et al. 2010; Thierbach et al. 2004). In a study to explore bystander trauma care for moderately versus severely injured victims, Thierbach et al. (2004) found that bystander intervention was attempted less often (n = 833 moderately injured vs. n = 463 severely injured), and was more often incorrect when the emergency was severe. Similarly, Bakke et al. (2015) reported fewer people attempted first aid when the intervention was for a severe emergency, for example 139 people secured the scene, and 141 people provided hypothermia prevention, compared with 7 people attempting BCPR, and 35 providing airway support. However, it is unclear whether the low numbers in these studies were related to the various types of emergency (i.e. less severe emergencies, thus lower numbers intervened), or peoples' unwillingness to provide assistance in an emergency perceived as severe.

Five studies found that bystanders were more likely to intervene if the emergency was perceived as severe (Clark III & Word 1972; Dietze, Cantwell & Burgess 2002; Faul, Aikman & Sasser 2016; Gaertner & Dovidio 1977; West & Brown 1975). West and Brown (1975) undertook an experiment to find out how severity of the emergency affected helping

behaviour. They found that when people perceived the emergency to be severe they were more likely to intervene. However, this result only occurred when the perceived cost of helping was low (West & Brown 1975). Cost of helping refers to weighing up the benefit of helping the victim with the cost (i.e. time taken to help, risk to personal safety). Faul, Aikman and Sasser (2016) also came to the same conclusion; if the risk of death for the victim was greater bystanders were more likely to offer intervention. However, none of the studies delved in to reasons for their findings.

#### *2.4.2.4 Type of intervention required*

The sub-theme of *type of intervention required* relates to the perception of severity of the emergency. Many studies mentioned, either directly or indirectly, type of intervention as being either a barrier or facilitator to providing assistance in an emergency. Seventeen studies reported bystanders as being more likely to provide non-medical assistance. Senneker and Hendrick (1983) found that if direct help was required, for example applying pressure to an open wound, less bystander assistance was offered. Conversely, bystanders were more likely to offer indirect assistance, such as calling for help. Bobrow et al. (2010), Taniguchi et al. (2012) and Cho et al. (2010) (detailed earlier) found that people were less willing to perform BCPR if they were required to do mouth-to-mouth, however willingness increased with hands-only CPR. Similarly, in the study detailed above Thierbach et al. (2004) found that non-medical intervention was offered more and was more often done correctly.

Three of the reviewed studies contradicted these results. A study undertaken by Latane and Rodin (1969) on the effects of friends and strangers on helping, found that of the 120 participants involved in the experiment 75% offered direct help, while the remaining subjects called out for help. Similarly Schwartz and Clausen (1970) found that 82% of people were more likely to offer medical or direct assistance. Despite the contradiction, each of these studies highlight that bystanders are influenced by their perception of the type of intervention that was required.

#### *2.4.2.5 Ambiguity*

The ambiguity of the emergency was a theme in nine of the reviewed articles, and was always reported to be a barrier to providing assistance. Clark III and Word (1972) investigated the effects of ambiguity on helping behaviour and found that helping decreased by 70% when the situation was ambiguous. Similarly, Clark III and Word (1974) found that

100% of subjects helped in non-ambiguous, yet only 50-59% in moderately ambiguous, and 38% highly ambiguous situations. Subjects were unsure whether the situation was an emergency, thus did not provide assistance. However the majority of studies did not explore reasons for the results.

The ambiguity of the emergency is linked to perception of severity and bystander knowledge because when an emergency is ambiguous it may be difficult to determine the seriousness or severity of the emergency without medical knowledge. It may also be related to the bystander not noticing the emergency event or not interpreting the ambiguous event as an emergency. Whatever the reason, if the event was ambiguous bystander assistance was negatively influenced.

### 2.4.3 The victim

Many of the reviewed studies reported who the victim was (i.e. family member, or a stranger) as being a barrier or facilitator to providing bystander intervention in an emergency. Thirteen studies found that if the victim was a family member or close friend, helping was facilitated. For example, Johnston et al. (2003), found that bystander intervention increased from 1.5% for a stranger to 9.2% when the victim was a family member. Lu et al. (2016) conducted a study to assess the attitudes regarding performing, learning, and disseminating BCPR and found that willingness to provide BCPR increased from 14.9% for strangers to 86% for a family member. Similarly, Taniguchi et al. (2012) found that 16-28% of lay people were willing to perform BCPR on a stranger compared with 42-60% for a relative. Reasons for being less likely to help a stranger included fear of incomplete performance or poor knowledge (56-67%), fear of hurting the victim (8-14%), fear of disease transmission (7-23%), others and unknown (8-15%). While Coons and Guy (2009) reported fear of legal consequences as the main reasons for being less willing to help a stranger.

In contrast, six studies cited the victim being a family member or close friend as a barrier to providing assistance. In a study comparing CPR rates of strangers versus known bystanders, Casper et al. (2003) found that 45.8% of strangers received assistance as opposed to only 15.5% of family members. Fujie et al. (2014) had similar results in their study comparing among other factors the influence of being either a family or non-family member on bystander helping. They found that 61.4% of strangers received bystander assistance, compared with only 34.2% of victims who were family members. The results of the reviewed

studies indicated bystander assistance is influenced by who the victim of the emergency was.

#### *2.4.3.1 Victim characteristics*

##### *2.4.3.1.1 Gender*

Several of the reviewed studies reported the victim's gender to be influential to bystander assistance in an emergency. Three studies reported more male than female victims receive bystander first aid. Sasson et al. (2011) investigated the characteristics that influenced BCPR provision, and found 28.4% of male (n = 182) and 20.8% (n = 97) of female victims ($p$ = 0.011) received BCPR, however results were not statistically significant. Similarly, Faul, Aikman and Sasser (2016) also reported male victims received more help than female victims (CI = 1.12-1.3) except, when help involved calling emergency services. In that circumstance, a higher number of calls to emergency services were made for female victims (46.64% vs. 40.08%). Reasons for these finding were not explored in the studies.

Only two studies related to gender of the victim suggested female victims were helped more often than males. Piliavin, Piliavin and Broll (1976) found that female victims were helped more often and faster than male victims. Similarly, Dietze, Cantwell and Burgess (2002) found that 12.1% of female and only 8.6% of male victims were assisted. None of the studies that reported on gender as an influential factor for bystander assistance explored reasons for the result.

Three studies reported larger numbers of male victims being helped, 45% male vs. 35% female (Venema, Groothoff & Bierens 2010) and 65% male and 35% female (Pelinka et al. 2004), 89% male vs. 19% female (Adielsson et al. 2011) however, none of the studies differentiated between how many males and females received bystander intervention. Thus, it may be the case that there were a greater number of male victims making it appear as though males received bystander intervention more often.

##### *2.4.3.1.2 Age*

Another characteristic that impacted bystander intervention was the age of the victim. However, the results were mixed. Some people were more likely to provide assistance to a younger person (Cho et al. 2010; Dami et al. 2010; Fosbol et al. 2014; Johnston et al. 2003; Lu et al. 2016; Taniguchi et al. 2012) and others to an older person (Faul, Aikman & Sasser

2016; Johnston et al. 2003; Savastano & Vanni 2011). Cho et al. (2010) found that apart from family members children were the most likely to receive BCPR (28.2%, n = 251), while elderly were the least likely to receive assistance (16.1%, n = 143). Although reasons for not performing BCPR were explored they were not directed toward the type of victim specifically. For example, fear of liability was the number one barrier to performing BCPR but whether the fear was the same for younger and older victims was not explored (Cho et al. 2010). Conversely, Faul, Aikman and Sasser (2016) found that the older age group (60-99 years) were the most likely to receive bystander intervention, while the youngest age group (0-19 years), were the least likely. Once again reasons for the results were not drawn out. Despite the dichotomy of results what these studies do show is the age of a victim can influence bystanders' willingness to intervene in an emergency.

*2.4.3.1.3 Ethnicity*

The ethnicity of the victim was reported to influence bystanders' decision to intervene in an emergency in eleven studies. All reported an increased likelihood of receiving bystander assistance when the victim was white. Moon et al. (2014) conducted a study to examine the differences in BCPR provision and found that 43.8% (n = 612) of white and 28.6% (n = 61) Hispanic OHCA victims received BCPR. This result was despite the study being conducted in a Hispanic neighbourhood where it can be presumed the population of Hispanics was greater. Similar results were reported in other studies, 36.4% of white victims and 21.7% of black victims ($p$ <0.001) (Sasson et al. 2011); and 58.6% (n = 219) of white and 24.3% (n = 91) of black victims ($p$ <0.001) (Fosbol et al. 2014) received BCPR. None of the studies explored reasons for these results, however they did indicate ethnicity is an influential factor for bystanders when making the decision about whether to provide assistance. Sasson et al. (2011) provided no results or discussion linking the demographics of the population with the result that white victims were helped more often by bystanders. Thus, it was difficult to determine whether the results were related to a greater population of white people within the neighbourhoods. Fosbol et al. (2014) however, claimed that lower rates of BCPR

occurred in neighbourhoods with a greater number of black residents; yet despite this, black victims received bystander assistance less often.

*2.4.3.1.4 Physical appearance*

The physical appearance of the victim at times reported to influence bystander assistance. Seven of the nine studies in this theme found that if the victim had an injury that affected their physical appearance (i.e. they were covered in blood) the willingness of bystanders to provide assistance reduced. For example, 18-23% of bystanders were willing to provide BCPR (mouth-to-mouth) to trauma victims with blood on their face, whereas, 39-42% of bystanders were willing to provide hands-only CPR (Taniguchi et al. 2012). Similarly, Vaillancourt et al. (2014) reported participants were less willing to perform bystander intervention as they found it 'distasteful'. Although slightly different West and Brown (1975), Lu et al. (2016) and Piliavin, Piliavin and Rodin (1975) found that when the victim was physically attractive and dressed well, they were more likely to receive assistance.

*2.4.3.1.5 Behaviour*

Two studies in the review found that the behaviour of the victim influenced their willingness to provide bystander assistance (Faul, Aikman & Sasser 2016; Piliavin & Rodin 1969). Piliavin and Rodin (1969) found that of the thirty-eight victims that appeared to be intoxicated, only nineteen were offered assistance, despite having collapsed (simulated) in a busy New York City subway. Again neither study drew correlations between the victims' behaviour and bystander helping.

## 2.5 Barriers to providing bystander assistance

Many barriers to providing bystander assistance were identified in the reviewed literature and presented in this preliminary literature review (see Table 3). Many of the subjects had not provided first aid assistance because of perceived barriers. Further, the aim and empirical design of the majority of reviewed studies did not allow for exploration of these barriers.

**Table 3: Perceived barriers of bystander assistance in an emergency**

| Perceived barriers | Number of studies |
|---|---|
| Lack of confidence | 30 |
| Other people present at the emergency | 28 |
| Insufficient knowledge and skills to provide first aid / Insufficient knowledge of importance of first aid | 22 |
| Fear of performing the intervention incorrectly, causing further harm to the victim | 18 |
| Type of intervention required –Medical / direct | 17 |
| Fear of infectious disease | 16 |
| Bystander characteristics - Female gender | 12 |
| The victim - Ethnicity – Non-Caucasian | 11 |
| The victim – Stranger | 11 |
| Ambiguity of the emergency | 9 |
| Fear of litigation | 9 |
| Emergency not witnessed | 9 |
| Location of the emergency - Private | 6 |
| Unsure of when to assist | 8 |
| Concerned about what others think | 8 |
| Bystander characteristics - Lower level of education | 7 |
| Location of the emergency - Low income area | 7 |
| The victim - Physical appearance - injury affecting physical appearance i.e. blood, broken bones etc. | 7 |
| Lack of confidence of physical ability to provide assistance | 6 |
| The victim – Family member / close friend | 6 |
| The victim - Older age | 6 |
| Non-responsive bystanders at the scene of the emergency | 6 |
| Possibility of being robbed or injured | 5 |
| Too busy to help | 5 |
| Perception of severity of the emergency - Severe | 5 |
| Bystander characteristics - Older age | 5 |
| Bystander characteristics - Male gender | 4 |
| Lack of knowledge of changing first aid guidelines | 3 |
| Bystander characteristics - Younger age | 3 |
| Type of intervention required – Non-medical / indirect | 3 |
| The victim - Female gender | 3 |
| Location of the emergency – Rural | 3 |
| Location – Urban | 2 |
| The victim - Male gender | 2 |
| The victim - Behaviour i.e. acting as though intoxicated | 2 |
| The victim - Younger age | 2 |
| Location of the emergency - Public | 1 |
| Bystander characteristics - Ethnicity – Caucasian | 1 |

## 2.6 Facilitators to providing bystander assistance

Knowledge and skills to provide assistance was the most commonly reported facilitators to providing bystander assistance (see Table 4). Many studies reported this theme and highlighted the correlation between first aid training and having the confidence, knowledge and skills to provide bystander assistance in an emergency. The type of intervention required was also reported to be influential to the decision of whether to provide bystander assistance in an emergency. Similar to the barriers, the majority of studies did not explore in-depth reasons why the reported facilitators influenced bystander assistance.

**Table 4: Perceived facilitators of bystander assistance in an emergency**

| Perceived facilitators | Number of studies |
|---|---|
| Type of intervention required – Non-medical / indirect | 17 |
| The victim - Family member / Close friend | 14 |
| Bystander characteristics - Male gender | 12 |
| The victim - Ethnicity – Caucasian | 11 |
| Sufficient knowledge and skills to provide first aid | 11 |
| Location of the emergency – Witnessed the emergency | 9 |
| Location of the emergency - Public | 9 |
| The victim – Stranger | 9 |
| First aid training – Increased confidence to provide assistance | 9 |
| Concerned about what others think | 8 |
| Bystander characteristics - Higher level of education | 7 |
| Social influence | 7 |
| Location of the emergency – High income area | 7 |
| Previous experience – Have provided assistance or someone they knew helped | 6 |
| Other people present at the emergency | 6 |
| Bystander characteristics - Younger age | 5 |
| The victim - Younger age | 5 |
| Perception of severity of the emergency - Severe | 5 |
| Bystander characteristics - Female gender | 4 |
| Type of intervention required – Medical | 3 |
| Bystander characteristics - Older age | 3 |
| Location of the emergency – Urban | 3 |
| The victim - Older age | 3 |
| The victim - Physical appearance – Attractive | 3 |
| Bystander characteristics - Ethnicity – Caucasian | 2 |
| The victim - Female gender | 2 |
| The victim - Male gender | 2 |

## 2.7 Discussion

Many studies have explored bystander assistance in emergencies and highlight the complex nature of bystander behaviour. The researchers all agree that rates of bystander first aid are too low, that bystanders can positively influence survival statistics, and that more needs to be done to encourage bystanders to provide assistance. The reviewed studies identified many barriers and facilitators for bystanders when deciding whether to provide assistance in an emergency. Yet barriers for some people were viewed as facilitators for others and vice versa.

Although many barriers and facilitators were identified, few studies examined reasons for these results. Further investigation into the barriers and facilitators for bystanders' assistance in an emergency is warranted as the reasons for the findings were poorly understood. Utilising a grounded theory method approach will enable the complexity of bystander assistance in an emergency to be further understood. This further understanding of bystander decision-making, including the barriers and facilitators to providing assistance in an emergency will help to inform implications and recommendations for policy development, future education, research and practice.

The preliminary literature review elucidated a gap regarding bystander assistance in emergencies. The majority of studies have explored bystander assistance in an emergency from the perspective of people who have not had this experience. Thus the most significant gap is the perspective of people who have been faced with an emergency. In-depth interviews with people who have witnessed or encountered an emergency, whether they decided to stay at the scene and provide assistance or leave without helping, would help to bridge the gap in understanding how their decisions are made. Further research is required to enhance understanding of the cues and factors which influence this decision from the bystanders' perspective.

## 2.8 Chapter summary

Chapter two presented a preliminary literature review of the broad area of bystander assistance in an emergency. This review explicated the barriers and facilitators to bystander assistance in an emergency and highlighted current gaps in knowledge, thus provided direction to the current study. The secondary literature review is woven through the findings

chapters (chapters six to ten), in order to situate the study within the body of literature. Chapter three presents the methodology employed for the study.

# CHAPTER THREE: METHODOLOGY

## 3.0 Introduction

Chapter two presented and examined the literature surrounding bystander assistance in emergencies. The related literature highlighted inconsistencies in identified barriers and facilitators for bystanders when deciding whether to provide assistance in an emergency. This chapter explores the methodology employed in the study, including the theoretical perspectives which underpinned the methods used. The evolution of grounded theory method (GTM) is presented followed by a discussion of the epistemological position of social constructionism and the theoretical perspective of symbolic interactionism. The philosophical underpinning is explored demonstrating why a constructivist perspective of GTM was adopted for the study. A key source consulted in developing the approach for this study was Giles, de Lacey & Muir-Cochrane's (2016b) research on the factors and perceptions which affected decision-making around family presence during resuscitation in an acute care setting.

## 3.1 Epistemological position

Discussing my epistemological position enables my view of the world to become apparent. My perspective of the world in turn influenced the GTM approach I utilised. Epistemology is the study of knowledge in the pursuit of knowledge and truth (Francis, Chapman & Whitehead 2016). My epistemological position provided the focus of this study and highlighted the relationship between the researcher and the research area (Francis, Chapman & Whitehead 2016). Each step in the research process included assumptions about realities that influenced how I planned and conducted the research, including data collection and analysis (Crotty 1998).

Social constructivism and social constructionism are epistemologies that embody many theoretical perspectives and are often used in interpretive research (Crotty 1998). The terms are often used interchangeably but have subtle differences (Crotty 1998). Social constructivism focuses on the role of cognitive processes while individuals construct their experiences of reality (Andrews 2012; Crotty 1998). Social constructionism is the construction of knowledge and reality based on interactions between people and their social

worlds (Crotty 1998). In other words, constructivism focuses more so on the individual person as opposed to social constructionism which is focused on collective meaning (Andrews 2012; Crotty 1998).

A constructivist approach highlights the relationship between the participant and the researcher, acknowledging that meaning is co-constructed (Charmaz 2014; Mills, Bonner & Francis 2006b). Knowledge of the phenomenon is gained by the participant telling the story of the experience while the researcher is the subjective insider. The relationship and interaction between the participant and the researcher is inherently important so the discovered reality can come from the data as they work as co-constructors (Charmaz 2014; Mills, Bonner & Francis 2006b).

## 3.2 Theoretical perspective

A theoretical perspective is the theoretical standpoint which informs the methodology (Crotty 1998). It is a way of looking at the world including 'how we know what we know' (Crotty 1998, p. 8). The theoretical perspective that informs this study is symbolic interactionism, which is used to understand and explain human society, specifically individual and group meaning-making, focusing on human action (Crotty 1998). Social constructionism and constructivism are epistemological stances that guide the relationship between the inquirer and the known, and are ways of making sense of the world and society (Crotty 1998; Francis, Chapman & Whitehead 2016).

### 3.2.1 Symbolic Interactionism

Symbolic interactionism is the perspective that '…society, reality, and self are constructed through interaction…' which influences changes in perspectives and beliefs (Charmaz 2014, p. 9). Symbolic interactionism was founded in the 1930's by philosopher George Herbert Mead, who regarded society as an exchange of symbols or gestures (Mead 1934). Meanings arise from social interactions between people, which are expressed through symbols, gestures or language (Annells 1996, p. 381). Interpretations of events can be altered by the actions of one's self and of others (Charmaz 2014).

In the 1960's, social constructionist Herbert Blumer undertook research which brought symbolic interactionism to the forefront of theoretical perspectives for many researchers (Charmaz 2014). Blumer's (1969) emphasis was on the construction of meaning, he believed

that meanings are constructed from social interactions with others which in turn influence the way people act. Blumer (1969, p. 2) asserted three basic assumptions of symbolic interactionism:

- The meaning people ascribe to something will determine the way they act toward it.
- Meanings are constructed from social interactions with others.
- These meanings are altered through interactions with self and others (interpretive process), the meanings then influence future interactions.

Symbolic interactionists believe meanings are a social construct of interactions between people (Blumer 1969). The meanings inform understanding of social reality, including interactions and actions (Blumer 1969). Symbolic interactionism and GTM emphasise the significance of understanding meaning, what people know about their world, what they place importance on and how they act in specific contexts (Benzies & Allen 2001). The aim of this study was to explore the experiences of bystanders upon witnessing or encountering an emergency, to understand the complex process of decision-making and the cues and factors that influence the process. Thus, symbolic interactionism was considered an appropriate theoretical perspective to underpin the study, because the emphasis of symbolic interactionism and GTM is to understand the process of human action and behaviour (Blumer 1969; Bryant & Charmaz 2007; Charmaz 2014; Crotty 1998).

## 3.3 Grounded theory method

A paradigm is an overarching way of viewing and understanding the world, a set of beliefs including the researcher's epistemological and ontological assumptions and methodological principles and practices that guide the research (Schneider 2016). Understanding my beliefs and perspectives of the world provides transparency and context for the choice of research paradigm, methodology and methods for the study (Annells 1997; Crotty 1998).

Grounded theory method (GTM) is a systematic, yet flexible set of strategies used to conduct research with the aim of generating a theory which explains social processes, behaviour and the meanings people give to their experiences in a particular context (Charmaz 1996, 2006; Glaser & Strauss 1967). GTM is an abductive process which allows for generation of theory from evolving data rather than deduction of hypotheses from existing theory (Charmaz 2014). It is useful when little is known about the phenomenon under investigation (Melnyk &

Fineout-Overholt 2011; Strauss & Corbin 1998), or when a lot is known but what is known lacks depth or quality (Melnyk & Fineout-Overholt 2011). GTM enables the researcher to move beyond description to the generation of a grounded theory that explains a phenomenon, grounded in participants' perspectives (Birks & Mills 2011).

GTM allows for in-depth investigation of a phenomena based on the ability to engage in dialogue with participants to elicit descriptive accounts of their experiences (Charmaz 2014; Francis, Chapman & Whitehead 2016; Polit & Beck 2008). It enables the development of an explanatory theoretical framework (Charmaz 2006, 2014). The aim of this research was to explore the cues and factors that influenced bystander decision-making in an emergency. The use of GTM allowed me to explore the meanings people ascribed to their experiences of being a bystander in an emergency. The complex process of bystander decision-making was explored allowing for discovery of cues and factors that influenced the cyclical series of assessments and decisions, leading to the ultimate decision of whether to provide assistance. The use of a positivist approach would not have allowed these concepts to be explored in detail as the deductive nature aims to test theory rather than to generate it (Charmaz 2014).

Core tenets of GTM, that distinguish it from other methods, include the simultaneous collection and analysis of data, allowing data to become increasingly theoretical (Glaser & Strauss 1967; Strauss & Corbin 1998), analysis and development of codes generated from the data, constant comparison of data, writing of analytic memos to aid in conceptual analysis and to highlight where more data collection must occur in order to explicate and fill out categories, theoretical sampling to refine emerging theoretical ideas for theory construction and theoretical saturation of categories (Charmaz 1996). To 'fill out' is a GTM term meaning to ensure the properties of categories have been thoroughly explored (Glaser & Strauss 1967).

GTM was developed by sociologists Barney Glaser and Anselm Strauss in 1967, when they studied dying in the hospital setting (Birks & Mills 2011; Charmaz 2006; Glaser & Strauss 1967; Wuest 2007). During this time many researchers believed that qualitative or interpretive research was flawed, thus it was often ignored or discredited (Charmaz 2014). Glaser and Strauss (1967) developed a set of methodological strategies that could be utilised by researchers to generate theory from data. GTM was developed during a time where

research was predominantly positivist, sparking dispute among researchers about the value (Charmaz 2014). Empirical research generated hypotheses from existing theories, however new theories were seldom generated (Charmaz 2014).

According to Orlikowski and Baroudi (1990) interpretive researchers attempt to explore a phenomena in its natural setting by understanding the meanings people ascribe to their experiences. Interest in interpretive research intensified with Glaser and Strauss' (1967) book *The Discovery of Grounded Theory*, which highlighted the use of qualitative methods that were rigorous and systematic and which could lead to theory generation. They challenged the use of the predominately positivist methods which dominated social research. Positivist research takes the stance that there is neutrality and objectivism within research which is based on evidence (Glaser & Strauss 1967). The popularity of GTM did not become apparent until the late 1980's, well after Glaser and Strauss parted ways and continued to research independently (Bryant & Charmaz 2007; Charmaz 2014). The discontinuation of collaboration between Glaser and Strauss was related to differences in perspectives and methods which led Strauss (1987) to write the book *Qualitative Analysis for Social Scientists*.

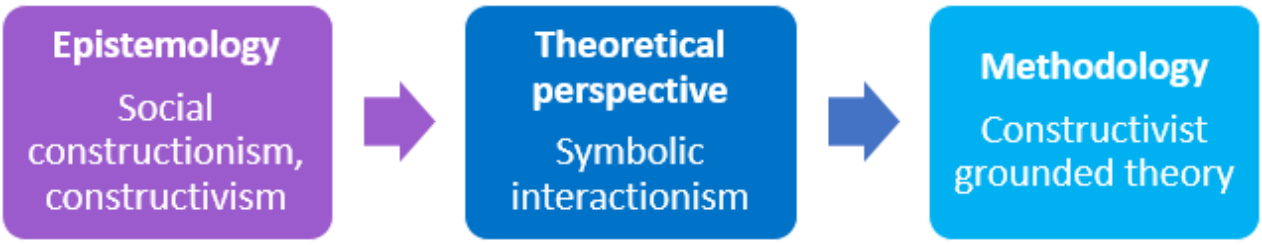
Two versions of grounded theory emerged from the cessation of the partnership, Classical or Traditional grounded theory method (Glaser & Strauss 1967) and Straussarian grounded theory method (Strauss & Corbin 1990). The main differences were Glaser maintaining his positivist approach whereby he believed the research was neutral (Glaser 1998, 2001) and Strauss believing in symbolic interactionism and exploring human action and meaning (Strauss & Corbin 1990, 1998). Collaboration ensued between Strauss and Juliet Corbin in the 1990's (Bryant & Charmaz 2007). The approach was coined Straussarian GTM (Berterö 2012) and took the focus off comparative methods and theoretical categories and focused instead on the technical procedures (Charmaz 2014). Glaser disagreed with how Strauss and Corbin approached GTM, suggesting their approach enabled researchers' preconceived ideas to *force* the data into predetermined categories, and rather than generating theory they provided conceptual description (Charmaz 2006, 2014).

According to experts the major weakness of classical GTM was the positivist leanings Glaser and Strauss imposed on it (Bryant & Charmaz 2007). Glaser had strong roots in positivist research which is why despite GTM being used to gather and analyse qualitative data, and to

develop theory, it maintained a positivist slant (Charmaz 2014). Bryant (2009) suggested that GTM had limited credibility until several experts moved GTM away from its positivist origins toward contemporary thinking, thus addressing theoretical shortcomings. For example, Charmaz and Strauss brought a more pragmatic, philosophical view to GTM by believing that people could not truly be understood by using positivist methodologies alone (Charmaz 1980; Strauss & Corbin 1998). Thus, interpretive methods were needed to ensure these experiences were able to be described and understood (Strauss & Corbin 1998). Clarke (2003) emphasised the theoretical perspective of symbolic interactionism and pragmatism, which were similar to the concepts put forward by Strauss and Corbin (1998) and Charmaz (1980).

Despite these changes, aspects of GTM remained the same, such as the strong foundation whereby the processes and procedures of the research remain transparent (Bryant & Charmaz 2007). This enables research to be easily understood and replicated, thus increasing rigour (Bryant & Charmaz 2007). Another strength of GTM that remains central is that researchers are constantly interacting with the data during the collection and analysis phases, which are simultaneous ensuring data are more focused and analysis theoretical (Bryant & Charmaz 2007).

GTM is widely used to investigate social processes and generate theory to explain them (Charmaz 2014; Glaser & Strauss 1967; Strauss & Corbin 1998). The purpose of the current study was to generate a substantive grounded theory of bystander decision-making in an emergency, and the aim to explore the cues and factors that influence this decision. With this in mind GTM was considered an appropriate methodology to explore bystander behaviour, actions and interactions, and to generate theory related to these behaviours.




Adapted from Crotty (1998, p. 4)

**Figure 1: Theoretical framework of this study**

## 3.4 Constructivist grounded theory method

Since the beginning of the twenty-first century, researchers guided GTM away from positivism and the approaches of Glaser and Strauss (1967), and back to the interpretivist paradigm (Charmaz 2006). Constructivist GTM aims to understand why or how participants constructed their meanings and actions from their experiences (Charmaz 1990, 2006). Constructivist GTM utilises some of the classical grounded theory methods, such as comparison, induction, open-endedness and emergence while taking a contemporary approach and highlighting the *construction* between both the experiences and perspectives of the participants and the researcher (Charmaz 2014). Charmaz (2006, p. 10) argues that grounded theories are constructed as 'an *interpretive* portrayal of the studied world, not an exact picture of it'. Researchers are active participants in the interpretation and construction of the theory and bring with them their beliefs, experiences and perceptions (Charmaz 2014; Locke 1996).

Constructivist GTM moved away from the position that the researcher's background, perceptions and positions do not influence the data in any way, to the position of acknowledging and examining these perspectives and preconceptions (Charmaz 2008b, 2014). In the past there was a belief that prior knowledge directed the data, thus falsifying it. Conversely, the constructivist approach embraces this prior knowledge and recognises its benefits when producing meaning or questions (Charmaz 2014). The aim of constructivist GTM is to provide a framework and guidelines to conduct rigorous research into an area, with intent to generate theory and inform policy and practice (Charmaz 2014).

Constructivist grounded theorists use a series of strategies or steps when researching (Charmaz 2006, 2014) including:

- Conduct data collection and analysis simultaneously in an iterative process
- Analyse actions and processes rather than themes and structure
- Use comparative methods
- Draw on data (e.g. narratives and descriptions) in service of developing new conceptual categories
- Develop abductive abstract analytic categories through systematic data analysis

- Emphasise theory construction rather that description or application of current theories
- Engage in theoretical sampling
- Search for variation in the studied categories or process
- Pursue developing a category rather that covering a specific empirical topic

The steps are flexible offering guidelines for undertaking a study, rather than prescriptive, rigid directions (Charmaz 2006). They are designed to provide a 'path' through grounded theory that can be altered to fit the study (Charmaz 2014). Charmaz's approach incorporates Glaser's (1967) methodological strategies and Strauss's (1998) symbolic interactionist perspective, while integrating social constructionism (Charmaz 2006).

### 3.4.1 Justification of use of constructivist grounded theory

Constructivist GTM was chosen for this study to enable me to generate a grounded theory of bystander decision-making in an emergency. The grounded theory helped to explain the behaviours and actions of bystanders as they undertook the series of assessments and decisions that inform decision-making in an emergency. I was able to understand the processes people used to construct meaning from their experiences (Charmaz 2006, 2014) by asking questions and confirming implicit and explicit meanings. I used the stories to explicate bystander decision-making from the perspectives of people who had actually been bystanders in at least one emergency situation. Through data collection and analysis a substantive grounded theory and conceptual model were generated.

Constructivist GTM is useful when there is a lot of knowledge about a subject, however the knowledge lacks the depth to fully understand the phenomenon (Melnyk & Fineout-Overholt 2011). As has been discussed in the preliminary literature review there is a large amount of literature on bystander experiences in emergencies, however the majority used empirical methods, thus not allowing for the depth of understanding about the experiences of bystanders and how they ascribe meaning and actions to these experiences. Constructivist GTM enabled me to investigate participant's experiences in-depth, by using interviews to understand and explain bystander decision-making in an emergency.

## 3.5 Chapter summary

Chapter three presented a discussion of GTM and highlighted the epistemological position, theoretical perspective, and methodology used within this study. Constructivist grounded theory method was chosen for this study, underpinned by social constructionism and symbolic interactionism. Chapter four details the methods used to conduct the study, including the recruitment of participants, ethical considerations, data collection and analysis and finally the development of rigour.

# CHAPTER FOUR: METHODS

## 4.0 Introduction

The previous chapter examined constructivist grounded theory as a methodology and why it was utilised for the study. The theoretical underpinnings of social constructionism and symbolic interactionism were detailed. Grounded theory method (GTM) is a methodology/methods package encompassing the process from the collection of data to the generation of theory (Charmaz 2014; Glaser 1998). Chapter four presents the constructivist GTM used to undertake the research to generate a substantive grounded theory. Presenting a clear picture of how the research was conducted provides an audit trail which increases the rigour of the study (Munhall 2007). Figure 2 (see page 47) depicts the research process and methods used during each stage of the research.

## 4.1 Research method

Constructivist GTM methods are not linear, rather it is an iterative process of going back and forth to focus the data with abstract conceptualisations (Charmaz 2014). It is a process used to view the world from the participants point of view, to understand their experiences (Charmaz 2014), '…to enter the studied phenomenon and view it from the inside [this]…shrinks the distance between the viewer and the viewed' (Charmaz 2008b, p. 133).

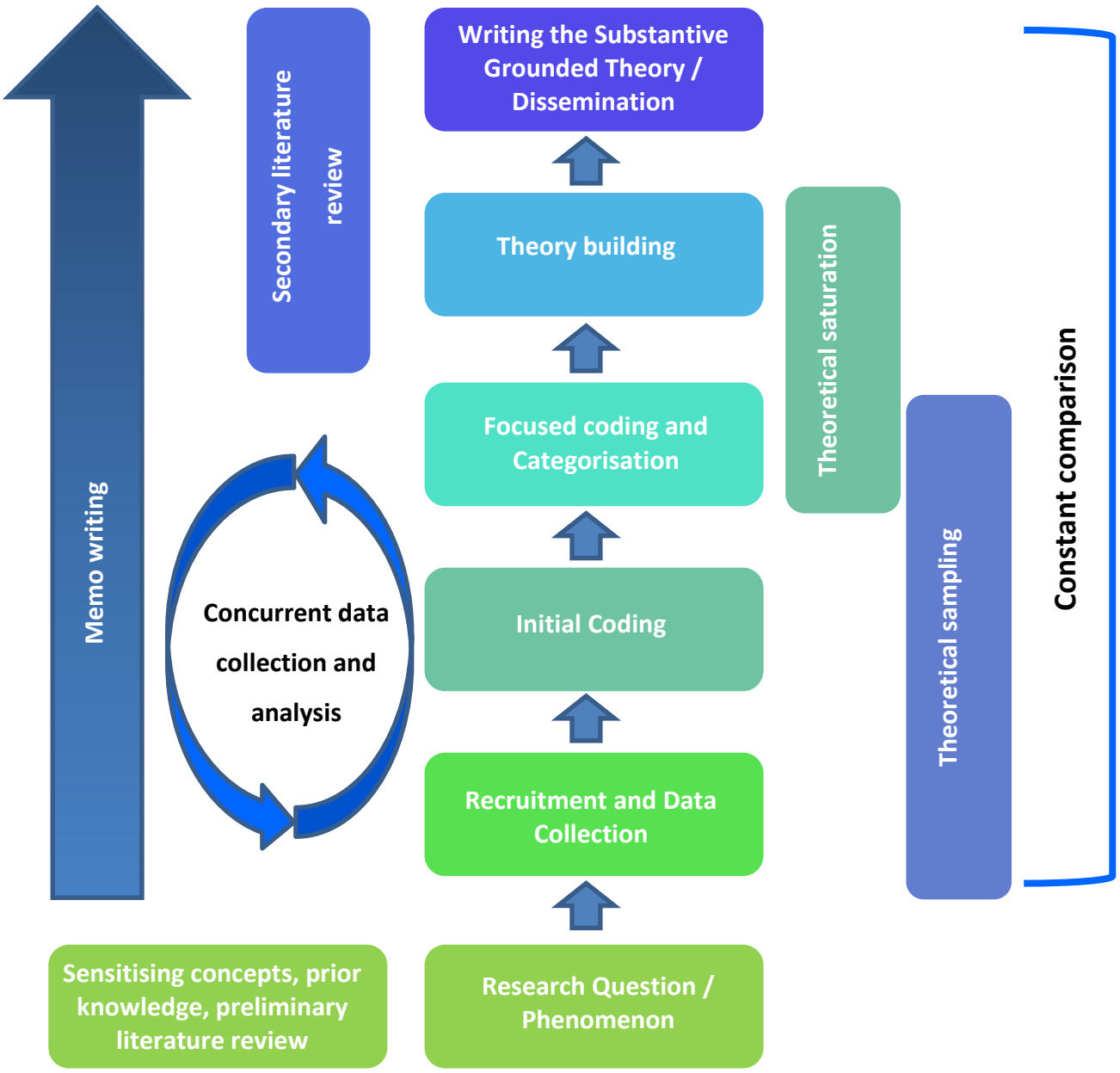



**Figure 2: Visual representation of constructivist grounded theory method used for this study**

### 4.1.1 Recruitment of participants

Purposive and theoretical sampling were used in this study as per recommendations from Charmaz (2014) and Strauss and Corbin (1998). The aim of the study was to explore and understand bystander decision-making in an emergency, and to understand the cues and factors that influenced this decision. Charmaz (2006) and Morse (2007) suggest purposive

sampling to locate a sample of the population with a common experience, in order to address the aims of the research. In line with recommendations I used purposive sampling to recruit people who had witnessed or encountered an emergency so as to understand the experience of being faced with the decision of whether to provide assistance. Ethics approval was granted prior to collection of data (discussed in *ethical considerations*, page 52).

Gaining access to participants who had witnessed or encountered an emergency was difficult. Multiple, simultaneous recruitment methods were used to enable me to locate participants.

- Posters (see Appendix 5) that included brief information about the study, the selection criteria and my phone number and email address were placed around Adelaide including at one University, three public hospitals, two Technical and Further Education (TAFE) institutes and five shopping centres (see Appendix 5).
- Advertisements that included brief information about the study, the selection criteria and my phone number and email address were placed in the Rotary Club of Australia and Lions Clubs of Australia news bulletins (see Appendix 6). I was then invited to present at various clubs within South Australia (presentations included an outline of the study and the need for participants).
- The same advertisement was placed on the affiliated University's Facebook and Twitter sites (see Appendix 7).
- The affiliated University's media and marketing group was approached for assistance in outreach for the research project. A press release was written in 'In Daily', a local online independent news report (see Appendix 8). Following the press release, I was approached by a local television news company and interviewed. Details of the project, and my contact details, were provided during the interview. I was then approached by two radio stations and interviewed about the project and contact details were provided.
- An article briefly detailing the project and contact details was written and published in the affiliated University's research journal (see Appendix 9).

Each method invited people to contact me as the principal researcher to express interest in the project, or to receive further information. An information pack containing an introductory letter (see Appendix 10), information sheet (see Appendix 11) and consent form (see Appendix 12), were emailed to the person. If the person was interested they contacted me to organise a time to be interviewed. If I had not heard from them within one week a follow-up email was sent. Each of these people replied via email, including people who chose not to participate or were not eligible to participate.

If the person chose to participate in the study, and met the selection criteria (see Table 5), a meeting time and location convenient to both the participant and myself was decided upon. Interviews were undertaken either face-to-face, via Skype or telephone. Face-to-face interviews were conducted in a private room at the affiliated University, or at another mutually agreed upon destination, for example a library or council meeting room. Skype and telephone interviews were undertaken only if the participant was unable to meet with me in person. These interviews were conducted in a private location (i.e. a private room) to ensure confidentiality. I was able to build trust and rapport with participants when interviewing in person and over the phone or via Skype, putting them at ease. We began by engaging in general conversation, so the participants did not feel as though I was only gathering data from them. At all times I treated them as a person and not as a source of data.

Theoretical sampling was the second sampling technique employed in the study. Theoretical sampling is a core tenet used with all types of GTM (Glaser & Strauss 1967; Strauss & Corbin 1990, 1998), including constructivist GTM (Charmaz 2014). Theoretical sampling is the process of gathering data related to emergent areas in order to fill gaps in conceptual categories (Charmaz 2014). Theoretical sampling was used within this study to recruit further participants and to re-interview a participant, in order saturate the properties of each category (Charmaz 2014). Theoretical sampling is further detailed in the section titled *theoretical sampling* (see page 69).

#### *4.1.1.1 The participants*

The selection criteria were set in order to protect participants, for practicality of the study, and to ensure it was possible to meet the aims of the research. To be eligible for inclusion participants were required to comply with the selection criteria outlined in table 5.

**Table 5: Inclusion and exclusion criteria for participation in study**

| Inclusion Criteria | Exclusion Criteria |
|---|---|
| 18 years or older | Under 18 years old |
| Able to comfortably participate in a conversation in English | Not able to comfortably participate in a conversation in English |
| No health-care qualification | Health-care qualification i.e. doctor, paramedic, nurse; or training i.e. country fire service (CFS), metropolitan fire service (MFS), state emergency service (SES) |
| Had witnessed an out-of-hospital emergency that required assistance | Have not witnessed an out-of-hospital emergency that required assistance |

The demographic chosen for this study were people over eighteen years of age. Recounting sensitive topics, such as an experience of witnessing or encountering an emergency, may cause distress, particularly to younger people (McCosker, Barnard & Gerber 2001) (risk mitigation strategies are detailed in *ethical considerations*, page 52). Participants had to be comfortable to have a conversation in English which is my sole language. Health care professionals, for example doctors, nurses, paramedics and people who are trained to respond (i.e. members of the Country Fire Service (CFS), Metropolitan Fire Service (MFS), State Emergency Service (SES)) were excluded from the study because the aim of the study was to generate theory about bystanders who were not health care professionals and were not trained to respond to emergencies, beyond having a first aid certificate. People who had completed a first-aid certificate were not excluded from the study because first aid training is available to the general population. To be included in the study people had to have witnessed or encountered an out-of-hospital emergency, in which assistance was required. Again this criterion was included to ensure the aim of the study was able to be met.

Within GTM, the number of participants required to reach theoretical saturation is unable to be estimated, however Glaser and Strauss (1967) and Charmaz (2014) believe large sample sizes are unnecessary. It is recommended data only be gathered until theoretical saturation is reached (Charmaz 2014; Glaser 1998; Stern 2007) as collecting data beyond this point adds 'little value' (Glaser & Strauss 1967, p. 225). Although a definitive number is not provided, Charmaz (2014) suggests between twenty and thirty participants are required for a GTM study to be considered credible and to make modest claims.

Twenty-seven interviews were deemed adequate for this study as the properties of each category, and the relationships and differences between each of the categories were explained, and no new, relevant information was coming from the interviews. Theoretical saturation was therefore deemed to be met (detailed in *theoretical saturation* section of this chapter, page 70). The twenty-seven interviews were undertaken with twenty-six participants (detailed later), between the ages of 19-81 years of age, who had witnessed or encountered an emergency whereby someone required assistance. The profile of each participant was tabulated and participants were assigned a pseudonym for protection of their identity (see Appendix 3) Pseudonyms were chosen in the same gender and of the same approximate generation in order to maintain the essence of the participant.

## 4.2 Ethical Considerations

When conducting research involving human participants, ethical considerations must be taken into account to maintain the rights, and to ensure the safety of participants (Liamputtong 2013; Polit & Beck 2008). Tracy (2010) provides a framework comprising of four key principles to ensure quality, ethical research, including the procedural, situational, relational and existing ethics (detailed below).

### 4.2.1 Procedural ethics

Before beginning data collection I applied for a low or negligible risk assessment ethics approval, however, the study was not considered low risk, and thus a full ethics application was completed. Reasons provided were related to the mode of recruitment and topic under investigation. The topic under discussion was of a sensitive nature and had the potential to remind participants of a potentially distressing experience. Subsequently full ethics was applied for and approval was granted by the Flinders University Social and Behavioural

Research Ethics Committee (SBREC). Approval was granted on 18th December 2013, project number 6288 (see Appendix 13).

Due to difficulties with recruitment a modification to the approval was sought and granted on 6th August 2014. This enabled me to be interviewed by a television news program, and two radio programs in order to recruit participants; to place advertisements on the affiliated universities social media sites; to interview people via Skype or telephone and to interview interstate participants. Recruiting via television and radio interviews was successful, however, no participants were recruited from interstate.

Approval was granted by the Southern Adelaide Clinical Human Research Ethics Committee, on 30th June 2014, project number, ARF 2 / 6288, to place recruitment posters within Flinders Medical Centre, Repatriation General Hospital and Noarlunga Health Service (see Appendix 14). Approval was also granted by Flinders University, and the poster appropriately stamped before placing around the University campus. Both of these methods of recruitment were successful.

To ensure harm to participants was minimised, I fully disclosed the risk of participating in the study in the information pack provided (see Appendix 10, 11, 12). To ensure I avoided deception and fabrication and informed participants of their rights, structured templates of forms were provided to participants. Forms included an information sheet, detailing my contact details, the purpose of the study, the eligibility criteria for the study, the details of what participants would be required to do, and the benefits and risks or discomforts of participating in the study (see Appendix 11). A template from the affiliated University was utilised so as to ensure no important information was omitted. A letter of introduction was also provided to all potential participants (see Appendix 10), which again detailed the project and stated that participation was voluntary. A University template was also used when drafting this letter.

The information pack contained contact details for free counselling services. Participants were informed of their right to cease the interview or to not answer any questions without repercussion. Due to the sensitive nature of the topic I was aware that it was a possibility participants could become distressed (Liamputtong 2010). One participant became upset when speaking about the loss of a family member whom she was unable to assist. During

this time the audio-recorder was paused until she regained composure, I gave the participant the option of stopping the interview at any time, however she said she wanted resume the interview. The participant was comforted and I reiterated the information about confidential, free counselling services provided in the information letter.

Informed consent was gained by providing potential participants with the letter of introduction, the information sheet, and a consent form (see Appendix 10, 11, 12). The information was emailed or posted to them after they had phoned or emailed expressing interest in the study. They were able to read the information thus making an informed decision to participate in the study. I utilised a template from the affiliated university for the consent form, which was approved by the ethics committee, and detailed the following information:

- participants will not directly benefit from the project
- participants have the right to withdraw from the research
- participants have the right not to answer any of the questions without disadvantage

The consent form suggested the research project be discussed with someone else, for example a family member or friend, before being signed. The affiliated university's standard consent form included a section stating that at any time a participant can remove their data from the study; this sentence was removed from the consent form before submission to the ethics committee. This decision was made following discussion with my supervisors as GTM is an iterative process of gathering and analysing data from the very beginning of data collection, making it difficult to remove a single participant's data without compromising the project. The decision was approved by the ethics committee.

Privacy and confidentiality of participant details and data was ensured throughout the research project in several ways. While being interviewed the participant was not identified by name, thus the participant was not identifiable by audio-tape to anyone including the transcriptionist. Interviews were conducted in a private room, or location that was comfortable to the participant so that sensitive information could not be over heard. Participants were informed by way of an information sheet that their identity would remain confidential throughout the study, the thesis and any publication or presentation by use of pseudonyms (see Appendix 3 for participants' profile).

Electronic data was stored in password protected devices, such as hard drives, and computers. Hard copy data had no identifiable components and was kept in a locked filing cabinet in an office only accessible via security card. Consent forms with identifying information were kept in a separate location, also in a locked filing cabinet in a secure office. The transcriptionist was required to fill out a confidentiality form before any data was emailed to her (see Appendix 15).

### 4.2.2 Situational ethics

Situational ethics is the practice of reflecting, critiquing and questioning decisions made throughout the process (Charmaz 2014). It centres around justification that the benefit of the study outweighs the risk to participants (Tracy 2010). The benefit of adding to the current literature a substantive grounded theory on bystander decision-making in an emergency outweighed the risk to the participants, thus the study was justified. As suggested by Hammersley and Traianou (2012), during the process of data collection I reflected on the methods used to gather data and whether asking sensitive questions to participants would cause them harm. As discussed above, methods were implemented to minimise risk to participants at all times. As mentioned earlier, one participant became upset, however she wished to resume the interview once she regained composure.

### 4.2.3 Relational ethics

Relational ethics includes being mindful at all times of the impact of oneself on the participant (Charmaz 2014; Tracy 2010). This was paramount in the current study as the discussion area was sensitive. I displayed respect and dignity toward participants at all times in order to engage in reciprocity (Tracy 2010). Respect was shown by always being cognisant to treat the participant as a person, never as a source of data. When the participant, mentioned above, became upset the interview was stopped until she composed herself and asked to resume.

During the interviews participants were able to tell their stories to an active audience, I was able to clarify any terms or hidden assumptions, and I was given the opportunity to learn about the experience of bystanders while making the decision of whether to assist in an

emergency. The study was a co-construction between the participants and myself (Charmaz 2014; Mills, Bonner & Francis 2006a).

### 4.2.4 Existing ethics

Existing ethics relates to the ethical considerations taken throughout the project not just at the data collection phase (Tracy 2010). This principle includes ensuring the research is presented in a respectful way so as to avoid any consequences to participants. As suggested by Charmaz (2014), I was careful at all times to ensure data gained from participants was presented in a way that depicted their experience, as interpreted by me. As mentioned above, where possible I used participants' words (*in vivo* terms/codes) to represent their symbolic world, I became intimately familiar with the data and practiced reflexivity to limit applying my pre-conceptions. Preliminary findings, the grounded theory and conceptual model were presented or sent to some participants to check for resonance (detailed later in this chapter, page 73).

## 4.3 Data collection

Grounded theory method offers the flexibility to utilise a variety of data collection methods (Charmaz 2014). According to Charmaz (2014, p. 56), interview is the most common method of data collection in GTM and has been described as a '…gently-guided … conversation that explores participants perspective on their personal experience…'. In order to generate grounded theory the collected data must be rich and thick with description encompassing participants experiences; including their actions, feelings, thoughts, views and intentions, which are grounded in the context of their lives (Charmaz 2006, 2014; Kvale & Brinkmann 2009).

In line with Charmaz (2014) in-depth interviews were undertaken and provided participants with the opportunity to reflect on and illustrate their experience to a captive audience. I was able to request more detail about a particular area, maintain the direction of the interview, stop to further explore an area and validate the participant's experience. As recommended by Charmaz (2014) my aim was to understand the participant experience, which led to theoretical analysis and eventually to the construction of theory.

Using a social constructionist and symbolic interactionist perspective, in-depth interviews were undertaken as the primary method of data collection. The interviews were co-

constructions of participants' interpretations of their experiences of decision-making in an emergency. 'Grounded theory interviewers start with the participant's story and fill it out, often by attempting to locate it within basic social process, which may be implicit' (Charmaz 2014, p. 86). The social constructionist and symbolic interactionist perspective allowed me to enter participant's symbolic world to explore and understand their actions based on the meanings ascribed to decision-making in an emergency. I achieved this by asking them to clarify meanings and to provide further explanation if and when I did not understand, which is the constructivist approach to interviewing as recommended by Charmaz (2014). After the general conversations I asked each participant a series of questions to gather demographic information, such as their age, how many emergencies they had witnessed or encountered, the time since the most recent emergency and whether they had undertaken a first aid training course (see Appendix 16).

As suggested by Charmaz (2014), using a semi-structured interview approach allowed for variation in participant's experiences. An initial open-ended interview question was formulated, along with follow up questions and prompts (see Appendix 17) to encourage participants to expand upon initial responses (Charmaz 2006, 2014), whilst maintaining the direction of the interview (Charmaz 2014; Polit & Beck 2008). The initial open interview question provided direction to the interview and ensured gathering of relevant data. The initial question asked of participants was:

*Tell me about your experience from the time you knew there was an emergency event.*

As recommended by Charmaz (2014) and with the guidance of supervisors, I ensured interview questions were without preconceived assumptions and enabled the interview to have a conversational tone. The broad, open-ended questions facilitated conversation by ensuring the participant was able to reveal their experience of the emergency and enabling any unforeseen stories to be told. My constructivist approach to interviewing meant I was focusing on the words, terms and events of the participant to fully understand the implicit and implied meanings and assumptions (Charmaz 2014). As mentioned above, I clarified any ambiguous comments, phrases or terms with participants to ensure I understood their meanings. This approach connected the interview questions to participant experiences, and aimed at limiting my assumptions about meaning (Charmaz 2014).

As suggested by Charmaz (2014) I used encouraging gestures, including head nods and 'uh huh's' to encourage the participant to continue during the recount of their stories. This allowed the participant to know I was following and listening to their story. When clarification or expansion on earlier responses was required I asked further questions. This was done if I was unsure about something the participant said, when I needed to clarify meaning, and when I required more detail.

Within the information pack participants received was information informing them the interview would be audio-recorded. Permission was granted by participants, enabling me to give them my full attention, while noting down facial expressions, mannerisms and questions to follow up. Charmaz (2014) suggests unspoken cues provided by the participant can be equally as important as the spoken words. Apart from the primary purpose of recording participants' experiences, audio-taped interviews allowed me to listen to the interview and as Charmaz (2006) recommends to critically analyse the interview technique, questions and prompts to ensure appropriate information was elicited. Before the interview commenced I asked participants for their consent to record the interview, I explained the reasons (detailed above) and reassured them that their name would not be recorded, thus they would not be identifiable. All participants gave permission for me to audio-record the interviews. Interviews were recorded using a quality recorder placed on a table central to both myself and the participant or near the speaker of the computer or phone when undertaking telephone or Skype interviews. Extra batteries were always carried to ensure the equipment did not fail. In one instance the batteries in the audio-recorded did deplete and I was able to ask the participant to wait while I replaced them. This method protected the participants from having to repeat their interview and respected the story they were telling me. Interview locations were quiet private rooms away from outside noises and distractions to ensure the recorder could capture the voices clearly. Ensuring interviews were conducted in private locations reduced the risk of being interrupted and lessened the pressure participants may have felt having other people around, who may hear their stories.

As suggested by Charmaz (2014) the interview questions became more directed with each interview (detailed in the *theoretical sampling* section, page 69). This enabled me to focus data collection on the properties of the categories that were emerging from the data, to ensure further refinement. Some of the original questions were removed from the interview

guide because the properties, relationships, differences and similarities of tentative categories related to these questions were saturated. Questions were replaced with those which could elicit data specific to the emerging theory. Examples of questions added to the interview guide were 'how do you think your age influenced your decision of whether to provide assistance?' and 'how do you think the location of the emergency, for example country or city, influenced your decision' (see Appendix 17 and 18 for original and modified interview guides). Interview questions were used only as a guide. As Charmaz (2014) suggests, questions and prompts were used when necessary (i.e. to clarify meanings and to further explore any area), to compare and refine properties of emerging concepts.

## 4.4 Data analysis

GTM is not a linear process; data analysis, data collection and conceptual theorising occur concurrently and iteratively (Charmaz 2006, 2014) (see Figure 2, page 47). Interviews were transcribed verbatim to ensure the entire picture of the interview was captured (Kvale & Brinkmann 2009; Oliver, Serovich & Mason 2005) to allow the details to be preserved (Charmaz 2014). Transcription was completed by either me or a professional transcription company. The professional transcriptionist was required to sign a confidentiality form before any transcriptions were undertaken (see Appendix 15). I simultaneously checked transcriptions while listening to the audio-file to make sure there was no misinterpretation of participant meanings.

### 4.4.1 Coding of data

GTM suggests the researcher must intensively interact with the data in order to ascribe meanings to the participant's actions and views (Charmaz 2014; Glaser 1978; Glaser & Strauss 1967). Coding provides the framework for analysis which occurs by associating meaning to the fragments of data, and is the link between collection of data and theory development (Charmaz 2014). Charmaz (2014) suggests codes are constructed while studying and interacting with the data, enabling the researcher to sort and synthesise data to define meanings, in order to move beyond statements to analytic interpretations.

This process starts from the beginning of the research and continues until construction of the theory (Charmaz 2014). Analysis of data began after the initial interview, whereby manual coding was undertaken. Manual coding is the process of coding transcriptions by

hand; software (i.e. NVivo) is available to code, however is not recommended by Charmaz (2014). Manual coding is recommended to ensure analysis has depth and is complete, to allow for conceptualisation of social behaviours, and to ensure the grounded theory is not rushed (Hesse-Biber 2007; Holton 2007). This process also enabled me to develop intimacy with the data by reading and re-reading the transcriptions.

#### *4.3.1.1 Initial coding*

During initial coding I used Charmaz's (2006, p. 43) recommendations to analyse each word, line or segment and name them in a way that '… categorised, summarised and accounted for each piece of data'. The aim was '… to make an interpretative rendering that begins with coding and illuminates studied life' (Charmaz 2006, p. 43). During initial coding I remained open to the direction the data and subsequent codes may take, thus not placing preconceived codes or categories on to it. As per Charmaz's (2014) recommendations, data was examined repeatedly until codes began to emerge that described the meaning within the data. The following strategies recommended by Charmaz (2014, p. 86) were followed when undertaking initial coding.

- Breaking the data up into their component parts or properties
- Defining the actions on which they rest
- Looking for tacit assumptions
- Explicating implicit actions and meanings
- Crystallising the significance of the points
- Comparing the data with data
- Identifying gaps in the data

The initial codes provided a name for the inherent meaning within the data and allowed the participant's voice to be heard (Charmaz 2014). Codes used within this study were as close to the data as possible to ensure the substantive grounded theory reflected an insider's view of the experience. As suggested by Charmaz (2014) immediately following interviewing, transcribing and checking, data were analysed for explicit and implicit meanings and a label applied. Gerunds (words formed with verbs but acting as nouns), and where suitable *in vivo* codes (words used by participants), were used to ensure actions and participants words were captured appropriately (Charmaz 2014). Each of the twenty-seven interviews were coded using this method to ensure new leads were not missed.

As suggested by Charmaz (2014) and Glaser and Strauss (1967), I took steps to ensure coding was consistent with participant's meanings; including making sure to remain open-minded so that codes captured meanings and actions. During regular discussions with my principle supervisors I sought critical feedback on the process and application of coding to minimise applying preconceptions. Codes were later compared with further data to analyse and examine them, to ensure they were the most appropriate. For example, during one interview it became clear the participant believed the emergency was beyond his ability. I initially coded this as *out of depth*. During further data collection and analysis it became apparent many participants felt this way. The code was renamed *lacking confidence in abilities*. The re-coding was done to ensure the code was the best fit for the data (Charmaz 2014; Glaser 1978). 'Fit' refers to the degree to which the codes or categories accurately represent participants meanings (Glaser & Strauss 1967).

In line with recommendations from Charmaz (2014) following each interview I wrote theoretical memos to examine the codes analytically. This allowed me to define what was occurring within the data, to start understanding the meaning, and to highlight the areas where more data collection must occur. Table 6 (see page 61) provides an example of initial coding.

**Table 6: Initial coding example taken from interview 2 with Alissa (28 years old)**

| Initial codes | Interview excerpt |
|---|---|
| Reflecting on morals<br><br>Diffusing responsibility<br>Reflecting on morals<br>Unhappy with decision<br>Unhappy with decision<br>Motivated to help<br>Motivated by self-reflection<br>Reflecting on self-worth<br>Unhappy with decision<br>Weighing up risk of helping<br>Weighing up risk of helping<br>Weighing up risk of helping<br>Believing her judgement<br>Diffusing responsibility<br>Reflection on her if she does not do something<br>Unhappy with decision – regret | I'm thinking, what kind of a person am *I* if I don't stand up and do something, and then, and also thinking, initially I thought maybe someone will get up and they'll do something and thinking, *how does that reflect upon me if I don't do something?* So it's not, it's, it's terrible because it's not like I, got up because I was concerned for his welfare, as such, I was more motivated by, how that would, how not getting up would reflect on the person I am or the person that I think I am. And even to this day when I think back, to that moment and I, 'cos, I still think that I waited too long, *why didn't I get up earlier?* You know, initially it was because I thought maybe, I didn't want to embarrass him, I didn't want to, just because he was behaving abnormally I didn't want to stare at him. It was a case of yeah I know this is wrong, maybe someone will stand up, and do something about it, and then well, *if I don't stand up and do something about it myself what kind of a person does that make me?* So they're the kind of thought process, processes that I went through. And even today when I think about it I think that I waited too long. |

#### *4.3.1.2 In vivo codes*

*In vivo* codes are terms used by the participant which are representative of their social world (Charmaz 2006). *In vivo* codes were used within this study to depict views and actions of participants' experiences. As recommended by Charmaz (2006), similar to initial and focused codes, *in vivo* codes were analysed and compared to further data. Using the participant's own words conveyed a sense of action and meaning and a way of looking at their experiences. A number of *in vivo* codes were used within this study, for example *culture*, *magic number*, *emotional coping ability*, and *level of action.* During some of the earlier interviews participants spoke about the methods they used to determine the various types

of intervention they could undertake at the scene of the emergency, for example calling for help, removing debris, or administering first aid intervention. Originally initial codes such as *deciding what to help with* and *assessing indirect intervention* were used. However, during a later interview one of the participants was explaining how he made an assessment of the *level of action* required at the scene, which influenced his decision to provide assistance. Level of action was subsequently used as an *in vivo* code and was also used to re-code the earlier interviews.

#### *4.3.1.3 Focused coding*

During focused coding I analysed initial codes to determine their meaning. Initial coding provided the analytical direction to take, while focused coding allowed me to 'synthesize, analyze, and conceptualize larger segments of data' (Charmaz 2014, p. 138). Comparison between initial codes and data helped me to determine which codes had analytic power and may potentially lead to tentative categories. The process of coding meant I moved from initial coding to focused coding and back again while comparing data with data (see Figure 2, page 47).

New data gathered from subsequent interviews was compared with the codes generated from analysis of previous interviews. I compared and grouped initial codes and raised some into focused codes and as suggested by Charmaz (2014) earlier interviews were then re-coded with these codes in order to refine them. Labels used as focused codes were developed through interpretation of explicit and implicit meanings in the data. Table 7 (see page 63) provides an example of focused coding.

**Table 7: Focused coding example taken from interview 2 with Alissa (24 years old)**

| Focused codes | Interview excerpt |
|---|---|
| Internal driver<br><br>Safety in numbers<br>Internal driver<br><br><br><br>Internal driver<br><br><br><br><br>Assessment of risk<br><br>Safety in numbers<br><br>Internal driver | I'm thinking, what kind of a person am *I* if I don't stand up and do something, and then, and also thinking, initially I thought maybe someone will get up and they'll do something and thinking, *how does that reflect upon me if I don't do something?* So it's not, it's, it's terrible because it's not like I, got up because I was concerned for his welfare, as such, I was more motivated by, how that would, how not getting up would reflect on the person I am or the person that I think I am. And even to this day when I think back, to that moment and I, 'cos, I still think that I waited too long, *why didn't I get up earlier?* You know, initially it was because I thought maybe, I didn't want to embarrass him, I didn't want to, just because he was behaving abnormally I didn't want to stare at him. It was a case of yeah I know this is wrong, maybe someone will stand up, and do something about it, and then well, *if I don't stand up and do something about it myself what kind of a person does that make me?* So they're the kind of thought process, processes that I went through. And even today when I think about it I think that I waited too long. |

Subsequent to testing focused codes on data, the codes that carried the most weight became tentative categories (Charmaz 2008a). A category attempts to make sense of what the participant has said, it '… explicate[s] ideas, events, or processes …' in the data (Charmaz 2014, p. 189). I compared focused codes with data, incidents, concepts and contexts to generate categories, as recommended by Charmaz (2014). When raising codes to categories explanation of properties and relationships between tentative categories became apparent. At this stage categories were considered provisional in order to remain open to analytic possibilities. Some categories remained that way (i.e. internal drivers) and others did not (i.e. emergency preparedness), these categories were subsumed by others that were the more

appropriate fit. During this stage of data analysis supervisors were consulted to minimise fitting data into pre-defined categories and to increase rigour, as recommended by Charmaz (2014).

## 4.5 Constant comparative analysis

Constructivist grounded theory method is an iterative process which incorporates constant comparative methods (Charmaz 2014). Constant comparison has been used since the development of GTM and is one of the core tenets (Glaser & Strauss 1967). Within constructivist GTM constant comparative analysis is a tool used to manage interactions which shape the development of theoretical understanding and abstract conceptualisations of the phenomenon (Charmaz 2014).

As recommended by Charmaz (2014) I used constant comparison at each level of analysis to discover similarities and differences to further support the emerging categories. The comparative process was done from the beginning of analysis where the statements, incidents and codes were compared within the interview, then interview to interview and code to code to determine if they could be raised to form higher codes that subsumed multiple initial codes, to make comparisons and to reveal analytic distinctions (see Figure 2, page 47). Constant comparison was used to raise tentative categories and form research questions, which were used to gather focused data.

Constant comparison and theoretical sampling are closely linked as the process of constant comparison necessitates theoretical sampling to ensure leads that are divulged while comparing are followed up on (Charmaz 2014; Glaser & Strauss 1967). During memo writing I analysed constant comparisons to further focus data collection and inform analysis, as suggested by Charmaz (2014). Finally comparisons were made with relevant literature to situate the grounded theory.

## 4.6 Memo writing

As suggested by Lempert (2007, p. 245) I used memo writing as '… the methodological link, the distillation process …' to progress data into theory. Memo writing is a core tenet of GTM (Glaser and Strauss 67; Strauss and Corbin 1998; Charmaz 2014), which is used during each phase of data analysis (Charmaz 2014; Stern 2007). Analytic notes were made about data,

codes and theoretical categories, and as recommended by Charmaz (2014) were designed to enhance analysis and productivity. I wrote memos as data were collected and analysed, so leads to take and areas to explore became apparent. Once data were collected and coding began, notes were written about thoughts, ideas, connections and comparisons, which were then analysed giving direction to further questions and leads to follow up on (Charmaz 2014; Stern 2007).

Memo writing allowed me to think analytically and to ask questions of the data. I was able to further understand the social processes detailed by participants and as Charmaz (2006) suggests to move from description to conceptualisation of data. Initially memos were more descriptive in nature, however, throughout the process they became increasingly theoretical and analytic. Types of memos varied immensely from thoughts and feelings written down in short, concise notes to long comparative, analytic memos. As suggested by Clarke (2005) a computerised 'memo bank' was used to store the memos, allowing for easy access. Memos were read and re-read as thinking changed and ideas became refined. As recommended by Charmaz (2014) memos were used to:

- Make comparisons between data, codes, categories and concepts which elucidated areas needing further investigation.
- Enable implicit meanings to be explored and incorporated into codes
- Identify key properties of tentative categories.
- Describe and explore category emergence and conceptualisation, and to break them into their components.

As recommended by Charmaz (2014), memos were given titles using labels that came from coding; and were sorted, diagrammed and integrated to provide theoretical development of analysis. I used theoretical sorting by comparing memos with memos while writing new increasingly abstract memos; I used diagramming to pictorialise categories in order to visualise properties and connections between categories; and integration of memos to ensure the relationships between the categories were clear (Charmaz 2014). These arrangements of memos changed many times as new memos were written and connections and comparisons made. At all times the arrangements reflected the experiences of the participants, as a co-constructors.

## 4.7 Theoretical sensitivity

Theoretical sensitivity refers to the level of insight the researcher has of both self and of the area (Glaser & Strauss 1967). It refers to the level of meaning the researcher attributes to the data (Glaser & Strauss 1967), and is a key component of developing a theory (Charmaz 2014). As the research progresses theoretical sensitivity increases, and codes become increasingly more analytic, leading to a demarcation between what is and what is not important (Charmaz 2014). Glaser and Strauss (1967) suggest theoretical sensitivity comes from two sources, the researcher's background, including, familiarity with the literature, professional and personal experiences, and from the analytic process itself.

I developed theoretical sensitivity because of my background as a nurse, because of my previous research undertaken on bystanders in motor vehicle accidents and by reading extensively on the topic of bystanders in emergencies. Although, I was careful to employ reflexivity (detailed below) to ensure my experiences did not allow my pre-conceived ideas or perceptions to impact the data. Becoming theoretically sensitive enabled me to understand the experiences of bystanders when making the decision of whether to provide assistance in an emergency; and to determine abstract relationships between experiences, which enhanced the emergence of the substantive grounded theory.

## 4.8 Reflexivity

Previously it was thought that a GTM researcher was able to conduct research without any preconceptions, that past experiences would not impact the research in any way (Glaser & Strauss 1967). However, constructivist GTM acknowledges the researcher is not without past experiences, thus not without preconceptions. Charmaz (2014) and Liamputtong (2013) believe the researcher plays a major contributory role in the collection, analysis, interpretation and shaping of the data, making it imperative to employ reflexivity.

As recommended by Hesse-Biber (2007) and Charmaz (2014) I used reflexivity to minimise bias, and to enhance the rigour of the study. Life experiences, beliefs, perceptions, culture, gender, race and age all play a role in the preconceptions we as humans have; thus it is important to acknowledge preconceptions before undertaking research (Charmaz 2014). The rigorous methods of GTM data collection, memo writing, coding and analysis, enabled me to acknowledge my preconceptions, and how they may influence the research process.

As highlighted in the *preface,* I have had an experience related to emergencies, have extensively read the literature, and have previously conducted research in a similar area, thus there was room for potential preconceptions. By practicing reflexivity throughout the duration of the study I was able to understand how my personal experiences influenced the research process. Reflexivity was practiced in a number of ways, as suggested by Charmaz (2014), including the following:

- I became intimately familiar with the phenomena being studied and challenged my own perspectives and practices by being self-aware and critically appraising myself and my assumptions.
- I was aware of, and acknowledged, my experiences and preconceptions and how they might influence the interpretation of the data.
- I acknowledged that data are co-constructions of the interaction between the participant and the researcher, which is consistent with a constructivist grounded theorists perspective.

The iterative process of data collection and analysis and the constant comparison between data gave me an intimate familiarity with the participants' experiences and what they deemed important. These data were then coded using words that gave meaning to action and processes, using codes that came from the data, including *in vivo* codes.

As suggested by Hesse-Biber (2007) and Charmaz (2014) I kept a methodological journal throughout this study and also wrote memos where reflections, thoughts and ideas were recorded in order to prevent previous experiences and preconceptions being applied to the data. Self-awareness through journaling and memo writing enabled me to make personal assumptions explicit, to avoid directing the data as I co-constructed data into categories and later theory. As suggested by McMorland et al. (2003) I was able to utilise the relationship I had with my supervisors to articulate and discuss my experiences and preconceptions and how they may have influenced the study. Following coding of the first few interviews and during initial and theoretical memo writing I sought critical feedback from my supervisors, to ensure I was not forcing data into pre-existing codes.

## 4.9 Theoretical sampling

Theoretical sampling is an emergent process aimed to define and saturate the properties of a category, to follow up on ideas and to ascertain the similarities and differences and relationships between categories (Charmaz 2014; Glaser & Strauss 1967). Charmaz (2006) suggests theoretical sampling enhances the rigor of the study and resulting substantive grounded theory. Theoretical sampling ensured the analysis was focused and allowed data to be added to enable saturation of categories and to allow me to generate theory (Charmaz 2014; Glaser & Strauss 1967). The data gathered to saturate the categories was from a variety of sources, including interviewing additional people and reinterviewing participants (Charmaz 2014). As recommended by Charmaz (2014) the questions asked during these interviews were more focused so that data gleaned could further explain categories. This data then went through the rigorous process of comparison between earlier data, earlier codes and categories, while writing memos to capture new ideas, comparisons and similarities (Charmaz 2014).

Theoretical sampling was used in multiple ways within this study, as suggested by Charmaz (2014) and Glaser and Strauss (1967). Interview questions were modified to focus data collection on filling out properties of tentative categories. This process ensured categories did not remain thin with unanswered questions but instead became robust and were then assimilated into the developing grounded theory. For example, early in data analysis the tentative category *safety in numbers* emerged, however, it did not fully explain the experiences of people when assessing the other people at the scene of the emergency. When undertaking further interviews I incorporated questions that allowed me to further explore this concept. Data from earlier interviews were re-coded with a new lens and increasingly abstract memos were written to compare the properties of the categories with each other, the tentative category was renamed *assessing the people*. The tentative category safety in numbers was subsumed by *assessing the people* and became a subset of this category.

One participant was re-interviewed using the modified interview questions to ensure the properties of tentative categories were filled out. The modified interview guide was used during the interview to explore the tentative categories with the participant. In order to appraise the theory and the conceptual model I personally presented, or emailed several

participants some key findings. Each of the participants claimed the theory and model resonated with them. They confirmed the account was a true representation of their experience.

## 4.10 Theoretical saturation

Theoretical saturation is achieved not when the data is saturated but when data collection is adding little or no new information which is of use to the study (Charmaz 2006, 2014; Glaser & Strauss 1967). The properties of the theoretical categories are saturated when relationships and differences between categories have become saturated (Charmaz 2014). Or as Glaser and Strauss (1967, p. 61) suggest when:

> *… no additional data are being found whereby the sociologist can develop properties of the category. As he sees similar instances over and over again, the researcher becomes empirically confident that a category is saturated.*

Once the similarities, differences and relationships within and between the categories were thoroughly investigated and no new properties were emerging from the data, I ceased sampling. The categories were deemed theoretically saturated after twenty-seven interviews were conducted. Using constant comparative methods and recoding of earlier data, new leads were searched for to be certain cessation of analysis was not premature. Very few new properties related to the categories were emerging from the data; however I interviewed several more participants and re-interviewed one to ensure the properties of the categories and sub-categories were saturated. The relationships and differences between the categories were explained, and no new properties emerged from the data, thus theoretical saturation was achieved after conducting twenty-seven interviews and data collection ceased.

## 4.11 Theoretical sorting, diagramming and integrating

Sorting, diagramming and integrating are inter-related processes used to develop and refine theoretical links (Charmaz 2006). As suggested by Charmaz (2006) and Birks and Mills (2011), memos were printed out and hand sorted and reshuffled, cut up, moved around and stuck in various arrangements on a wall in order to see them clearly. During this phase, categories were compared and relationships became more apparent. Diagramming was then used to

map out and visualise the emerging theory, and the subsequent relationships between categories.

As suggested by Charmaz (2014), integration of memos was undertaken to order them for process. Memos were sorted, diagrammed then integrated to articulate the relationships between properties of categories and categories, in order to explicate theoretical analysis and write the theoretical framework. Data analysis moved beyond the process of coding, whereby significant theoretical categories that carried 'substantial analytic weight' were raised to concepts (Charmaz 2006, p. 139).

## 4.12 Theory construction

Charmaz (2014, p. 344) suggests a substantive grounded theory is a 'theoretical interpretation or explanation of a delimited problem in a particular area', and the theory should articulate relationships between the abstract concepts incorporated within (Thornberg & Charmaz 2012). The current study utilised constructivist grounded theory methodology / methods package and a social constructionist, symbolic interactionist perspective while interpreting the experience and developing the substantive grounded theory. While I simultaneously collected and analysed data, theoretical concepts began to emerge. As suggested by Charmaz (2014) these concepts, or core processes, were constantly compared during analysis of data and were eventually developed into the substantive grounded theory. The grounded theory is detailed in full in chapter ten. A secondary literature review was undertaken and integrated into chapters six to ten to situate the study into the extant literature and to further support the theory.

## 4.13 Rigour

Within constructivist GTM a theory is constructed as an interpretation of the participant who experienced the phenomena, and the researcher who collected and analysed the data (Charmaz 2014; Scahill 2015). Replication of the study is difficult due to the possibility of having other researchers with different interpretations (Scahill 2015), which is acceptable so long as the research process is explained well, and the participants voices can be heard throughout the theory (Glaser & Strauss 1967). Within the current study I made sure the process was explained in detail, and that the language the participants used was carried through data analysis and into the subsequent grounded theory.

Charmaz (2014) suggests there are four criteria used to evaluate grounded theory studies, including the credibility, originality, resonance and usefulness. These criteria were utilised to establish rigour within the current study. The aim of the current study was to conduct a quality, original substantive grounded theory, which resonates with research participants and the public, and bridges the gap in the knowledge surrounding bystander decision-making in an emergency. The theory must represent the data and must explain and predict behaviour (Glaser 1978). Within a grounded theory study reflexivity (detailed earlier) is also used to enhance the rigour of the study (Charmaz 2014).

### 4.13.1 Credibility

For a study to be credible it must represent the truth, by ensuring the participants words are truly and accurately reflected in the data (Polit & Beck 2012). Charmaz (2014) suggest four methods to ensure the credibility of a GTM study, including ensuring the data is reflective of the participant's experience; to check data against data to ensure the meaning is accurate; to use participant's words in the grounded theory; and to reflect using reflective memos or journals. The implementation of multiple strategies, consistent with GTM ensured the credibility of the study. Strategies included:

- A preliminary literature review was undertaken prior to collection of data, to gain an intimate familiarity with the phenomenon.
- In-depth interviews were conducted over a period of nine months, allowing for immersion in the data.
- Multiple methods were used to collect data, including interview and theoretical sampling, which meant that properties of categories became saturated.
- Interviews were audio-taped in order to ensure participants meanings were not misunderstood during the transcription process.
- Data were analysed in an iterative process of constant comparative analysis, to provide links between the data, the argument and the analysis.
- Similarities and differences between categories were explored in-depth.
- Data were collected and analysed until the properties of all categories were saturated.
- Memos were written and stored in a memo bank.
- Memos were sorted, diagrammed and integrated.

As Glaser and Strauss (1967) suggested, each of these processes outlined above has been presented within this thesis to provide an audit trail. As Charmaz (2014) recommends each of the stages of data analysis have been detailed and examples of conceptual analysis and theorising provided. As detailed earlier I also engaged in reflexivity; member checking with participants, in the form of theoretical sampling; and peer debriefing with supervisors, to increase the credibility of the study.

### 4.13.2 Originality

Originality refers to gaining new insights, ideas, practices or concepts surrounding the area under study (Charmaz 2014). The current research was original in that the theory generated from the data offered new insights and concepts that have not been discussed in the current literature. Literature was woven throughout chapters six to ten, which highlights how the current study builds upon the existing literature and both challenges and supports current theories. The method of conducting the research was original because the majority of research on bystander decision-making in an emergency utilised positivist methods, and no GTM studies were located

### 4.13.3 Resonance

As Charmaz (2014) suggests I made sure the properties of the categories were saturated to ensure the phenomena being studied was fully understood and the implicit and explicit meanings were explored. As mentioned, implicit and explicit meanings were made clear by clarifying meanings with participants (Charmaz 2014). The grounded theory offers new insights about the experiences of bystanders in emergencies which increases the resonance, thus the rigour of this study (Charmaz 2014). Participants, and other people who have witnessed or encountered an emergency should be able to understand the substantive grounded theory (Charmaz 2014). Through member checking and theoretical sampling, participants confirmed the account was a true representation of their experiences.

Each of the participants who were shown preliminary findings, the theory, and the conceptual model expressed resonance. They believed it made sense and claimed they were offered ‘deeper insights about their lives and world’ (Charmaz 2006, p. 182). The following are examples of participant’s words:

*You're certainly on track with the information and the model. It is a lot to consider and has made me think about actions a lot, you're on track being able to demonstrate it in that way. It seems very thorough.*

*I was just thinking about it again the other day [the key findings]. I do think it's like you say, helping is very influenced by their culture, where in the world they live, and their family situation. You have put the puzzle pieces together!*

### 4.13.4 Usefulness

The usefulness relates to being able to contribute to the breadth of knowledge and being able to highlight where further research needs to be undertaken (Charmaz 2014). It is the ability to apply the substantive grounded theory of bystander decision-making in an emergency to other contexts (Charmaz 2014; Glaser 1978).

This study contributes to the knowledge on bystander decision-making in an emergency and highlights areas which would benefit from further research. The grounded theory is general enough to be applied internationally and to decision-making in other contexts, for example health care. Recommendations and implications have been detailed in chapter eleven (see page 201).

The study was reported to be useful to participants who spoke to me after the interview, or phoned or emailed me some days later to thank me for interviewing them and for undertaking the research. Many participants believed the experience of being interviewed, of speaking about their experiences and thinking about them in different ways, was a form of debriefing. Some participants had never spoken about their experiences before the interview. Other participants were glad to know I was conducting research in the area of bystander decision-making in an emergency.

*Thank you so much for doing this study. Someone really needs to look into bystanders and what stops them from helping, so hopefully more people will help.*

*Thank you so much for looking into this area. I think about my experience all the time, I have never actually told anyone about it before. I've been reflecting on it since the interview and I actually feel a lot better for having told someone. Keep up the good work.*

## 4.14 Chapter summary

This chapter provided a detailed explanation of the methods used to explore bystander decision-making in an emergency. The constructivist grounded theory methods of data collection and analysis were explained in depth, including how the research process was used to generate the substantive grounded theory. The strategies for evaluating GTM studies were presented to ensure the study was rigorous, and ethical considerations detailed. Chapter five is the first of the chapters that detail the substantive grounded theory.

# CHAPTER FIVE: THE GROUNDED THEORY

## 5.0 Introduction

The preceding chapters detailed constructivist grounded theory methodology and methods (GTM) used in the study. Chapter five provides an introduction to the study participants, presents the conceptual model of the grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification*, and finally provides an overview of the successive chapters (chapters six to ten) which present the findings from the interviews with participants. This chapter situates the participants and the conceptual model to contextualise and enhance understanding of the grounded theory.

The study aimed to develop an understanding and explanation of bystander decision-making in an emergency. Decision-making is complex and relies on a series of analyses, assessments and decisions which interact to influence the decision of whether to provide assistance in an emergency. As suggested by Charmaz (2014), utilising constructivist GTM with the perspectives of symbolic interactionism and social constructionism enabled me to focus on the processes of bystander decision-making in an emergency, as outlined in chapter three. Chapters six to nine illustrate the complex decisions enacted by participants on witnessing or encountering an emergency, thus providing the evidence that underpins the substantive theory. Chapter ten presents the substantive grounded theory developed in the study.

## 5.1 The grounded theory conceptual model


**Figure 3: Conceptual model of the grounded theory of Motivated Responsibility and the Construction of Reasoned Justification**

The conceptual model (see Figure 3) represents the substantive grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification*. The model highlights the complex, interconnected, interdependent nature of bystander decision-making in an emergency. Within the decision-making literature there are many models used to explain behaviour in certain contexts, such as the Josephson Institute of Ethics' model (Josepheson 2002) or the National Decision Model (2013), which are used for ethical decision-making; the Emergency Response Decision Making Model (Federal Emergency Management Agency 2014) or the National Centre for Disaster Preparedness (2016) model used for decision-making in a disaster; the rational decision-making model (Carpenter, Bauer

& Erdogan 2012) used for making rational decisions. When conceptualising the model for the current study these models were looked to, however, this the model of Motivated Responsibility and the Construction of Reasoned Justification is unique, as will be detailed in the following chapters. Circles are used to represent the cyclic interaction between the series of analyses, assessments and decisions before the ultimate decision of whether to provide assistance is made. Circles are also used to illustrate the ability of bystander decision-making to cycle back and forth, with no distinct end point.

The centre circle is the core category, *motivated responsibility and reasoned justification*, which explained bystander decision-making in an emergency. Each of the categories within the model interact with, and influence the core category. The inner circle illustrates three of the major categories namely *internal drivers*, *assessing personal attributes* and *assessing competing factors*. This circle represents the assessments participants enacted to determine whether they were motivated to provide assistance, whether they possessed the ability and confidence to assist, and whether there were factors that competed with their ability to provide assistance in an emergency. The categories are represented in a circle with arrows to illustrate the cyclic nature of bystander decision-making in an emergency.

The outermost circle represents the major category *assessing the scene* which is comprised of four sub-categories *analysing the situation*, *assessing the situation*, *assessing the people* and *assessing the risk*. Again this circle symbolises the interconnected, interdependent nature of bystander decision-making upon witnessing or encountering an emergency. This circle depicts the series of analyses and assessments participants undertook when interpreting if what they were seeing was an emergency; when evaluating the scene and surroundings of the emergency; when assessing the other people at the emergency; and when assessing the risks. Using one colour for the outermost circle depicts this circle as one major category, while the use of arrows symbolised the cyclic nature. Not only could participants cycle back and forth within one circle, the entire process was dynamic and they could cycle through the circles.

## 5.2 The participants

Twenty-six people who had witnessed or encountered an emergency participated in this study (see Appendix 3). Thirteen women and thirteen men between the ages of 19-81 years

were interviewed about their experiences of decision-making in an emergency, and to identify the cues and factors that influenced the series of decisions. Participants had witnessed or encountered between one and nine emergencies, from witnessing a person have a fall, to encountering a multi-vehicle crash, to seeing a car hit a person, amputating his legs. Participants who had multiple experiences were asked about these experiences individually, thus at the beginning the questions related to the most recent, then to the next emergency and so forth. The emergencies occurred less than one week to forty years prior to the interview. Despite the variation in time lapsed, all participants were able to recount emergency events with great detail.

Participants were interviewed using an in-depth design supported by constructivist grounded theory as detailed in the methods chapter (see page 56). Interviews allowed me to explore the participants' interpretation of their experience of decision-making in an emergency. The participants' profiles have been de-identified by use of pseudonyms to protect their privacy and tabulated to provide context (see Appendix 3, page 220).

The interviews were reconstructions of past experiences, reliant on memory and told in the present (Charmaz 2014; Seale et al. 2012). Although these memories may not be accurate they form the participant's experience. The constructivist, interpretive approach of the research allowed me to examine participants subjective meanings related to their experience of being a bystander in an emergency. The data were co-constructions between the participant and myself, which represented participant's beliefs, views and experiences of decision-making in an emergency.

Excerpts from each participant were cited within this thesis as evidence to support the assertions, however the excerpts were not weighted equally. Constructivist grounded theory focuses on theoretical concepts and the associated interactions (Charmaz 2014), thus the excerpts representative of the concepts were the ones used within this thesis.

## 5.3 Synopsis of the findings chapters

**Chapter six** examines the major category of *internal drivers*, which informs the grounded theory. The chapter *internal drivers* illuminates where participants' motivation to provide assistance was drawn from, and how it was constructed. **Chapter seven** presents the category of *assessing personal attributes*, which delves into participant's perception of their

ability and confidence to provide assistance in an emergency. **Chapter eight** explores the third category, *assessing competing factors*, whereby participants determined whether any factors competed with their internal drive to provide assistance.

**Chapter nine** is an in-depth examination of *assessing the scene*, which is made up of the sub-categories *analysing the situation, assessing the situation, assessing the people* and *assessing the risk*. Each of these categories represents a series of analyses, assessments and decisions made when deciding whether to provide assistance in an emergency. **Chapter ten** presents the substantive grounded theory *Motivated Responsibility and the Construction of Reasoned Justification* which helps to explain bystander decision-making in an emergency.

The relationship between each of the categories has been discussed within the successive chapters, highlighting their interaction with the core category and grounded theory (Charmaz 2014). Relevant literature is woven through chapters six to ten to position, support and elucidate how this study and the grounded theory fits within and extends upon extant literature (Charmaz 2014). At the beginning of chapters six to nine the conceptual model of *Motivated Responsibility and the Construction of Reasoned Justification* has been presented, similar to the way Heyes (2010) and Giles (2015) did in their theses.

## 5.4 Chapter summary

This study was designed to provide a theoretical understanding and explanation of bystander decision-making in an emergency. Chapter five introduced the study participants and presented and examined the conceptual model of the grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification*, to provide context to the study. An overview of chapters six to ten were provided again to provide direction to the reader and to gradually build understanding of the theory to explain decision-making for bystanders in emergencies.

# CHAPTER SIX: INTERNAL DRIVERS

## 6.1 Introduction

The previous chapter presented an overview of the substantive grounded theory and conceptual model and introduced the study participants. This chapter presents the first of four major processes (categories) enacted by bystanders when making the decision of whether to stop to assist in an emergency. The *internal drivers* provided the motivation to provide assistance in an emergency. This is explained to provide a clear explanation of the process and where it fits within bystander decision-making. The relationship between the processes and their role in the grounded theory are presented. The following diagram (Figure 4) situates the category in the substantive theory.


**Figure 4: Internal Drivers: Initial social process enacted when deciding whether to help in an emergency**

## 6.2 Internal drivers defined

A common definition of the term *internal* is something that is not outwardly expressed but is in one's mind (Oxford Dictionaries 2015d); a *driver* is a factor that causes something to occur (Oxford Dictionaries 2015e). Thus, *internal drivers* are internal factors which influence something to ensue, for example, decisions. Within this thesis the term *internal drivers* refers to internal motivations that influence bystander decision-making in an emergency. The term *internal drivers* is most commonly used in manufacturing and is utilised in a similar way within this thesis. In manufacturing internal drivers refer to internal factors that drive a choice (Hallgren & Olhager 2009); they are proactive and incite change (Lozano 2015). Internal drivers help to explain the internal motivating factors that influence bystander decision-making in an emergency.

The internal drive to provide assistance was believed to be developed in a multitude of ways and stemmed from a feeling of responsibility. The responsibility to help was driven by many factors within participants lives, which have been presented in the following section. Participants drive to help was often influenced, positively or negatively, by further analyses and assessments enacted after witnessing or encountering an emergency. The decision to remain at the scene to provide assistance or to leave the scene of the emergency without providing assistance can be made at any time. Analyses and assessments and the cues and factors that influenced the series of decisions have been presented in depth in chapters seven, eight and nine.

## 6.3 Internal drivers

When witnessing or encountering an emergency a series of analyses, assessments and decisions are made, resulting in the decision to provide assistance or to leave the scene of the emergency without providing any help. These decisions were influenced by participants' internal drivers, which motivated them to provide assistance in an emergency. Participants described feeling responsible to help people they knew as well as strangers. The feeling of responsibility was inherent within participants' experiences of witnessing or encountering an emergency. Whether the participant made the decision to provide assistance or leave the scene without providing assistance the feeling of responsibility was what drove them to *want* help.

Internal drivers, and thus the feeling of responsibility to provide assistance, were thought by participants to be acquired through genetics and the environment in which the participant was raised. Participants developed moral and ethical values and constructed social roles based on their perception of where their internal drivers were acquired. Factors such as their role at the time of the emergency (i.e. employment role), their knowledge and skills of first aid, the inability to rely on others to help, the concern about other peoples' opinion of them, and because they themselves wanted to be helped, influenced their internal drive to provide assistance.

### 6.3.1 Driven by responsibility

A common definition of responsibility is to be accountable for an action (Oxford Dictionaries 2016f). Feeling responsibility toward something is a natural response derived from a person's beliefs, emotions and attitudes (Eshleman 2014). A person's moral and ethical values are what drives the feeling of responsibility toward something and they become morally responsible (Vargas 2013). However, in the current study feeling morally responsible to provide assistance in an emergency did not necessarily mean assistance was provided. Many cues and factors positively or negatively influenced the feeling of responsibility to provide assistance and the person would either remain at the scene, or leave the scene of the emergency without providing assistance. These influential cues and factors have been detailed in successive chapters.

Moral and ethical values are personal principles that govern behaviour (Beauchamp & Childress 2001). These principles encompass what is important to the person including the distinction between right and wrong (Beauchamp & Childress 2001). According to Dinwiddie (2015) the majority of people feel responsibility toward something, for example helping in an emergency, a lack of a sense of responsibility can be characteristic of psychopathic or sociopathic personality disorders. Participants of the current study all detailed the feeling of responsibility.

> *I would feel morally and ethically obliged to get involved if I could see that people needed help I'm a human being and other people are human beings we're flesh and blood …* (Claire, 53 years old)

Moral and ethical values were standards that many participants of the current study lived by in order to have a clear conscience. Values, as defined in the literature are, '…desirable

goals, varying in importance, that serve as guiding principles in people's lives (Sagiv & Schwartz 2000, p. 178). Moral and ethical values positively influenced the responsibility and motivated participants to provide assistance. They were, in part, driven by their desire not to go against their value system. For example Paige said:

> *… just being okay with your own decisions at the end of the day, and being okay with how much or how little you acted I think is really important as well.* (Paige, 19 years old)

Participants' were concerned about the associated negative feelings if they chose not to provide assistance in an emergency. If they did not help, they intimated their opinion of themselves would be negatively affected and believed it would be a reflection of them as a person. At times, participants' claimed the increased feeling of responsibility stemmed from feeling that because they are *able* to help they *should* help.

> *… how does that reflect upon me if I don't do something? It's terrible because it's not like I, got up [to assist the victim] because I was concerned for his welfare I was more motivated by how not getting up would reflect on the person I am or the person that I think I am.* (Alissa, 28 years old)

The relationship between moral and ethical values and helping behaviour is supported by the wider literature. Paciello et al. (2013) conducted a study to understand reasons why people offer or omit help when explicitly asked and found that helping behaviour is positively influenced when basing a decision on moral and ethical values. Similarly, Niemi and Young (2013) undertook five studies to determine associations between moral and ethical values and prosocial behaviour and found that a person's values positively influence prosocial behaviour. Prosocial behaviours are 'voluntary actions that are intended to help or benefit another individual or groups of individuals' (Eisenberg & Mussen 1989, p. 3). Within the current study, moral and ethical values and the responsibility to provide assistance were thought to be acquired from several avenues, including being passed down from their parents (genetics), and the environment they were raised in (discussed in the *acquisition of the internal driver of responsibility* section, page 87).

#### *6.3.1.1 Whom they feel responsible toward*

Participants' described providing assistance to victims who were relatives, friends and also to strangers. The majority of participants expressed wanting to help anyone. Some participants did not believe they differentiated between victims but rather, felt they were equally as willing and likely to help a family member as they were a stranger. However, other participants asserted the drive to help a person they knew was stronger.

> *… they're my loved ones aren't they gosh you'd never forgive yourself if, you know …*
> (Catherine, 74 years old)

> *… in the case of a loved one I don't think there's really a choice, if our loved ones need help that's it, in the case of a complete stranger I suppose it's more complicated …*
> (Emily, 25 years old)

> *I would definitely help. I haven't questioned what religion, race, that's just the way I am. I've had women, I've had men, age hasn't been a barrier, they just need help …*
> (Max, 61 years old)

It could be reasoned that participants who helped friends or relatives had more to gain than people who assisted strangers. Providing assistance to a friend or family member may lead to saving the life of someone they love; however, the drive to help a stranger may come from wanting to maintain respect for themselves and ensure they have a clear conscience.

Helping someone in an emergency has many potential personal benefits and is often referred to as altruistic behaviour. Altruism is the selfless act of helping another person, without expecting a gain (Oda et al. 2014). There is debate about whether helping behaviour stems from purely self-interested reasons or if there is some validity in people helping for altruistic reasons. In a chapter on altruism and prosocial behaviour Batson and Powell (2003, p. 474) wrote:

> *Even if it were possible for a person to be motivated to increase another's welfare, such a person would be pleased by attaining this desired goal, so even this apparent altruism would be a product of egoism.*

Batson and Powell (2003) claim altruistic behaviour has a benefit, and as such is not actually altruistic. Conversely, Oda et al. (2014) undertook a study on personality and altruism and reported that people helped others without receiving a reward, thus displaying altruistic

behaviour. The research around whom a person is more likely to provide assistance to in an emergency varies (see *preliminary literature review*). Some studies reported that bystanders were more likely to assist their relatives or friends in an emergency. Ben-Ner and Kramer (2011) found that individuals were more likely to help family first, then friends, then strangers. Similarly Niemi and Young (2013) who researched the relationship between moral values and pro-sociality; and Smith (2014) who undertook a review of kin selection and social evolution, concluded a high propensity to help kin over strangers. Reasons have been hypothesised in many studies and include; social identity (i.e. bystanders' were more likely to identify with a victim); the cost versus benefits of helping (i.e. there may be more benefit to helping someone known); fear of disease transmission (detailed further in the *preliminary literature review*, page 19); and kin selection.

Kin selection is an evolutionary theory that has been well researched in the areas of sociology and social psychology. The theory of kin selection dates back to Darwin (1859), who claimed that people are intended to reproduce, thus they maximise their chances of producing offspring with the same genes by selecting kin. In the context of emergencies, kin selection pertains to having an increased drive to help someone who is related, rather than a stranger. In a study to examine the link between social discounting, kin and reciprocal altruism, it was found that prosocial behaviours are positively influenced when deciding to help kin (Osinski 2009).

In contrast many studies suggested people were more likely to provide assistance to a stranger. Fujie et al. (2014) undertook a study comparing bystander assistance for family members and non-family members and found that almost twice as many strangers were offered assistance. Reasons for being more likely to help a stranger than someone known were not explored in any of the located studies.

### 6.3.2 Acquisition of the internal driver of responsibility

As mentioned earlier, participants believed the responsibility they felt to provide assistance came from their moral and ethical values. These values were thought to be passed down from their parents (genetics), and the environment they were raised in, and as such were ingrained in their personalities. Thus they believed feeling the responsibility to provide assistance was natural instinct.

> *… I guess it's in my nature, I would not hesitate for a moment, I just don't think it's in me to think will I, won't I, it's just automatic ...* (Patricia, 54 years old)

> *I'd be there helping because that's my nature to do that, I don't think about whether I'm going to help somebody, I just do it …* (Margaret, 81 years old)

> *I saw this guy was in strife and I dived off the boat to rescue him, now that was without any training, without any nothing, it was just a natural reaction to go in and help …* (Ralph, 71 years old)

Views differed on how participants' natural instinct to help was formed. Some participants believed it was passed onto them through genetics, and others believed it was developed through the environment they were raised in, as detailed below.

#### *6.3.2.1 Genetics as the internal driver of responsibility*

Some participants believed their internal drivers, which came from their moral and ethical values, were acquired through genetics. They asserted they had helpful parents, thus the drive to help in an emergency was passed down to them. When asked why Claire provided assistance to a lady who had fallen over in the street, she replied that she helped because of her morals and ethics, then went on to say:

> *… there's definitely something about caring for another human being it seems to be something in my genes …* (Claire, 53 years old)

Some participants appeared unsure of where they developed their internal drivers. They did not claim they had their moral and ethical values passed down through genetics with conviction; yet they offered the explanation anyway. This was apparent with Patricia who provided assistance in a multi-car crash:

> *Oh I think that's just born in me that I would always help, I think perhaps it's genetic, I think any of my family would do the same thing, whether it's the way you're brought up, or whether it's in your genes or what it is …* (Patricia, 54 years old)

It appeared participants who believed they acquired their internal drivers through genetics may have been confusing genetics and environment. If someone mimics a parent's helpful behaviour it is possible the behaviour is learnt while being raised in an environment with helpful people, not through genetics. Thus, it may be social influence rather than genetics.

However, trying to ascertain whether helping behaviour was developed through genetics or environment was not the aim of this study; where participants believed their internal drivers came from however is important, thus their perceptions of the acquisition of their drivers have been reported.

Literature that supports the notion that behaviour comes solely from genetics is decades old. Contemporary research acknowledges that a combination of genetics and environment shape a persons' behaviour (Beale Spencer & Harpalani 2012; Plomin & Spinath 2004).

> *Although still often misunderstood by the public, the realization that both heredity and environment play a role in practically all human behaviour superseded myopic notions such as genetic determinism or strict environmentalism* (Beale Spencer & Harpalani 2012, p. 54).

Beale Spencer and Harpalani's (2012) view parallels the symbolic interactionist and social constructionist perspectives that frame this study. Participants' accounts of where their internal drivers were acquired were symbolic of the significance they placed on the development of their moral and ethical values. They believed their moral and ethical values were passed down through genetics and through the environment they were raised in and these beliefs influenced their motivation to provide assistance in an emergency.

#### *6.3.2.2 Environment as the internal driver of responsibility*

Some participants believed their moral and ethical values, and in turn their internal drive to help in an emergency, was acquired from the environment they were raised in. These participants expressed growing up with grandparents, parents and siblings who selflessly helped others; participants believed being surrounded by this behaviour influenced their drive to provide assistance to others. For example Jim said:

> *… it's probably got a lot to do with upbringing, the idea of helping other people was pretty much ingrained in me through family upbringing …* (Jim, 56 years old)

Witnessed helping behaviour included assisting people who were unwell, generally helping others and being involved in the community. Geoff recounted seeing his parents help people in the community who did not have much money; he remembered his parents regularly

inviting these people over for dinner. Geoff described these memories with fondness and believed his parents were good people for helping others. In turn Geoff felt his own driver to be helpful was gained from seeing his parents exhibit this behaviour. Further examples were provided by Margaret and Don:

> *I don't know, my mum was like that, she always helped everybody always taking somebody in. I grew up during the war time and she was always helping, doing things for the forces, helping people who were home on their own …* (Margaret, 81 years old)

> *… my mother lived that philosophy. And I've got an older brother and sister both of them have been heavily involved in community service, they were in their mid-twenties when I was fourteen, fifteen [years old] and I could see again, the sort of life that they lived, and they enjoyed it and so I've just taken that up and enjoyed it the same.* (Don, 62 years old)

Participants emulated the helpful behaviours they saw exhibited by people who were influential to their upbringing. Influential people included not only family members but friends and people from their community. Participants believed the internal drive to help others was not only learnt through childhood but throughout their lives. Matt, believed that a friend he met at university was influential to his life and to the development of his moral and ethical values and drive to help others. Matt expressed looking up to the friend as he was a St John Ambulance Australia volunteer, which in turn inspired Matt to become a volunteer.

> *… at least one of my friends was a member of St Johns ambulance, I say this is because at the time I felt that I should be trained, then I proceeded to go and get trained …* (Matt, 32 years old)

Some participants felt their internal drive to help others was acquired through the community they were raised in. They explained they were raised in an environment where other people around them, some who were close, and others who were not so close, exhibited helpful behaviours as part of daily life. This was seen as the way people behaved, thus these participants grew up incorporating helpful behaviours into their moral and ethical value system, which subsequently drove them to help others. For example:

> *… my family was very poor, I couldn't have made it through university if it hadn't been for the people in the town getting together behind the scenes and making arrangements between themselves to offer me employment during school vacations, so I had enough money to fund myself during school terms. You know that old saying that it takes a village to raise a child was really true in my circumstance. I got well looked after in that community, that stuck with me so that it became a part of my cultural inheritance to behave that way towards other people that I find in need …* (Jim, 56 years old)

A number of participants believed their drive to help others developed because their parents raised them to have religious or spiritual values. Participants' believed this developed feelings of responsibility to love, care for and help others. When Catherine was asked why she provided help in an emergency delivery of a baby, and Claire was asked why she helped someone who had fallen over in the street they replied:

> *… it's a Christian thing that you help other people that, you know that need you and don't stand back and let people suffer, people need help, you can't just stand by and not help people, I mean that's what we're here for isn't it?* (Catherine, 74 years old)

> *I have a spiritual understanding of God and those kind of things, there's something in that for me as well about understanding the deeper compassions of life. I get that, that's really deep for me, so, there's definitely something in that about caring for my brother or sister, you know another human being.* (Claire, 53 years old)

Current research supports the link between religious or spiritual values and prosocial behaviour. Li and Chow (2015), examined the effects of religiosity and spirituality on prosocial behaviours and found people attributed their tendency to help to their religious or spiritual values including love and hope. Similarly, King and Furrow (2008) investigated the effects of religiosity and spirituality on prosocial behaviour and found that having religious and cultural values increased the likelihood that a person will help another individual when in need.

At times participants of the current study believed their internal drive to help came from having taken care of a sibling or friend who was unwell, had a medical condition, or a mental health problem. Participants described looking after these relatives or friends, how the experience of helping others became part of their upbringing, and that they did not feel frightened by seeing unwell or injured people. Instead, participants had a frame of reference to refer back to and felt as though they knew what to do in a future emergency. Having

these experiences influenced participants' behaviour, becoming caring, helpful people who were driven by their moral and ethical values to help others. When asked why Max and Ken assisted strangers in an emergency they replied:

> *I think it's because my mate used to have seizures, we'd be playing in the park and he'd have a seizure, you had to do something* (Max, 61 years old)

> *… my sister had epilepsy and I knew, the problems she'd had when she'd have a fit and nobody would help her, and that's why I did it.* (Ken, 68 years old)

Current research similarly indicates that helping behaviour is increased in people who have a sibling with a medical condition. Prchal and Landolt (2012) found there were both positive and negative effects of growing up with an unwell sibling. The well sibling felt an increase in responsibility and was more involved in the caring role, which enabled them to develop a better understanding of people, and to become more compassionate, patient, tolerant, and mature (Prchal & Landolt 2012). It could be argued that if sibling relationships are influential to the development and application of prosocial behaviours, the relationships developed with peers may also influence helping behaviour.

At times, participants of the current study believed their internal drive to help others was developed by interacting with their cultural group, which in turn motivated them to help in an emergency. The term culture was an *in vivo* code or term used by participants when referring to groups within society, such as the Australian society, the area they live (i.e. rural or urban areas), and the culture of belonging to a volunteer group. The way the phrase was used by participants referred not only to a cultural group but a sociocultural group, however, participants used the term culture.

A common definition of sociocultural is the combination of social and cultural factors (Oxford Dictionaries 2016g); individually the term social relates to society (Oxford Dictionaries 2016h), while culture refers to the social behaviours (Oxford Dictionaries 2016i). Thus within this thesis the term sociocultural group refers to the social behaviours of a society or a group within society. Some participants believed that growing up in an environment as part of these sociocultural groups helped to form their moral and ethical values and their internal drive to help others. For example, James said:

> *I think culture is a big part of it, and just being an Australian. Australian culture is one that promotes helping people, especially helping people who are less fortunate than ourselves. You need to help them. They're tied to my drive, the way I've been wired ...* (James, 24 years old)

Being raised in an urban or rural environment was also reported to be influential to participants' internal drive to help others (the influence of rural and urban locations are detailed in *assessing the situation*, page 139). Participants who identified themselves as being raised in a rural environment believed they were more helpful than people who were raised in urban environments. Of note, people from urban areas also believed people from rural areas were more likely to help others. Participants from urban and rural areas felt there was a stronger community spirit in rural areas and believed being raised in this helpful environment meant rural people were inherently more helpful. Some participants also believed they would be viewed badly if they did not provide assistance in a rural area.

> *I'm from the country, I've lived in the country most of my life and those things [helping] are standard.* (Don, 62 years old)

> *Country people tend to be more caring and more sharing that's the way they live, it's a different style of living …* (Ralph, 71 years old)

If a participant belonged to a club, for example Rotary Australia or sporting clubs, they often described belonging to a cultural group. Members of these 'helping' clubs or groups often volunteered their time so they could help others. Being in an environment where people volunteer their time to assist others was believed to influence participants' internal drive to help. Again they were surrounded by helpful people, thus they emulated behaviour associated with the kind of person they aspired to be.

> *I'm a Rotarian now. I've always volunteered.* (Lizzy, 49 years old)

> *… you are there for a bunch of lads and somebody needs to be there for them, you just do it because it's a good thing …* (Leonard, 69 years old)

Paciello et al. (2013) examined why people offer or omit assistance and found that identifying oneself as part of a cultural group increases prosocial behaviour, such as helping,

because the person is motivated by moral responsibility. In research on the cost and reward of prosocial behaviour, Dovidio et al. (1991) found that prosocial behaviour increases if the person identifies the victim as belonging to the same 'group' as them, because they feel more responsibility toward a person who shares the same social identity.

Social role theory may account for why participants of the current study felt they developed their moral and ethical values, and internal drive to help from the environment and people who were influential to them. Social role theory was developed in the 1920's to explain patterns of human behaviour and the roles people play in society (Brookes et al. 2007). According to George Herbert Mead (1962), people define themselves through their social roles and the expectations and perspectives that society imposes on them. Behaviour in certain contexts is learnt as a result of the social roles imposed by self and others (Biddle 1986b). Koenig and Eagly (2014) suggest that as a result of experiences with group members within society, social roles are taken on, which predict future behaviour in certain contexts. Behaviours that people perceive as expected within a group are adopted as 'normal' behaviours for the individual (Koenig & Eagly 2014). However, the expectations can be formed from the individual's perceptions of the way society believes they should act, and from actual expectations of groups within society (Biddle 1986b; Koenig & Eagly 2014).

Within the current study role theory is a suitable framework to understand participants' internal motivating behaviours because they took on the role of someone who was caring and responsible to provide assistance to others, even if they did not help. Whether the expectation came from parents who were helpful within the community or from self-imposed expectations, participants identified with the 'helping' role and their behaviour was influenced accordingly. It appeared that participants' beliefs, views and experiences were referred to when constructing social roles that influenced their behaviour. For example, the expectation that people from rural areas would provide assistance in an emergency. This role was constructed by participants' belief that helping was an expectation for people in rural areas; whether they themselves, society, or a combination of both imposed the expectation is unknown.

### 6.3.3 Factors influencing the internal driver of responsibility

Participants detailed factors that influenced their internal driver of responsibility. Factors included their role at the time they witnessed or encountered the emergency, their

perceived knowledge and skill of first aid, the perceived inability to rely on others, other people's opinion of them, and the desire to be helped in the future (reciprocity). Each of these have been detailed below.

#### *6.3.3.1 Role at the time of the emergency*

A number of participants were volunteering at an event or working when they witnessed or encountered an emergency. These participants believed their role made them responsible to provide assistance, which increased their motivation to help. For example, Lizzy (49 years old) believed her role as a teacher made her responsible to help others. Despite many of the emergencies not occurring at her place of work, where helping would be expected. Another example was Matt, who was volunteering at the time he saw a man fall two metres off a ledge onto the concrete below:

> *Well in that case I was expected to because we're in uniforms and that's what we're there for, plus we know that we're sober, plus we know that we have got tools, first aid kits, resources, people on the phone, people on the radio.* (Matt, 32 years old)

Participants constructed, or perceived society constructed, a role for them, and had a perception of what was expected of them, which increased the responsibility and the motivation to provide assistance.

Latane and Darley (1968) conducted a study experimenting with diffusion of responsibility and found that unless the bystander feels responsible they will not provide assistance. Similarly, in a study on prosocial behaviours and extensivity (a feeling of responsibility toward others), Einolf (2010) found that prosocial behaviour is positively influenced when the person feels responsible. Within the current study, the responsibility participants felt may have come from identifying with a particular role within society, and their inability to remain anonymous. In an experiment to determine the link between future interaction and the bystander effect, Gottleib and Carver (1980) found that when a person wears a uniform or an identification tag their ability to be anonymous within a crowd of people is reduced. This increases the social responsibility and the likelihood of providing assistance.

#### *6.3.3.2 Knowledge and skill of first aid*

Often participants believed because they had the ability to help they should offer assistance. This links closely with the category *assessing personal attributes*, presented in chapter seven (see page 101).

> *…at the time I felt that I [am] trained, therefore I should help…* (Matt, 32 years old)
>
> *…all three of us were first aid trained, so I went back.* (Don, 62 years old)

Although unable to locate literature linking knowledge in first aid and an increased drive to help, it was apparent with participants of the current study that the feeling of responsibility was influenced by having knowledge in first aid. These participants reported having undertaken first aid training and detailed the associated increase in responsibility they felt toward the victim. Participants suggested that an increased feeling of responsibility could be attributed to feeling a moral and ethical responsibility to provide assistance, to ensure they had done the best they could with the knowledge and training they had.

> *I just really feel that if someone needs assistance and I'm capable of providing that, then I should.* (Emily, 25 years old)

#### *6.3.2.3 Inability to rely on others*

Some participants believed they could not rely on other people to provide assistance in an emergency, which increased the responsibility they felt. They believed if they did not offer assistance no one else would, and the victim of the emergency would not receive help and may possibly die. The belief was predominantly founded by having previously assisted in emergency, yet was also expressed by participant's who had not helped previously.

> *… I don't know why I feel that I should do it, I guess I feel that other people won't necessarily do it …* (Matt, 32 years old)
>
> *… they were almost being run over by the people that didn't want to stop …* (Ralph, 71 years old).
>
> *I needed to help because nobody else was doing what needed to be done …* (Leonard, 69 years old)

> *… [I] noticed a guy assaulting a young woman and no-one was getting involved. [I] went in to stand up for the woman who was being belted around …* (Geoffrey, 74 years old)

Many participants who had never provided assistance also expressed concerns they would not be able to rely on others to provide assistance.

> *I had to help because no one else would do it, so many people are just there to watch but don't actually want to help …* (Ralph, 71 years old)

This concern was often attributed to the media and fictional movies and books portraying victims of emergencies and crimes being left without assistance. Participants concern that no one would offer assistance could be attributed to the bystander effect. Darley and Latane (1968) and Latane and Darley (1968) undertook research to try and understand the bystander effect, which was named as a phenomenon whereby the more people at the scene of an emergency, the less likely anyone is to help. Since this seminal research, the bystander effect has been tested many times, and the majority of experts have come to the same conclusion; responsibility to provide assistance is diluted when other people are present at the scene of an emergency. This phenomenon is known as diffusion of responsibility (Darley & Latane 1968). It is possible participants of the current study who had previous experience helping at an emergency, during which time no one stopped to assist them, experienced the bystander effect. While the participant was assisting the victim other people may have determined they did not need to stop to assist as the victim already had assistance. These participants developed a concern that other people would not stop because of this previous experience, thus were driven to provide assistance.

#### *6.3.3.4 Other people's opinion*

At times participants were motivated to provide assistance in an emergency to avoid other people viewing them negatively. The opinion of their family and others was important and they expressed not wanting to disappoint them.

> *… I often think to myself before I make decisions how would my parents view the decision that I've made, that's been an influence on me. When I reflect back upon it now I guess it's nicer to be able to say to your friends that, yeah I was the one that got up and did something.* (Alissa, 28 years old)

This concern positively influenced the internal drive to provide assistance, for example Ken who had provided assistance at five emergencies, expressed feeling an increased responsibility to help as he believed that was how he *should* act.

> *… if somebody's in trouble you stop and help them … because everybody does it …* (Ken, 68 years old)

Using terms such as *because everybody does it* indicated Ken felt it was his role to provide assistance. This self-imposed, or perceived social role, influenced his internal drive and his behaviour, and subsequently he provided assistance. Ken appeared to be concerned that other people would think negatively of him if he did not provide assistance, so adhered to this social role.

Being driven to help someone, to adhere to a social role, appears to fit within the extant literature. A study which investigated associated emotional and cognitive factors when receiving a request for help, and the reasons why people decided to offer or omit help, suggested that if the person has a fear of how others will view them if they do not offer assistance, their drive to help increases (Paciello et al. 2013). Similarly, Kilpatrick, Stirling and Orpin (2010) found that people were driven by a desire for social connection, which is similar to wanting people to view them positively. In contrast, eight studies discussed in the preliminary literature review, found that being concerned about other peoples' opinions was a barrier to providing assistance (Ashton & Severy 1976; Cacioppo, Petty & Losch 1986; Lu et al. 2016; Sasson et al. 2015; Sasson et al. 2013; Smith, Smythe & Lien 1972; Staub 1970; Tice & Baumeister 1985). Several participants of the current study did not provide assistance because of a concern about other people's opinion of them.

#### *6.3.3.5 Reciprocity*

Some participants were driven to provide assistance to a victim of an emergency in the belief that in turn they would be more likely to receive assistance in the future. When asked why he assisted a man having a cardiac arrest, Carl replied:

> *… I'd just like to think that if anything like that happened to me and somebody was around that they'd do the same thing for me. So it was just like I gotta do anything to save him, so I did what I could.* (Carl, 72 years old)

Similarly Leonard attributed his assistance partly to wanting others to help him in the future.

> *…if I was in a situation where I needed assistance I would expect people to try and do the best they can that's an expectation…* (Leonard, 69 years old)

Being driven to help someone so as to be helped in the future appears to fit with the theories of reciprocity. Reciprocity is when a person performs an action to receive a reward, and conversely is punished for not performing the action (Falk & Fischbacher 2006). For example, Cortes Barragan and Dweck (2014) found that altruistic helping can in turn elicit reciprocity from others. Thus, people are driven to help others because they have either been helped before or want to be helped in the future (Cortes Barragan & Dweck 2014). The theory of reciprocity could explain the motivation for helping for some participants in the current study.

Reciprocity also occurred retrospectively, with some participants of the current study who detailed personal experiences whereby they required bystander assistance in the past, which in turn increased their drive to want to help others;

> *I do recall when my last son was born and I had a placenta abruption, a bleed and I was rushed to the hospital. I was feeling really vulnerable and I was scared and I didn't know what was going on and I didn't know how it was going to end and I needed some reassurance. I've experienced it myself [needing help].* (Claire, 53 years old)

> *I've had a stroke and I know what it's like [to need help].* (Max, 61 years old)

Having a loved one who was previously a victim of an emergency situation was also a factor that influenced participants' internal drive to help in an emergency. These participants described feeling a sense of appreciation toward the responder who had selflessly helped their loved one. At times participants described wanting to emulate this behaviour.

> *… my mother had an accident and people stopped and helped her and it seemed to me that was the right thing to do. And she may have died had they not. If I can help then I will.* (Don, 62 years old)

> *… one of my students a really lovely year twelve girl had epilepsy she had two really bad seizures out in public. A woman was driving past the bus stop and saw her have a seizure while she was sitting at the bus stop, and that woman stopped and called an ambulance, well you know I thought that was a really good thing to do, now she didn't know her she just stopped, and stayed until the ambulance came and then drove off.* (Lizzy, 49 years old)

> *I guess I think maybe if it was one of my family I would want somebody to help them, or if it were me I would want somebody to help me …* (Patricia, 54 years old)

Whether the personal experience was in the form of needing assistance themselves, or someone they knew needing assistance, these participants described the experience as being influential when making the decision about whether to help in an emergency. Theories of reciprocity may explain why participants who had received assistance, or knew of others who had received assistance in the past asserted they were more likely to help in the future. However, the behaviour may also be related to mimicry, which is described as mimicking behaviour that one perceives as favourable. van Baaren et al. (2004) investigated prosocial behaviour and mimicry, and found that mimicry increases prosocial behaviour because the subjects wanted to emulate behaviour they found positive.

## 6.4 Chapter summary

Internal drivers are internal motivating factors that influenced bystander decision-making in an emergency. Whether the decision was made to provide assistance or to leave the scene of the emergency, a feeling of responsibility motivated participants to want to help. Internal drivers, and the responsibility to provide assistance were thought to be driven by moral and ethical values, which were developed through a combination of the influences of genetics and the environment the participant was raised in.

Participants' moral and ethical values and social roles were constructed throughout their lives, which influenced the way they saw the world and the responsibility they felt toward others. Several factors impacted on the internal driver of responsibility and could influence participants' motivation to provide assistance. Factors included the participant's role at the time of the emergency, their perceived knowledge and skill of first aid, their inability to rely on others, a concern about other people's opinions of them, and wanting to be helped or help others because of previous experience. The internal drive to provide assistance was

further influenced by cues and factors derived from analyses and assessments of the scene, situation, other people and the risks at the scene of the emergency. These analyses and assessments are discussed in the following chapters.

# CHAPTER SEVEN: ASSESSING PERSONAL ATTRIBUTES

## 7.0 Introduction

The previous chapter detailed the *internal drivers* which motivated people to provide assistance in an emergency. This chapter presents the second of four major processes performed when deciding whether to help in an emergency. *Assessing personal attributes* influenced the internal drive to provide assistance in an emergency. *Assessing personal attributes* is unpacked in this chapter to provide a clear explanation of the process and where it fits within the complex series of assessments and decisions that make up bystander decision-making in an emergency. The following diagram (Figure 5) situates the category in the substantive grounded theory.


**Figure 5: Assessing personal attributes: Initial social process enacted by bystanders when witnessing or encountering an emergency**

## 7.1 Assessing personal attributes defined

A common definition of personal attributes is the qualities or characteristics of a person, including their knowledge, skills, age, gender, and coping ability (Oxford Dictionaries 2015a). Within this thesis the phrase *assessing personal attributes* refers to the self-appraisal of one's qualities or characteristics to determine whether participants had confidence in their ability to provide assistance in an emergency. Participants considered their age, gender and emotional coping ability during this assessment.

Having an ability to do something refers to being proficient in an area, and possessing '…the means or skill…' to do it (Oxford Dictionaries 2015k). If participants of the current study deemed they had the ability to help, they described themselves as being confident. Confidence is a 'feeling of self-assurance arising from an appreciation of one's own abilities or qualities' (Oxford Dictionaries 2015l). Assessing personal attributes upon witnessing or encountering an emergency has been discussed in the bystander literature (detailed in the *preliminary literature review*, page 15), however what people base this decision on was not able to be located. Understanding how bystanders assess their personal attributes and the influence this has on the complex series of assessments and decisions has the potential to help explain why some people decide to provide assistance and why others leave the scene of the emergency without helping.

## 7.2 Assessing personal attributes

An emergency can occur anytime and anywhere. When participants witnessed or encountered an emergency they became involved in events in which they had to decide whether they would provide assistance. The assessment of personal attributes influenced the decision to provide assistance in a number of ways, including the following:

- Participants felt confident they had the ability to provide assistance, thus continued with the series of analyses and assessments.
- Participants did not feel confident in their ability to provide assistance, thus left the scene of the emergency without providing assistance.
- Participants did not feel confident in their ability to provide direct or medical assistance, thus provided other forms of assistance, such as helping with environmental tasks, for example moving debris, removing danger or directing traffic.

A*ssessing personal attributes* is closely linked with other categories in the complex cycle of bystander decision-making in an emergency. The assessment of personal attributes was influenced by cues and factors derived from analyses and assessments of the situation, emergency scene, risks and other people. For example, the type of emergency influenced the outcome of the assessment of personal attributes for some participants. Lizzy (49 years old) expressed feeling fearful about helping in an emergency which involved the ocean or electricity. She believed the concern for her personal safety would negatively influence the internal drive to provide assistance, and she would not help. Other participants shared similar concerns, which influenced their assessment of personal attributes.

> *I wouldn't be as confident in a car crash, I think drowning would be fine, I could fix a person who'd drowned …* (Catherine, 74 years old)

> *… I would react differently to the one we just discussed [car crash], I have a real fear of burns and fire, so I'm not quite sure how, how I would react if a car was to be in flames and it was getting somebody out of a car …* (Patricia, 54 years old*)*

Being confident to help in some emergencies and not others was, at times, due to a belief of where abilities lay. Some participants possessed confidence in their ability to deal with any emergency they encountered.

> *It takes a lot to shock me, I've seen people die, so yeah I'd do it ...* (Max, 61 years old)

Participants like Max described feeling confident to help at any emergency. They did not believe a risk to personal safety would influence their decision to provide assistance. Conversely, at times participants lacked confidence in their ability to provide assistance in an emergency.

> *… given my level of expertise, I'm not the one that needs to be there, I'm the one that needs to be out. It was very clear in my head about what I could contribute.* (Kim, 48 years old)

These participants often did not stop to provide assistance believing they may cause more harm to the victim of the emergency. They justified leaving the scene of the emergency, believing they did not possess the required ability to help. Other times participants believed

they had the ability to intervene in certain ways and not others. For example, Claire (53 years old) did not have confidence in her ability to provide medical assistance in an emergency, however she felt confidence in her ability to assist with non-medical interventions.

> *… even if I'm lugging bricks or moving trees out the way that is really valuable, even though it's not medical it's still valuable and in an emergency situation it's not only medical that's required.* (Claire, 53 years old)

Thus, assessing personal attributes not only determined whether participants had confidence in their ability to provide assistance, but also what they believed they had the ability to assist with.

The assessment of personal attributes relied on multiple cues and factors, for example having had previous experience with an emergency, and an assessment of several personal characteristics, for example age. The assessment of cues, factors and personal characteristics (detailed below) influenced participants' confidence in their ability, because they referred to them to construct justifications for why they should or should not provide assistance in an emergency.

## 7.2.1 Previous experience with emergencies

Previous experience with emergencies was believed to influence participants' confidence in their ability to provide assistance in an emergency. Participants detailed thinking about either their experience, or their lack of experience, which in turn affected their assessment of confidence and ability.

### *7.2.1.1 No previous experience*

Some participants reported having no previous experience with emergencies (prior to the emergency they were interviewed about). These participants lacked confidence in their ability to provide assistance in an emergency. They expressed feeling concerned because they did not know what to expect, and they felt unsure if they would be able to provide appropriate intervention and whether they would cope with what they might see. It is possible the lack of confidence could be related to not having a frame of reference to refer back to because they had not provided assistance previously.

As mentioned in the previous chapter, participants detailed referring back to previous experiences when assessing their motivation to provide assistance in an emergency. When assessing their personal attributes, they used these previous experiences as a reference when deciding whether they were confident in their ability to provide assistance. When they did not have an experience to refer to they felt unsure about their ability and were more likely to decide they did not have the ability to provide assistance in an emergency. As exemplified by the excerpt provided by Jim:

> *… the gore and the potential for seeing things you'd prefer not to see would worry me, having to deal with any sort of exposed innards or brain or something like that, might be a possibility …* (Jim, 56 years old)

The literature supports the notion of referring to previous experiences for how to behave in the future. O'Meara et al. (2015), Darley and Latane (1968), Latane and Darley (1969) and Dombrowski et al. (2012) all reported that individuals construct frames which are referred to when attempting to make sense of a situation. Dombrowski et al. (2012) also found people are more likely to help when they have assisted at an emergency in the past.

#### *7.2.1.1 Having previous experience with emergencies*

Some participants spoke about having provided assistance in an emergency situation, and how this experience positively influenced their assessment of personal attributes. Their previous experience was said to increase their knowledge of what to expect, thus they were no longer concerned about what they might encounter. Confidence in their ability to provide assistance in future emergencies increased and they were more likely to continue analysing and assessing to make the decision of whether to provide assistance.

> *I have some experience in dealing with emergencies and so I guess I don't fear them in that way. I sort of feel like I will know roughly what to do, or how to handle it and that probably makes me feel that I should act.* (Matt, 32 years old)

Previous situations included emergencies, witnessed or encountered, where the victim was a stranger; and emergencies whereby the victim was their relative or someone they knew. For example, Kim's (48 years old) experience of her husband falling from a zip line, badly breaking both his arms increased her confidence in her ability to provide assistance. Many

participants who had children detailed experiences of having to provide first aid to their child and their friends while they were growing up, for example, Claire said:

> *… as a mum you make decisions for your kids all the time, they've smacked their tooth through their lip or something and they're bleeding, what do you do? Or they've got a broken arm, you manage the risk of making the decisions, right or wrong, you have to trust your instinct and make the decisions.* (Claire, 53 years old)

These experiences increased their confidence in their ability to provide assistance and decreased some of the fear participants felt. They had provided assistance previously, thus knew what to expect, and believed they possessed the ability to help with other emergencies.

Each participant who had previously assisted in an emergency said they would assist again, irrespective of the outcome. Participants who described helping a victim who subsequently died also said they would provide assistance in the future. Past experience increased confidence in ability to provide assistance in future emergencies.

Similarly, having the knowledge and skills to provide first aid, which was predominately linked to confidence, was the most common theme in the reviewed literature (detailed in the *preliminary literature review*, page 15) (Axelsson et al. 1996; Axelsson et al. 1998; Dombrowski et al. 2012; Dwyer 2008; Sasaki et al. 2015; Urban et al. 2013). However, none of these studies explored reasons for the correlation. For example, Axelsson (2001) found that 99.5% of people who had performed BCPR stated they would assist again; 0.5% of people were unsure and none of the people stated they would not help again. Similarly, Dombrowski et al. (2012) and Kilpatrick, Stirling and Orpin (2010) found that past experiences can influence future actions. However, reasons for these findings were not explored. It is possible that assisting previously increased confidence to help again.

Literature on self-affirmation and prosocial behaviour could explain why at times participants of the current study were more likely to provide assistance at an emergency when they had previous experience. Self-affirmation is the ability to reflect to recognise and assert the '… existence and value of one's individual self' (Oxford Dictionaries 2016m). In a study to determine whether self-affirmation increases prosocial behaviour Lindsay and Creswell (2014) found a positive link between self-affirmation, feelings of compassion and

prosocial behaviour. It is possible that following providing assistance in an emergency participants of the current study went through a process of reflecting on the personal value of their experience, which positively influenced their internal drive to help in an emergency, and increased confidence in their ability.

Some of the participants who had previous experience with emergency situations described feeling 'desensitised' to emergencies, which reduced their fears and concerns and increased confidence in their ability. The term desensitised was used by participants when referring to having witnessed or encountered as many as thirty emergencies, and no longer feeling concerned about what they might see or have to assist with. The common definition of desensitisation is to 'make (someone) less likely to feel shock or distress at scenes … of suffering by overexposure to such images' (Oxford Dictionaries 2016n). Indeed, participants who described feeling desensitised to emergencies did not believe they experienced psychological reactions, such as fear or shock.

Desensitisation was described as being positively influential when witnessing or encountering an emergency and assessing personal attributes because participants did not perceive the emergency as being a risk to their personal safety, with regard to becoming traumatised (detailed in *assessing the risk*, page 175). They were less concerned about what they might see, or what they might have to intervene with, thus were confident in their ability to provide assistance.

## 7.2.2 Having first aid knowledge and a first aid kit

### *7.2.2.1 First aid knowledge*

There was a direct relationship between having undertaken a first aid course and participants feeling confident in their ability to provide assistance in an emergency. Participants reported gaining first aid knowledge through completion of a first aid course or through other methods, for example by watching television, or searching the internet. For example:

> *… having that first aid training I'm certainly confident that if something happens, I'm not going to be that useless female running about like a chicken with its head cut off …* (Emily, 25 years old)

The majority of the time, first aid training had been undertaken many years previously. Some participants had completed refresher courses, however most did not have a current first aid certificate. Even when first aid training was completed many years previously, participants expressed feeling confident they could recall their training and provide assistance in an emergency. For example, Geoff said:

> *… I went back to my surf life-saving days when I was a little nipper and you do first aid so sort of knew what to look for and what to do and what not to do.* (Geoff, 42 years old)

Repeated or more advanced training promotes retention of knowledge and ability to perform first aid skills (Anderson, Gaetz & Masse 2011), which may account for why some participants felt confident in their abilities, despite not having undertaken first aid training for many years. In a study on skill development for volunteering in rural communities Kilpatrick, Stirling and Orpin (2010) found a correlation between level of training and the quality of the provided service, which may be why participants of the current study who had first aid training expressed having more confidence in their ability to provide assistance. One participant, Jim, had undertaken first aid training while he was in the Boy Scouts, the Citizens Military Force and the Army Reserve. He also described undertaking intense first aid training while he was at school. Despite not having undertaken a first aid course or a refresher course for many years, Jim remained confident he could assist in any emergency he encountered.

> *… it was pretty good preparation I thought, and that's what gave me the confidence to involve myself [in the emergency].* (Jim, 56 years old)

In contrast, despite having undertaken first aid training, some participants did not feel confident in their ability to assist with the emergency. The lack of confidence in ability often stemmed from the extended time since they had completed first aid training and concerns they had not retained enough knowledge to provide help in an emergency. It is likely that some participants doubted their ability to help in an emergency, despite undertaking first aid training in the past, due to lack of confidence rather than an actual lack of ability.

> *… at the time I noticed that my medical knowledge was lacking, there were a few things where I didn't quite know what to do, I'd been taught it, but just couldn't remember. That certainly prompted me to make sure I did keep up the first aid training and just make sure the knowledge is really firmly cemented …* (Emily, 25 years old)

> *… I think I was better at first aid at the time, you know my training was more up to date and more experience closer to hand …* (Matt, 32 years old)

Previous studies have examined the effect of first aid training on bystander assistance (see *preliminary literature review*, page 15) and found that following first aid training knowledge, associated knowledge and quality of performance is increased. In a study involving 773 respondents looking at prevalence of first aid training and utilisation of first aid skills, Arbon, Hayes and Woodman (2011) found that first aid training increased confidence in ability, thus likelihood of helping increased ($p < 0.001$). Similarly, in a systematic review of the efficacy of non-resuscitative first aid training Van de Velde et al. (2009) found that bystander helping rates increased following first aid training.

However, there is debate about how quickly first aid knowledge decreases after training. Anderson, Gaetz and Masse (2011) conducted a study to assess first aid skill and knowledge decay and found that one day post first aid training around 70% of people could accurately open the airway. This result fell to 33% after two days and had deteriorated to 'unacceptable' levels within thirty days (Anderson, Gaetz & Masse 2011, p. 5). Similarly, de Ruijter et al. (2014) undertook a study on 120 medical students to ascertain if they retained first aid and basic life support (BLS) training. One year post training only 2% passed both first aid and BLS stations and 68% failed both stations.

In contrast, Bollig, Wahl and Svendsen (2009), undertook a study of children's performance of first aid after first aid training and found those who were provided with five lessons of first aid training at school retained the majority of knowledge and ability to perform measures six months after training. Similarly, Riegel et al. (2006) and Christenson et al. (2007) in studies looking at retention of CPR knowledge and skills in adults found that seventeen months and twelve months post training (respectively), there was little to no degradation of CPR knowledge or skills.

Within the current study, first aid knowledge was learnt not only by attending first aid training programs, but also through activities such as watching television programs, reading posters and leaflets, being taught by friends or family members, reading books, and searching the internet. These participants believed they either learnt how to provide first aid, or had their memories refreshed due to these various methods, which made them feel better prepared, increasing their confidence in their ability to help. For example:

> *… I've seen it on television, CPR and you always pick up leaflets at the doctors and I probably would have been able to do it, probably not as efficiently. Because, I knew where to compress and how many to do ...* (Carl, 72 years old)

Participants were not watching programs that were designed to teach first aid, but programs such as *Bondi Rescue*, which focuses on the life-saving efforts of life guards on Bondi Beach in New South Wales, Australia and *Grey's Anatomy*, a fictional American medical drama. It could be reasoned that when watching programs such as these people are passively learning first aid skills such as CPR, as was described by Geoff.

> *… a TV show like Bondi Rescue, you actually learn some things off that through watching it because my kids are young and we're, down the beach all the time, so you can sort of speak to them about scenarios. You can watch things and learn things from there as well, a bit of an education tool …* (Geoff, 42 years old)

In a study looking at the effects of television on knowledge growth, Shehata et al. (2015) found that learning occurs while watching television programs (active and passive learning), even when the person is not interested in what they are watching. Passive learning refers to '…knowledge attainment in the absence of personal motivation or interest' (Shehata 2013, p. 205). Within the medical domain, Portanova et al. (2015) and Jones, Brewer and Garrison (2000) who conducted studies on the accuracy of CPR on popular television medical shows both found that many people reported learning first aid measures through watching television.

It is likely participants of the current study were both actively and passively learning while watching television, which contributed to increased confidence in their ability to provide assistance in an emergency. It is also possible participants mimicked what they had seen on these television shows. As discussed in the previous chapter mimicry is where a person

unconsciously imitates another person (Carpenter, Uebel & Tomasello 2013). If participants of the current study watched television shows that depicted people performing first aid interventions, they may have possibly mimicked these behaviours, which could account for why they believed these shows increased confidence in their ability to help in an emergency.

Some participants described actively seeking out first aid knowledge by looking at pamphlets in the doctor's surgery, or by researching on the internet. These participants felt confident they could keep up-to-date with current first aid guidelines, which increased confidence in their ability to provide assistance in an emergency. Participants who actively sought out first aid knowledge did so by accessing information through sources they believed were the most reliable and accurate.

Actively seeking information about a topic is known as information-seeking behaviour and is undertaken when there is a perceived deficit in knowledge (Muusses et al. 2012; Zare-Farashbandi et al. 2015). In a study to determine the link between information-seeking behaviours and mass-media information sources, Muusses et al. (2012) found that health information is regularly sought through methods including those asserted by participants of the current study. Similarly, Zare-Farashbandi et al. (2015) researched information seeking behaviours in people with diabetes and found that information is sought by people who require knowledge of a particular area. These methods were employed by participants of the current study to increase their knowledge when they believed there was a deficit. Finding information on first aid intervention and guidelines increased confidence in their ability to provide assistance in an emergency. Irrespective of where knowledge was acquired, having knowledge of first aid increased participants' confidence in their ability to help in an emergency.

#### *7.2.2.2 First aid kit*

Some participants reported an increase in confidence of their ability to provide assistance in an emergency if they had a first aid kit. Confidence was thought to come from feeling prepared to protect themselves against the risk of infectious disease (ID) (further discussed in *assessing the risk*, page 175). Items such as gloves, CPR face masks and bandages were carried in participants' car and/or handbag to ensure they were prepared at all times, thereby increasing confidence. Carrying these items did not necessarily mean these participants would help, but they did feel better prepared. It is evident by the language Jim

uses in the following excerpt that carrying a first aid kit increased his confidence to help in an emergency.

> *… I've gradually acquired what I call a basic trauma kit with enough compression bandages and swabs, triangular bandages, I've got a Laerdal mask, bottles of saline for washing out wounds, so I've got a kit that I've made up. This means I'm prepared for anything.* (Jim, 56 years old)

The literature also supports the link between being prepared with a first aid kit and increased confidence. In a study undertaken to determine the level of emergency preparedness in households in Sudan, Ahmed, Salman and Arafa (2014), found that when people had first aid supplies they felt better prepared to deal with an emergency. However, this was not always the case in the current study. Some participants did not experience an increased confidence in their ability to provide assistance in an emergency even when regularly carrying first aid equipment. These participants claimed to not even think about their first aid equipment in the emergency situation, keeping them in the car to provide first aid to their family when away from home.

### 7.2.3 Age

Participants of the current study ranged in age from nineteen to eighty-one years. At times, participants who were younger (under 25 years) or older (over 65 years), asserted they were less confident in their ability to help in an emergency, and subsequently in many circumstances they chose not to help. For example James said:

> *… I lack being sure of myself, I can do something but I'll doubt myself. I believe that self-doubt was even present there [at the emergency], where I was like, 'there are older people who are handling it, and who am I to say that I can handle it better'. So there's that silly self-doubt, and it's something I'm really aware of ...* (James, 24 years old)

The younger participants, who lacked confidence in their ability to provide assistance, asserted their age was a barrier to helping with the emergency. They felt that because they were young they had less life experience and were less likely to know what they were required to do in the emergency.

> *… if they [adults] were like 'no you shouldn't be turning him on his side, no you should be doing this instead, no we should call the police not the ambulance', or something like that. I think that would probably get to me, if they corrected me, or like told me off, especially in an emergency situation where you're … trying to help as best as you can … that would be a deterrent.* (Paige, 19 years old)

At times, younger participants were concerned about what other people at the scene might say to them. They believed that 'the adults', as they called them, might voice the opinion they were providing incorrect intervention, further negatively affecting confidence in their ability. The combination of this concern and a lack of confidence influenced some younger participants' decisions, and they often left the scene without providing assistance. These younger participants often believed someone else, for example someone older, would have more ability to provide assistance, thus they left believing the older people at the scene would provide assistance.

> *I think it's hard because I'm so young, an adult would be much more qualified than me …* (Paige, 19 years old)

However, this decision was at times influenced by other factors, for example, the type of emergency (detailed in *assessing the scene*, page 134). If the participant perceived the emergency to be severe, their confidence was further influenced, and at times, they did not believe they had the ability to offer any assistance.

Literature on age and development claims there are psychological and physiological reasons that age affects prosocial behaviour. Bar-tal, Sharabany and Raviv (1982) studied helping behaviour and developmental stages and found that as the person ages, cognitive social-perspective and moral development become more advanced. They claimed that until the person is 'older' (age not reported) there are cognitive and conceptual limitations, which limit their ability to behave altruistically, or to feel morally obliged or responsible to offer help (Bar-tal, Sharabany & Raviv 1982). Conversely, Brownell (2013) undertook a study on early development and prosociality and found that prosocial behaviours, such as helping, were displayed in a child as young as two years.

Research also links physiological development and prosocial behaviour. A study that examined neurodevelopment and age reported that as a person ages there is an

interconnection of circuits within the prefrontal cortex, specifically the amygdala and insula (Decety, Michalska & Kinzler 2012). This interconnection is thought to be developing until early adulthood, which is why researchers link development, moral functioning, moral reasoning, prosocial behaviour and decision-making (Decety, Michalska & Kinzler 2012). Similarly, in studies which examined the interaction between the prefrontal cortex and cognitive processes (Salzman & Fusi 2010); and in another to determine the role of fronto-mesolimbic networks on influencing decisions (Moll et al. 2006), links were reported between age related physiological changes and prosocial behaviours. Each of these studies found that as a person ages physiological changes occur in their brain which increases moral reasoning and helping behaviour (Decety, Michalska & Kinzler 2012; Moll et al. 2006; Salzman & Fusi 2010).

These psychological and physiological changes in development may explain why younger participants of the current study were reluctant to provide assistance at emergencies. If moral functioning, moral reasoning, prosocial behaviour and decision-making abilities were not yet fully developed, then it is possible younger participants may not possess the internal moral drive to help another person. However, the literature is complex and varied, highlighting the complexity of bystander decision-making in an emergency, thus it is difficult to understand why participants believed their younger age was a barrier to providing assistance in an emergency. It is possible this belief was related more so to confidence and a perception of their ability to help.

The link between younger age and decreased self-assessment of ability is supported in the wider literature. Salonen et al. (2007) researched registered nurses working in intensive and emergency settings and drew the link between younger age (< 27.3 years) and decreased perception of abilities. They claimed perception of abilities was lower in the younger age group because of a lower confidence in their personal attributes (Salonen et al. 2007). Similarly, Arbon, Hayes and Woodman (2011) found that people aged 25 years and older possessed greater confidence, thus they were more likely to offer assistance. Respondents in the younger age group (aged 17-24 years), were less confident they could provide assistance at a car crash (Arbon, Hayes & Woodman 2011).

One participant of the current study believed younger age was a facilitator to providing assistance in an emergency. Mark felt he had more ability to help and had less

responsibilities because of his younger age, thus he was more likely to offer assistance in an emergency.

> *At the moment with my certain life circumstances, I would probably be more likely to stop just because, I don't have to consider children or anything like that so, I guess, because I have a bit less to lose than someone who's maybe slightly older, with children, it kind of gives me a reason to be more likely to want to attend to an incident …* (Mark, 19 years old)

Mark's view, however, was not shared by any other participant, and he went on to say that he believed that younger people might not offer assistance in an emergency due to less life experience. This could possibly be related to a reduction in confidence of ability. Mark's motivation to help was present, however he lacked confidence in his ability, thus help was at times not offered.

Within the current study, older participants (over 65 years) also reported lacking confidence in their ability to help in an emergency. Some of the older participants believed they were less physically able to help in an emergency; they said they were not as fit, strong or agile as they used to be, which in turn reduced confidence in their ability to help in an emergency.

> *… these days, I'm a lot slower, weaker, a lot less fit than I was. I would know that there is no way that I could help, in terms of physical involvement. I know things that I can't do now, but I used to be able to …* (Ralph, 71 years old)

Less confidence in ability to provide assistance in older participants was also related to a perceived reduction in mental capacity to help. These participants believed that as they aged they became less aware of what was happening around them and were less likely to notice an emergency had occurred.

> *Yes these days I might not be as aware as what I was, of things …* (Ralph, 71 years old)

The combination of feeling less physically able and mentally competent impacted on older participants' confidence of their ability to provide assistance in an emergency. These participants were less likely to offer assistance in an emergency. They believed younger

people were more competent to provide assistance, and often left the scene of the emergency believing younger people will help.

> *I know what I can do and what I can't do, and as I get older I know I'm not as strong, not as agile. You don't try to do something you can't do … leave it to the young one's …* (Catherine, 74 years old)

As with the literature on younger age and helping, research on older age and helping suggests both psychological and physiological reasons for a reduction of prosocial behaviours in older people. As detailed in the *preliminary literature review* (see page 22), older age was a barrier to providing assistance in an emergency. Dwyer (2008) reported an association between older age and decreased helping rates, which was attributed decreased confidence in ability to provide assistance. Reasons why older participants of the current study felt less physically able to provide assistance may have been related to 'the progressive loss of function in the older years …' which corresponds with a decreased ability to undertake physically demanding tasks (Pan American Health Organization 2012, p. 1).

As a person ages there are associated losses of physical ability, less tolerance to physical activity and decreased strength (Pan American Health Organization 2012). In a qualitative study looking at how people's life experiences influenced their perception of emergency preparedness, Cornell (2015) found that older people acknowledged deterioration of their physical abilities, and understood the implications when helping in an emergency. This finding supports those of the current study, where some older participants perceived a lack of physical ability, thus they understood their limitations.

Physiological reasons for a reduction in helping behaviour were investigated by Cacioppo et al. (2011) in a study which looked at the brain and age related changes. They found that as the person ages there is a reduction in the activation of the amygdala and arousal of the associated emotional and cognitive processes, which reduces the likelihood of noticing and reacting to negative stimuli (Cacioppo et al. 2011), such as an emergency. Hutton (2008, p. 6), suggests this can be attributed to 'vision, hearing and other sensory deficits and cognitive/neurological deterioration …' which influence how older people perceive the emergency.

These physiological changes may explain why some participants of the current study felt they no longer noticed emergencies. If their brains were not registering the emergency as negative, then emotional and cognitive processes were not aroused, inhibiting moral reasoning and associated decision-making required to assist at the emergency. Conversely, Cornell (2015, p. 30) found that older people experienced deterioration in physical ability, yet felt confident their past experiences prepared them and '… left them feeling comfortable and strong enough mentally to deal with any potential future emergency'.

It is difficult to ascertain exactly why older participants of the current study expressed feeling less confident in their ability to provide assistance in an emergency. However, it is important to understand that age (both younger and older) was at times seen as a barrier to providing assistance. One older participant, Ralph (71 years old), believed that as he has aged he has become more caring, although he did not believe this was linked to likelihood of helping. Perhaps with age Ralph's internal drive to help increased, because he cared more about the outcome of the victim, however he lacked confidence in his physical ability and mental capacity to help, thus he did not offer assistance.

Both younger and older people were less likely to provide assistance (shown in the results of the current study and in the reviewed literature), related to an assessment of personal attributes and the realisation they were not confident in their ability to help. However, when faced with an emergency situation, it is possible many younger and older people would provide assistance. At the very least they may continue to cycle through the series of assessments and decisions and be influenced by the cues and factors derived within. These interactions may have positively or negatively influenced their decision and age may not have been considered.

### 7.2.4 Gender

Some participants considered their gender when performing an assessment of personal attributes and believed it impacted confidence in their ability to provide assistance in an emergency. Some male participants believed that because they were male, they were stronger and had less fear or inhibitions than females. Because of this belief they felt more confident in their ability, thus were more likely to assist in an emergency. For example, when talking about why he believed more men provide assistance in emergencies Ralph said:

> *… I think it's this more reckless disregard for personal feeling, I think that probably sums it up. It's the risk, associated with it. I think, that males do tend to jump in …* (Ralph, 71 years old)

In contrast, some female participants believed they were more likely than men to help in emergency situations. They believed they were more nurturing, caring and maternal, thus were more confident in their ability to provide assistance to the victim.

> *… women are maybe a little bit better equipped than men are, only because they tend to be more caring, men can be a little bit sort of anti-blood and a bit more, I don't know, squirmish, whereas women tend to seem to cope better with that sort of thing, but that aside I think physically, intellectually they're probably, equal.* (Penny, 54 years old)

Gender was also reported to negatively influence the perception of ability to provide assistance in an emergency. Both male and female participants felt there were times their gender could contribute to an increased risk to personal safety or a risk of embarrassing one's self (concepts discussed further in *risk assessment*, page 175). For example, Claire believed her female gender put her at more risk of being attacked by someone who was setting her up.

> *… if I was walking to the car park at nine o'clock or ten o'clock on a Thursday night that would affect it [the decision of whether to stop], I would try and see what's going on from a distance, but I doubt that I would get close, and if it was a man I wouldn't get close …* (Claire, 53 years old)

Research on gender appears varied, with some studies suggesting more males assist (Bakke et al. 2015; Sasson et al. 2011); others asserting that 'masculine' men do not offer assistance (Tice & Baumeister 1985); some saying more females provide assistance (Dombrowski et al. 2012; Faul, Aikman & Sasser 2016); and others claiming that no one gender offers help more often (Eagly 2009). What seems to be a common theme in the literature is that males are more likely to help if the emergency involves physical exertion (Eagly 2009), danger (Hyde 2014), or a female victim (Tice & Baumeister 1985).

What is not apparent in the extant literature is the link between gender and confidence in ability to provide assistance in an emergency. As suggested above, within the current study

gender (male and female) was seen as being a barrier or a facilitator to providing assistance in an emergency. Gender was considered when assessing personal attributes, which influenced the decision of whether participants had the ability to provide assistance.

The perception of gender as a barrier and facilitator to providing assistance in an emergency may be related to social roles - roles that society socially constructs that guide behaviours, responsibilities and beliefs (Oxford Dictionaries 2016o). For example gender roles, which are roles imposed by society which dictate appropriate behaviours for males and females (Eagly & Crowley 1986a; Eagly & Wood 1999). A meta-analysis of gender similarities and differences and prosocial behaviour found that men and women provide different types of help, which was attributed to gender roles (Eagly 2009).

Men were traditionally seen as helpers by society, especially altruistic helpers, such as heroes. Eagly and Crowley (1986b) who undertook a meta-analysis on gender differences and helping, describe a hero as someone who takes risks, who is calm and adventurous, and someone who can cope with pressure. They found that when faced with a dangerous act, such as an emergency situation, women may perceive it to be more dangerous than a male, because of the ascribed gender role. They claim that women may not feel the pressure to act heroically, yet men feel an obligation (Eagly & Crowley 1986b). A more recent review looking at the theories of gender difference suggested males were more likely to assist when other people were present, related to a desire to be seen as a hero (Hyde 2014), which again relates to gender roles. In a study to investigate prosocial behaviour and gender differences it was found that males were more likely to help where the risk is greater and where strength is required (Erdle et al. 1992). These authors suggested male helping behaviour fits with the ascribed social role for a male to be chivalrous or a hero.

In contrast, the research suggest that females are more likely to help in emotional emergency situations, for example when a child is involved (Hyde 2014). Females are seen by society to have the gender role of being empathetic, understanding and nurturing (Eagly 2009; Eagly & Wood 1999; Hyde 2014), thus are ascribed this role. It was also reported that females were more likely to diffuse responsibility to others (Tice & Baumeister 1985), although reasons were not explored. It is possible this diffusion of responsibility could relate to the female gendered role being meeker and less willing to put themselves in dangerous situations.

Within the current study there were instances in which both male and female participants did not offer to help in an emergency, however gender was considered while assessing personal attributes and often influenced participants' confidence in their ability to provide assistance. It is possible these results were related to social roles, and the belief that one should behave in a certain way, in certain situations.

### 7.2.5 Emotional coping ability

The assessment of personal attributes was at times influenced by the participants' confidence in their ability to cope emotionally. A common definition of coping is having the ability to deal with something in an effective manner (Oxford Dictionaries 2015p). Participants who spoke of this believed they would not have the ability to cope with the emergency scene and would become traumatised by sights of blood or severe injuries. These participants reported a lack of confidence in their ability to provide assistance, and some left the emergency scene without helping. For example, Kim witnessed a truck collide with a car, assessed her personal attributes, and did not feel confident with her ability to cope emotionally.

> *I'm not great with blood though, I probably would've fainted or something completely useless.* (Kim, 48 years old)

Kim left the scene of the emergency without helping, believing she would be traumatised by what she would witness. There were times these participants did not leave the scene of the emergency but provided non-medical intervention instead, for example removing debris.

> *If a child was injured or dead, I myself would then be of no value because I'd go into shock. I would not be able to make a clear decision, so I would be of no help to anybody, I would in fact be a hindrance just being there. If I was still needed I would go to another part of the incident.* (Claire, 53 years old)

Other participants reported putting the victim before concerns of how they would cope, and prepared themselves for what they might find. These participants continued cycling through the assessments and decisions before they made the decision of whether to provide assistance. Participants assessed their personal attributes to determine whether they had

confidence in their emotional coping ability, although how this affected the decision of whether to provide assistance was varied.

It is not uncommon for seasoned emergency personnel to struggle to cope with particularly horrific emergency scenes (Thygerson, Gulli & Krohmer 2007). Thus it is possible that someone with no medical training and few experiences with emergencies might lack confidence in their ability to provide assistance. Axelsson (2001) reported that with repeated first aid training people developed the skills needed to cope with extreme stressors such as emergencies. This may be similar to the desensitisation described by participants of the current study. With repeated exposure to something, for example first aid training, the anxiety and stress associated with the stimuli reduces, and the person is able to cope more effectively (Thygerson, Gulli & Krohmer 2007). This could account for why some participants of the current study who had undertaken first aid training many times, or had assisted in a number of emergencies reported feeling confident in their ability and their ability to cope emotionally with any emergency they might encounter.

## 7.3 Chapter summary

Assessing personal attributes was the second of four major processes enacted upon witnessing or encountering an emergency. Participants assessed whether they were confident in their ability to provide assistance in an emergency. The assessment of personal attributes had a significant impact on bystander decision-making in an emergency, and although components of the assessment have been discussed in the literature, I was unable to locate any studies that did so in-depth.

The assessment of personal attributes influenced the internal drive to provide assistance, but despite participants being motivated to provide assistance they did not necessarily stop to help. Confidence in one's ability to provide assistance in an emergency was influenced by a number of factors including having completed first aid training, learning first aid measures through other sources, for example television shows, and the participant's age, gender and perception of emotional coping ability. Participants' perceptions of how these factors influenced confidence in their ability, and whether in turn they were a barrier or a facilitator to providing bystander assistance in an emergency were varied.

At any time while assessing personal attributes, the decision could be made to leave the scene of the emergency without providing assistance. This decision was influenced by many competing factors, which have been covered in-depth in the following chapter. Chapter eight presents factors that compete with the motivation to provide assistance in an emergency and provides a discussion of the relationship between the categories in the grounded theory.

# CHAPTER EIGHT: ASSESSING COMPETING FACTORS

## 8.0 Introduction

The preceding chapter detailed the way in which personal attributes were assessed when deciding whether participants were confident in their ability to provide assistance in an emergency. While this assessment was being performed, an assessment of competing factors was enacted to determine whether any factors were deemed more influential to the decision of whether to provide assistance in an emergency. This chapter details these competing factors and how they influenced the series of assessments and decisions and the ultimate decision to stay to provide assistance, or to leave the scene of the emergency without providing assistance. Figure 6 situates the category in the substantive grounded theory.


**Figure 6: Assessing competing factors: Social process enacted when deciding whether to help in an emergency**

## 8.1 Competing factors defined

The terms *competing* and *factor* are commonly used when referring to elements that rival one another in order to gain superiority (Oxford Dictionaries 2015b, 2015c). Within this thesis competing factors are elements that contest with the motivation to provide assistance in an emergency. These factors were influential to the series of assessments and decisions and the ultimate decision of whether to provide assistance in an emergency. Competing factors included participants' prior engagements, mood, and being unwell, injured or having consumed alcohol at the time of the emergency.

## 8.2 Assessing competing factors

When witnessing or encountering an emergency a decision must be made whether to provide assistance. Participants were motivated by their responsibility to provide assistance in an emergency and assessed their personal attributes to determine whether they had confidence in their ability. If they determined they had the ability they assessed whether any factors were more influential than their drive to provide help. These processes were interconnected and interdependent and participants cycled back and forth through them when making the decision of whether to provide assistance in an emergency.

### 8.2.1 Prior engagements

Prior engagements were often considered when deciding whether to assist in an emergency. A prior engagement was something participants were doing, or somewhere they were going, before witnessing or encountering an emergency. Prior engagements included going to work, going to pick up their grandchildren and going to do the shopping. At times participants considered whether their prior engagement was more influential than their internal drive to provide assistance in an emergency. For example Claire said:

> *… if I suddenly come across a car accident at three o'clock in the afternoon and I've got to pick up the kids right now, I would think that my family would come first, my children would come first and my grandchildren would come first and then the strangers.* (Claire, 53 years old)

When assessing prior engagements, participants made one of two decisions:

1. Their prior engagement was considered, however their internal drive to provide assistance was more influential to their decision and they continued with the series of assessments and decisions that make up bystander decision-making in an emergency.
2. Their prior engagement negatively influenced their decision and they left the scene of the emergency without providing assistance.

For some participants the driver of responsibility was more influential than their prior commitment. For example:

> *… you still stop. Because I've got something to do every single minute of my life, I'm just so busy, I wouldn't think of that [the prior engagement], I would think of the accident at that moment …* (Lizzy, 49 years old)

> *No, no, they've got to come first their life is very important. I'd have to think about it a bit more, but no [prior engagement would not take precedence].* (Catherine, 74 years old)

Conversely, when a prior engagement was considered more important than providing assistance participants left the scene of the emergency without assisting. For example, when Paul (45 years old) encountered a car crash he did not stop to help because he was on the way to a job interview which he considered more important than providing assistance to the victim. Paul did not experience any negative feelings and as he was able to justify his decision based on his assessment of competing factors.

Participants who left the scene, justifying their decision based on their prior commitment, believed the prior commitment was more important than providing assistance. These participants felt more responsibility toward their prior commitment, and less responsibility to the victim of the emergency. They were motivated by the responsibility they felt toward what they perceived was more important at that point in time. Important prior commitments usually involved the participant's children or grandchildren. The majority of the time commitments such as employment were not often considered more important than helping in an emergency. Participants justified their decision to leave the scene of the

emergency without helping. They believed they made the right choice, under the circumstances, and did not experience any subsequent negative feelings.

> *I would weigh it up, what is more important. If it was just work probably no. I would assess that a person's life is more valuable than my workplace, and you can't feel bad about that …* (Claire, 53 years old)

There were occasions where participants felt conflicted between the importance of their prior commitment or assisting in the emergency. The following excerpt illustrates the conflict Claire would feel when deciding between providing assistance in an emergency and attending to her prior commitment:

> *I don't know how long that would take out of my life, my busy schedule. Having to run to get kids from school, having to run to get to work, having to carry home groceries. Then it would cause the whole day to go shemozzle. I would take a double take to see what it requires of me, how much it's [the emergency] gonna ask of me …* (Claire, 53 years old)

These findings are similar to those reported previously in the *preliminary literature review* (page 24), whereby prior commitments were viewed as a barrier to providing bystander assistance in an emergency (Batson et al. 1978; Darley & Batson 1973; Faul, Aikman & Sasser 2016; Ross, Winter & Mossesso 2000; Vaillancourt et al. 2014). In a retrospective analysis to determine the situational circumstances associated with bystander interventions during a medical emergency, Faul, Aikman and Sasser (2016) found that when someone was busy at the time of the emergency they were less likely to offer assistance. Similarly, Ross, Winter and Mossesso (2000) sought to understand why black victims were less likely to receive BCPR, and Vaillancourt et al. (2014) to identify barriers and facilitators to CPR training and performing CPR. Both studies found that when a person is busy, willingness to offer assistance is reduced.

None of these more recent studies offered reasons for the correlation between being busy and reduced likelihood of helping, however some older studies provided insight. When a person feels an obligation toward someone (prior commitment) the responsibility toward helping in an emergency reduces, however when the prior engagement does not involve an obligation or responsibility to another person then being busy appears to have little to no

effect on helping (Batson et al. 1978). A book on the ethical failures in leadership suggests that people are often mistaken about the importance of their prior commitments (Price 2006, p. 81) which may account for participants of the current study feeling as though getting to work, or going to pick up the grandchildren was more important than providing assistance in an emergency.

### 8.2.2 Mood at the time of the emergency

Mood, for example being angry, upset, or emotional was an influential factor for some participants when deciding whether to help in an emergency. At times participants reported not helping in an emergency when in a bad or emotional mood. These participants believed they were less likely to notice an emergency, and felt they would not be of any use when consumed with the mood. They considered the competing factor (negative mood) and decided to leave the scene of the emergency without providing assistance.

> *… you wouldn't be any use to anyone, you'd get out and shout and yell. I think probably be better to stay away.* (Catherine, 74 years old)

> *… if you're really, really angry or really upset then you may not even notice they need help.* (Ken, 68 years old)

If participants were consumed by their mental state and believed their decision-making would be affected, they felt they were less likely to notice the emergency and could possibly make the situation worse by assisting at that time; therefore they did not stop to assist. These beliefs provided the justification for participants' actions, thus they did not experience any negative feelings associated with their decision to leave the scene of the emergency.

> *… if I was emotionally unstable and furious I think I would've gone over the point of being helpful, my decision-making would've been scarred, my own emotional state would've been already tender and I just couldn't trust myself to make the right decisions …* (Claire, 53 years old)

Conversely, some participants did not consider their bad, angry, or emotional mood when cycling through the assessments and decisions; thus the decision of whether to provide

assistance was not affected. Participants described putting the mood aside and giving the emergency priority. For example:

> *… there's sort of an ethic, a responsibility, and you have to get over that [the negative mood]. And as I say an accident concentrates the mind wonderfully, most other things go out of my mind …* (Lizzy, 49 years old)

> *… you'd think that person's [victim] worse than me, that one needs help, I don't, I'm just frustrated. I'd still stop.* (Max, 61 years old)

The effect of mood on helping behaviours has been widely researched. According to Forgas (1995), who investigated the role of emotional states on social judgements found that when an individual is focused on the mood state they become less aware of situations around them. Kosnes, Pothos and Tapper (2010) undertook a study to test emotional state on the interpretation of a social stimulus and found that the time taken to deliberate over the stimulus is affected by an emotional state. In an emergency context this may equate to a person who is experiencing a negative mood taking longer to decide whether they will provide assistance in an emergency, or may mean the person has already passed the emergency before assessing the cues and factors. These studies may help to explain why some participants of the current study felt consumed by their mood, or felt they would be less aware of the emergency, and were less likely to provide assistance.

### 8.2.3 Being unwell or injured

If a participant was feeling unwell or was injured at the time they witnessed or encountered an emergency the internal drive to provide assistance was negatively influenced. They were concerned they would be of no use if they were feeling unwell, and feared passing on their illness to the victim, therefore left the scene of the emergency without providing assistance. Other participants believed they would be less likely to notice an emergency if they were feeling unwell, and would unintentionally leave the scene of the emergency. Similarly, some participants felt they would not help in an emergency if they were injured in some way. For example:

> *… you've got to think about your capabilities. If I'd just had my knee operated on and I could hardly walk, there was no way I'd be any use at all, you just can't do it, and I*

> *wouldn't feel guilty about it, there wouldn't be any reason for me to go and help somebody.* (Catherine, 74 years old)

> *If you had something that you thought you might pass on to somebody, obviously you wouldn't stop to help would you, I mean if you physically weren't well enough to be doing anything well you shouldn't be helping …* (Margaret, 81 years old)

Although participants believed they would not notice the emergency (which may be the case when answering a hypothetical question), participants who had experienced being unwell or injured when witnessing or encountering an emergency must have noticed the emergency to have spoken about it during the interview. However, at times participants justified leaving the scene of the emergency without providing assistance by rationalising they may further injure themselves or infect the victim, thereby not experiencing any associated negative feelings.

Other times, participants who were unwell or injured at the time of the emergency were uncertain about their decision, their internal drive motivated them to provide assistance yet the competing factor (being unwell or injured) influenced their decision. At times, they described weighing up the decision of whether to help despite their illness or injury, thus they cycled back and forth while decision-making.

> *… you would do your calculations in your mind but yeah something like a cold, I don't know, unless it was maybe something like you had a really bad back thing where you couldn't lift somebody, I'd still help but I might say to somebody else 'could you do that part of something for me', because I can't do that ...* (Patricia, 54 years old)

Often participants provided assistance, but in a less direct way, for example by phoning emergency services, or directing others to help instead.

> *… I could damage myself if I was sick with a virus I could infect somebody who's already vulnerable. I wouldn't get out of the car, I would still assess to see if I could call an ambulance or call the police. I would've stood back and encouraged somebody else to come and help, I would've asked somebody else to come and help and I would've jumped on the phone …* (Claire, 53 years old)

For some participants being unwell or injured at the time of the emergency would not influence their decision to help at an emergency; they would have wanted to be involved

with the emergency regardless. These participants felt the victim was more unwell or injured than them so they put their own feelings aside to help. When asked if feeling unwell at the time of the emergency would prevent her from helping Patricia replied:

> *… no I mean if they catch a cold and I save their life, sue me (laughs) ...* (Patricia, 54 years old)

The impact of personal illness and injury on helping behaviour is not evident in the extant literature and this current study therefore offers insights not previously explored. What was apparent with participants of the current study was their varying responses to different hypothetical illness/injury scenarios. There were times when participants were adamant they should not provide assistance when unwell or injured; yet at other times they felt conflicted about their decision, and detailed going back and forth between the interconnected processes involved in bystander decision-making in an emergency. This study also found that being unwell or injured could affect the level of care provided in an emergency because although participants were motivated to assist they worked to ensure their personal safety and the safety of the victim.

### 8.2.4 Consuming alcohol

The consumption of alcohol was a competing factor when making the decision of whether to provide assistance in an emergency. Some participants expressed no longer feeling as though they were competent to offer assistance if they had consumed alcohol. There was a concern they could possibly increase the harm to the victim as their judgement may be affected. For example, Claire said:

> *… if I'd been drinking alcohol I wouldn't get involved, wouldn't help, one glass of wine can affect your judgement and I might be overly chatty and not sensitive to the person and that would be one of the top priorities for me is to assess how they're going and meet them at their need, rather than be all up in their face and chatty and friendly, that's not what you need when somebody's distressed …* (Claire, 53 years old)

> *… you're useless [having consumed alcohol] you'd be more in the way ...* (Catherine, 74 years old)

The concern of causing harm to the victim related to the consumption of alcohol influenced the decision and at times participants left the scene of the emergency without providing assistance. Participants' confidence in their ability to provide assistance was affected and they were concerned their decision-making may be impaired. In contrast, there were times participants' motivation to provide assistance was more influential than the competing factor of having consumed alcohol, and they stayed at the scene and continued with the cycle of decision-making.

> *… if I had a couple of beers it wouldn't be an issue, that wouldn't stop me.* (Max, 61 years old)

Some participants felt uncertain about whether consumption of alcohol *should* prevent them from providing assistance in an emergency. They claimed they had not thought of the ramifications of helping until they were asked the question during the interview. It is possible these participants had not weighed up the risks associated with having consumed alcohol and having their judgement affected before offering to help in an emergency.

> *I probably would [help in an emergency after consuming alcohol], I probably shouldn't but I probably would…* (Ken, 68 years old)

Studies have been conducted previously into the effects of alcohol on judgement and decision-making. For example, a study investigating the effects of alcohol on the brain found that with moderate alcohol consumption grey and white matter are altered resulting in decreased neurocognitive performance and impaired decision-making (Jacobus & Tapert 2013). In contrast to findings from the current study that alcohol inhibits some participants likelihood of providing assistance in an emergency, studies in the extant literature have found that alcohol causes people to think of more of the benefits of helping and less of the risks involved, thus increasing willingness to provide assistance in emergencies (van Bommel et al. 2016).

Reasons why other participants in the current study did not consider alcohol consumption while assessing competing factors may be explained by the release of dopamine within the reward centres in the brain following alcohol consumption. Dopamine increases feelings of motivation, pleasure, and reward (Charlet, Beck & Heinz 2013), thus, people who have

consumed alcohol may have heightened feelings of motivation, which may increase their internal drive to provide assistance in an emergency.

## 8.3 Chapter summary

Upon witnessing or encountering an emergency a decision must be made whether to provide assistance. Participants in the current study performed an assessment of their personal attributes to determine whether they were confident in their ability to help in an emergency before assessing competing factors. Competing factors included prior engagements, mood, whether participants were feeling unwell, were injured or had consumed alcohol at the time of the emergency. Each of these factors had the ability to positively or negatively influence the decision to help in an emergency and participants could continue with the series of assessments and decisions, or leave the scene of the emergency without providing assistance. Chapter nine presents the main social process of *assessing the scene* which incorporates four analyses and assessments enacted upon witnessing or encountering an emergency and being faced with the decision of whether to provide assistance.

# CHAPTER NINE: ASSESSING THE SCENE

## 9.0 Introduction

The preceding chapters detailed the way in which *internal drivers* motivated participants to provide assistance in an emergency, while an *assessment of personal attributes* was enacted to determine whether participants had confidence in their ability to help. Participants undertook an *assessment of competing factors* to determine whether any factors were more influential than the internal drive to assist. This chapter details *assessing the scene* which is comprised of four complex, interconnected, interdependent analyses and assessments, namely *analysing the situation*, *assessing the situation*, *assessing the people* and *assessing the risk*, which are enacted upon witnessing or encountering an emergency. Each of these subcategories are detailed within this chapter. The following conceptual model (Figure 7) positions the category and subsequent sub-categories, in the substantive theory.


**Figure 7: Assessing the scene: Four interconnected analyses and assessments enacted when witnessing or encountering an emergency**

## 9.1 Assessing the scene

Assessing the scene is a complex series of processes comprised of four interconnected analyses and assessments undertaken to determine whether to offer assistance in an emergency. Assessing the scene consisted of participants performing an analysis of the scene, an assessment of the situation and the people present, and an assessment of the risk. The series of analyses and assessments did not necessarily occur only once, or in the order presented in this thesis, it was a cyclic, interconnected, interdependent process that varied for each participant. At any point in the series of analyses and assessments that make up assessing the scene, the decision could be made to provide assistance or to leave the scene without helping. I have chosen to present the analyses and assessments sequentially, using the 'linear logic' format advised by Charmaz (2014, p. 317) in order to guide the reader through each aspect of *assessing the scene*.

The assessment of an emergency scene incorporated individual analyses and assessments that participants could cycle back and forth between to inform their decision of whether to provide assistance in an emergency. An analysis of the situation was performed by participants to determine if what they were seeing was actually an emergency; an assessment of the situation was undertaken, whereby many aspects including the location of the emergency, time of day, victim characteristics and severity of the emergency were assessed; the other people at the scene were assessed; and an assessment of the risk was enacted to determine the risk to personal safety, to other people at the scene and to the victim of the emergency. Each of these analyses and assessments influenced the series of decisions that make up bystander decision-making in an emergency.

The wider literature supports some of the individual analyses and assessments incorporated within *assessing the situation*, however no study was located that brought together the series of analyses and assessments that a bystander enacts upon witnessing or encountering an emergency. The phrase *assessing the scene* was inspired by a continuous, dynamic procedure that is commonly performed by emergency services personnel in the pre-hospital environment within Australia. On arrival at the scene of an emergency, paramedics undertake a scene assessment to gather all the necessary information including hazards, safety concerns, number of victims, mechanisms of injury and natures of illness (Carter & Thompson 2015; Henry & Stapleton 2012). Despite none of the participants of the current

study being health care professionals, the series of analyses and assessments they used to assess the scene of the emergency encompassed aspects of the assessment paramedics perform. Within this thesis the phrase *assessing the scene* refers to looking at the emergency scene and interpreting cues and factors to determine whether to provide assistance in an emergency.

## 9.2 Analysing the situation

An analysis of the situation began with witnessing an emergency either visually or aurally, or encountering an emergency (unexpectedly coming upon an emergency), and then looking to cues and factors from the potential victim and from other people at the scene, and processing and building on them to determine if the ambiguous situation was an emergency. Many times an emergency was obvious to participants, such as the car crash Jim witnessed, or the fall Claire witnessed; other times it was less obvious, for example the cardiac arrest Alissa witnessed. In an ambiguous situation, participants' attention was drawn to something that was not quite right within that context; for example, Ken saw a man lying on the ground at a working bee. Ken thought the situation was unusual so analysed cues from the potential victim and other people to determine if what he was seeing was an emergency. Participants only analysed the situation whether it was ambiguous to them and they had to determine if it was an emergency. For example, Alissa said:

> *… an older gentleman walked in [to the doctors surgery] and he sat down near the reception desk, and he suddenly he made this weird sound, and it was kind of like '(sharp inhalation), hhuuhh!' and then his eyes closed, then he did it again '(sharp inhalation), hhuuhh!' It was abnormal and then I noticed his face going blue.* (Alissa, 28 years old)

Based on her observations, Alissa cycled through the process of combining cues together and analysing and interpreting them to inform her decision of whether the man had fallen asleep, or whether it was an emergency situation. Previous literature on bystanders in emergencies recognises the need for the bystander to interpret the event as an emergency (Darley 1978; Darley & Batson 1973; Darley & Latane 1968; Garcia et al. 2002; Latane & Darley 1968, 1969), but what was unable to be located were the cues that are looked to when making the decision to provide assistance.

There are famous examples in history of people who have misinterpreted cues and factors from an ambiguous situation and not realised that a situation was an emergency, for example the Bradford Stadium fire in 1985 in the United Kingdom. A small fire started in the benches of the stadium, yet video footage showed people cheering their football team on and watching the fire, without apparent concern (Gagnaire 2010). Within ten minutes, half of the stadium was ablaze leaving 53 people dead and 250 people injured (Vaghela 2009). People may have analysed the situation to determine if the small fire was an emergency, but unfortunately the event was misinterpreted and many people were injured or killed.

> *On 11 May 1985, at approximately 3.40 p.m., fire broke out in the main stand at Valley Parade, the home ground of Bradford City FC … the main wooden stand dating back to the Edwardian era was ablaze. The exits and turnstiles where many tried to escape were chained, trapping many supporters … making the disaster one of the worst in the UK's sporting history …* (Vaghela 2009, p. 756)

Participants of the current study also analysed other people who were present at an ambiguous situation to determine if they were behaving as though it was an emergency situation. Behaviour from other people that indicated it could be an emergency included screaming, being panicked, going to help the potential victim, and going to get help from someone else. After seeing or hearing the cues and factors, derived from other people, the participant then decided whether the ambiguous situation was an emergency. In the example below, Matt aurally witnessed an ambiguous situation and looked to see how other people reacted before deciding it was an emergency and going to assist the victim.

> *… somebody starts screaming outside and so we all looked at each other like 'what the hell? And I quickly walked out the back door and there's [a] lady saying 'my mother is dead', and she was hysterical …* (Matt, 32 years old)

The language used by both Matt and Alissa symbolises the importance of the analysis process to these participants. In both Matt and Alissa's situation, they were concerned about the risk of embarrassing themselves or the potential victim, so they waited and appeared to keep cycling through the analysis, building on cues until they were certain the unusual situation that drew their attention was an emergency. At other times the ambiguity of the situation and the concern of embarrassing oneself was not an issue and participants would gather cues by physically approaching the potential victim.

> *We were doing one of the fairs at Carrick Hill and one of the guys that had been helping disappeared, I thought 'where's he gone' and I've just glanced over the side and he's lying down on the grass and I thought oh no, I ran over and grabbed him 'are you alright', he said 'what, I'm just having a five minute nap' …* (Ken, 68 years old)

Alissa and Matt both used language to suggest they would not assist until they were sure the situation was an emergency. Risk of embarrassment has been further described in the *assessing the risk* section of this chapter (see page 175).

> *… I thought that's weird, but I accepted it and thought well maybe he's just fallen asleep, he's got narcolepsy or something strange like that, but then he did it again '(sharp inhalation), hhuuhh!' It was abnormal and I was starting to feel like there was something wrong and I should act, and then I noticed his face going blue and I thought yep there's definitely something wrong so I got up …* (Alissa, 28 years old)

The act of analysing the situation is commonly described in the bystander literature, although it is not named as such. The most pivotal model used to describe bystander decision-making was proposed by social psychologists Latane and Darley (1968). It remains the most referred to model for bystander intervention. They found that people undertake five processes while deciding whether they will intervene in an emergency. Steps one and two of the process, 1) to notice the event is happening, and 2) to interpret and determine whether the event is an emergency (Latane & Darley 1968), are analogous to the process of analysing the situation within the current study. Latane and Darley (1968) claimed that fewer people helped in an ambiguous situation as they were unsure if what they were seeing was actually an emergency. They found that in an ambiguous situation:

> *… the individual bystander is likely to look at the reactions of people around him and be powerfully influenced by them … nonresponsive bystanders would lead the individual to interpret the emergency as not serious, and consequently lead him not to act* (Latane & Darley 1968, p. 220).

In the situation described above, Matt looked to other people at the scene of the ambiguous situation and alluded to the other people being unsure of what to do, which influenced his analysis of the situation and the decision of whether it was an emergency. Similarly, in the situation described earlier, Alissa looked to other people at the scene to see if they appeared concerned it might be an emergency, or whether they were acting as though nothing was

wrong and the man was simply asleep. In this situation no one else appeared concerned, thus Alissa thought her concerns were unfounded and at that time did nothing.

> *… there were probably about fifteen people but no one was really doing anything …*
> (Alissa, 28 years old)

Participants analysed cues derived from the ambiguous situation and from other people at the scene, including other bystanders and the potential victim to determine if the event was an emergency. If they made the decision it was not an emergency they left the scene. Conversely, if they decided it was an emergency they continued to cycle through the analyses and assessments in order to make the decision of whether to provide assistance in an emergency.

## 9.3 Assessing the situation

After participants interpreted the situation as an emergency they performed a complex assessment of the situation. Within this thesis, the phrase assessing the situation refers to an evaluation of cues and factors derived from the scene and surroundings of the emergency, including the location (urban or rural location, and proximity of the emergency to the participant), the time of day the emergency occurred, the characteristics of the victim (including gender, age, appearance and behaviour), and the perceived severity of the emergency. No two participants responded in exactly the same way; cues and factors weighed differently for each participant and were not assessed in a particular order, instead they cycled back and forth while performing the series of assessments.

The assessment of the situation was enacted to gather information about the scene and surroundings of the emergency, which could influence, either positively or negatively, the internal drive to provide assistance, the assessment of personal attributes and the assessment of competing factors. The gathered information was used to inform and justify reasons for providing assistance, or reasons why the participant should leave the scene without helping.

As mentioned, beyond first aid training none of the participants were trained to respond to emergency situations, yet despite this, the assessment of the situation was similar to that used by emergency services when building situational awareness. Situational awareness is

the '… process of information receiving, processing, and decision making …' to gain knowledge about the circumstances and surroundings (Busby & Witucki-Brown 2011, p. 451). Bosse and Solaiman (2016) and O'Meara et al. (2015) claim that situational awareness can be gained from assessing the environment and accessing prior knowledge, feelings and perceptions to guide the assessment and to inform a hypothesis of the situation. For example, one might assess the emergency scene while consulting with prior knowledge, feelings and perceptions to decide whether there was a risk to personal safety, which in turn informed the series of decisions and the decision of whether to provide assistance.

Darley and Latane's (1968) bystander intervention model, described above, does not factor in any kind of assessment of the situation. Instead, they suggest the person notices the event, interprets the need for some kind of assistance, takes responsibility, decides what help to provide and finally provides help. None of these steps incorporated looking at cues and factors at the scene and surroundings of the emergency to inform the decision of whether to provide assistance. The current study goes further to compile the cues and factors participants found influential to the series of analyses, assessments and decisions. This resulted in the decision of whether to provide assistance in an emergency, while explaining the interactions within bystander decision-making.

### 9.3.1 Assessing location of the emergency

The location of the emergency was at times considered influential to bystander decision-making. The term location was an *in vivo* term used by participants when referring to whether the emergency occurred in an urban or rural location, and the proximity of the participant to the emergency. The location of the emergency could either positively or negatively influence participants' decision of whether to provide assistance.

Urban locations are characterised by larger population size, smaller spaces between dwellings, and greater concentration ratio of population to space (Weeks 2010). Within this thesis, the term urban has been used to refer to either metropolitan or suburban areas, as described by participants of the current study. A rural location is '… characteristic of the countryside …' (Oxford Dictionaries 2015d). Within this thesis the term rural has been used when referring to country areas, as described by participants.

To determine whether a location is considered urban or rural, the accessibility/remoteness index of Australia (ARIA) can be used by assigning a score between 0 (high accessibility) and 15 (high remoteness) (Australian Population and Migration Research Centre 2015). The locations described by participants of the current study as being rural, included Lobethal, Stirling, Loxton, Mt Gambier and the Barossa, which have varied ARIA scores (0.3689 – 4.2064) depending on the distance to the nearest Service Centres (Australian Population and Migration Research Centre 2015). These locations range from highly accessible (ARIA score 0 – 1.84) 'relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction', to moderately accessible (ARIA score >3.51 – 5.80) 'significantly restricted accessibility of goods and services and opportunities for social interaction' (Australian Population and Migration Research Centre 2015).

Some participants of the current study were more likely to provide assistance in an emergency that occurred in what they perceived as a rural area. Reasons have been highlighted in Table 8 (see page 144).

> *… in a country town what you do at the start of somebody's treatment before the ambulance can get there can actually be life or death …* (Geoff, 42 years old)

A common thread for participants was the concept of responsibility, detailed in *internal drivers* (see page 83), and the perceived risk to personal safety, which links to the sub-category *assessing the risk* (see page 175). Although participants felt internally driven by moral and ethical values, the feeling of responsibility increased when making the decision of whether to provide assistance in a rural area. This was because of a belief there was less chance anyone else would help, fewer resources, less chance of being attacked, and it was considered standard behaviour to help. An increased feeling of responsibility to provide assistance motivated the participant when making the decision of whether to provide assistance in an emergency.

Some of the participants identified themselves as being from rural areas, thus they may have been motivated to assist because of their social role or identity, discussed in *internal drivers* (see page 88). They may have believed they had an expectation, constructed by their experiences, beliefs and views, or a perceived expectation from society that they had to provide assistance, which increased the internal driver of responsibility. The increased

responsibility may also have come from participants' perception that no one else would provide assistance because of the location of the emergency. For example Ralph said:

> *… if there's more people [in an urban location], I think the natural reaction is 'leave it to somebody else', whereas in the country that's not the situation, there is nobody else …* (Ralph, 71 years old)

Many research studies have previously explored bystander assistance in rural and urban locations with varied results. O'Brian and Wilson (2011) undertook a study of the ability to assess safety to inform crime level and found people were more willing to provide assistance in rural locations, related to social cohesion, strong reciprocity and the perception of a welcoming environment. Similarly, in study comparing the differences in OHCA in rural and urban areas, (Jennings et al. 2006) found that more people provided BCPR in rural areas (65.7% vs. 48.4%; $p = 0.001$). In contrast, Faul, Aikman and Sasser (2016) conducted a study which compared bystander assistance across medical emergencies, utilising a data set from the National Emergency Medical Service Information System (NEMSIS) (19.8 million records of emergency events), from 42 states across the USA and found fewer people provided assistance in rural locations. Reasons why people were less likely to provide assistance in rural areas were not illuminated, although it may be related to smaller population size, thus a reduced likelihood of someone witnessing or encountering the emergency.

Within the current study, the *in vivo* term location also referred to participants' proximity to the emergency, which denoted the distance of the emergency in relation to the participant and the accessibility of the emergency. The proximity of the emergency influenced participants' series of assessments and decisions and the decision of whether to provide assistance in an emergency.

Participants were more likely to help in an emergency that occurred closer to them for a number of reasons, including an increased feeling of responsibility (reasons have been detailed in Table 8, page 144). Similarly, the accessibility of the emergency was assessed by participants while undertaking an assessment of the situation. If the emergency was difficult to stop at, or if the participant had driven past the emergency before realising what was occurring, at times he/she did not go back to the emergency.

> *… if it happened over there and there were people standing over there, I would expect that they would [help], they're closer so they can get there quicker …* (Narelle, 28 years old)

> *In a situation where you're going so fast that you're beyond [the emergency] before you've got the chance to compute what happened, I wouldn't turn around and go back.* (Kim, 48 years old)

Location (urban / rural or proximity) was often used as justification for not providing assistance in an emergency. For example, if the participant believed there were fewer resources in a rural location, at times he/she reported feeling more responsible to help, thus continued with the process of decision-making. The factor (location of the emergency, related to fewer resources in a rural location) may have positively influenced the participant's internal drive and responsibility to provide assistance, thus he/she continued with the series of assessments and decisions of bystander decision-making in an emergency. Conversely, if participants were in an urban location and the emergency occurred further away they may diffuse the responsibility to other people and be less likely to provide assistance. As was the case with Mark:

> *… the closer I am to an incident definitely changes the amount I'd be likely to help, if I'm further away I would stay out of the incident ...* (Mark, 19 years old)

Darley and Latane (1968) and Latane and Darley (1968) conducted experiments to understand why people were less likely to help in an emergency if other people were present, they found that people diffuse the responsibility to other people at the scene, thereby absolving themselves of responsibility. Diffusion of responsibility is a term used to describe a person's '… tendency to subjectively divide the personal responsibility to help by the number (*N*) of bystanders' (Fischer et al. 2011, p. 518). Put simply, the more people present at the scene of an emergency the less responsibility a person feels toward helping.

Diffusing responsibility was apparent with some participants of the current study. Participants who were further away from the emergency reported thinking that someone who was closer to the emergency would provide assistance. Some of these participants no longer felt responsible to provide assistance and left the scene of the emergency. They were able to justify their decision to leave without providing assistance based on their assessment

of location (proximity) combined with an assessment of the people at the scene of the emergency, thereby these participants reported no associated negative feelings.

Research on the difference between prosocial behaviours in urban and rural settings supports the findings of the current study. For example, in a study looking at whether stereotypes are formed or passed on, Martin et al. (2014) found that people identify with other people from the same social group, positively influencing their helping behaviour and increasing the likelihood of helping. Some participants of the current study who identified themselves as being from a rural location felt more responsible to provide assistance to other people from rural areas. It is possible they identified with these people because of their social identity, which increased their responsibility and motivated them to provide assistance.

However, not all participants were from the same social group. Some who identified as being from urban locations also reported being more likely to provide assistance in rural areas. It is possible this was related to the cues and factors mentioned earlier, for example, participants' concern the victim would not receive any help related to a reduced chance of another person encountering the emergency.

In contrast with the findings of the current study, Hooghe and Botterman (2012) investigated whether a rural-urban divide exists for participation within voluntary organisations. They found no direct correlation between population density or community size and voluntary engagement, which is a form of prosocial behaviour. Hooghe and Botterman (2012) do, however, suggest the findings might be associated with the study being conducted in Belgium, which is a '… small and densely populated country …' whereby people from rural areas are close enough that resources are easily accessible. This may not be the case in a country such as Australia with large areas of open land and many rural areas not having easy access to resources (Jennings et al. 2006; O'Meara et al. 2012). Although, for the majority of participants, resources were easily to moderately accessible, according to the ARIA, detailed earlier (Australian Population and Migration Research Centre 2015).

As participants assessed the situation and the location of the emergency, a key consideration was the dichotomy of the cost of helping against the benefit of providing assistance. If participants believed there was a risk to personal safety, for example in an

urban location, some weighed up the cost and benefit of helping more so than someone who felt there was little to no threat to personal safety. Risk to personal safety has been detailed in the *assessing the risk* category of this chapter (page 175) and in Table 10 (page 176).

The concept of the cost and reward of helping has been discussed in the extant literature. The arousal: cost-reward model developed by Dovidio et al. (1991) explains the process of becoming aroused, in the form of seeing someone who is distressed, in conjunction with an analysis of the costs and benefits of helping. Similarly, Faul, Aikman and Sasser (2016) found that when an emergency is perceived as dangerous the likelihood of bystander intervention decreases. Reasons for the result were not discussed; however it is possible it was related to the cost of helping increasing when there is danger. Participants of the current study undertook an assessment of the situation, including the location of the emergency and weighed up the responsibility to provide assistance, against the cost of helping (concern for personal safety), which could influence the outcome of the decision of whether to provide assistance. When asked if she would provide assistance despite a risk to personal safety Patricia replied:

> *… I don't know that I would, I would assess the situation, what are the risks here, what are the fore's and the against. I'd weigh up the risks more …* (Patricia, 54 years old)

The current study provided an examination of how the location of the emergency could influence the internal driver of responsibility. Understanding how location impacts decision-making for people when deciding whether to provide assistance in an emergency may have implications for policy, education, research and practice.

**Table 8: Assessing location of the emergency**

| Location | | Details about location | Excerpt |
|---|---|---|---|
| **Urban vs. rural** | Rural location - No one else to help | **Rural location**<br>Less chance of anyone else witnessing or encountering the emergency<br>Victim may not receive any help and may die<br>Increased responsibility to provide assistance<br>Smaller population – decreases anonymity<br>**Urban location**<br>Many people may witness or encounter the emergency<br>Diffusion of responsibility – someone else will do it<br>Anonymous in largely populated areas<br>Decreased feeling of responsibility | *I'm more likely to help in the country, there's less people around to help. In the city it's easy to walk by if you think there's a whole heap of other people walking by, or driving by or whatever, that's easier to do than to stop*… (Beth, 58 years old)<br><br>*… when you're travelling on a country road if somebody's in trouble you stop and help them, but in the city it's a bit different* … (Ken, 68 years old) |
| | Fewer resources in rural location | **Rural location**<br>Fewer ambulances and trained paramedics<br>Longer for emergency services to arrive<br>Victim may die if they do not receive bystander assistance<br>Increased feeling of responsibility<br>**Urban location**<br>More resources<br>Shorter ambulances response times<br>Decreased responsibility | *… [It takes] longer for medical services to reach somebody who's in an emergency than what it would if it happened here in a metro or city, there's probably less chance of a doctor or a nurse or a paramedic to be driving by …* (Patricia, 54 years old)<br><br>*… I would be more likely to help in the country because it would take longer for the ambulance to arrive, the victim could die before they arrive. It is not like that in the city though …* (Beth, 58 years old) |
| | Safer in rural location | **Rural location**<br>Not as populated<br>Less chance of being attacked or set up<br>**Urban location**<br>Greater population – more dishonest people | *… an accident down in the city on a city street, or the person lying on the ground at three in the morning, just not knowing what this could be, could this be a trap, could he be pretending and his mate's there come to rob my purse or something* … (Beth, 58 years old) |

| | | | |
|---|---|---|---|
| | | More chance of being attacked or set up<br>Vulnerable to aggression<br>Cost of helping increases | *… there are several times where somebody in the town has gone to help somebody and there's been something else that has happened, well you know you've got your bag, you put your bag down, and somebody nicks the bag, whereas in the country that doesn't happen, you can trust people …* (Ralph, 71 years old) |
| | Cultural norm to help in rural location | **Rural location**<br>Standard behaviour to provide assistance<br>Part of a community / culture<br>People are more helpful<br>**Urban location**<br>People are less helpful<br>Larger population size - less connected to people<br>Less civility toward others | *… I think in the country there's more a sense of community and connection to the people that are around you than in the city, you just kind of feel like an individual. The more connected you feel to the people around you the more responsibility you feel to help them.* (Narelle, 28 years old)<br><br>*I think that people who are from the city are very, very used to kind of being a part of the crowd and not really getting involved with anyone else's business. It's become more of a habit for them to ignore other people and not get involved …* (Mark, 19 years old) |
| **Proximity to the emergency** | How close physically the emergency was to the participant | **Closer**<br>More likely to provide assistance if emergency occurred closer<br>Less risk to personal safety<br>Would be first to get to victim<br>Increased responsibility<br>More likely to have witnessed the emergency<br>**Further away**<br>Less likely to help if emergency occurred further away<br>More risk of being set up<br>Diffusion of responsibility | *… if someone's lying around in the street and you're not sure, well then you are a bit more wary, but not if you saw it happen …* (Margaret, 81 years old)<br><br>*… I don't think I would get involved unless somebody fell in front of me, or something well then you'd help them wouldn't you. It shouldn't make any difference where they are but …* (Margaret, 81 years old) |
| | Accessing emergency | Cannot safely get to emergency – nowhere to park<br>Have gone past the emergency – diffused responsibility | *… it was difficult to park and get back, once you get going the thought of trying to get back again was actually quite difficult, and I thought that's not [a] logical thing to do …* (Kim, 48 years old)<br><br>*If I'd been moving through that intersection, when it [car crash] had happened I would have kept going, but I wasn't moving, my car was stopped, and therefore I had the opportunity there and then to do something, but if I* |

| | | | |
|---|---|---|---|
| | | | *had been moving through that intersection when it happened I would have probably kept going because I was already moving*. (Ralph, 71 years old) |

### 9.3.2 Assessing time of day

The time of day the emergency occurred, for example during the day or at night-time, was influential to some participants' assessment of the situation. Some participants were less likely to provide assistance in an emergency that occurred at night-time because of a belief that night-time and darkness increase isolation, thereby increasing the risk to personal safety. Feeling isolated and at risk made these participants feel vulnerable and they were less willing and likely to provide assistance in an emergency. Equally, some participants reported feeling safer during the day, thus were more likely to provide assistance.

> *… it can be quite daunting on the streets at night and in the dark. I would be less likely to help another person, you'd always have in the back of your mind is it a trick and they're just trying to get you closer to them, I'd be more likely to help someone during the day …* (Paige, 19 years old)

It is unknown whether feeling unsafe at night-time was related only to the isolation darkness provides and whether participants would still feel unsafe to provide assistance at night-time but in a well-lit area. Only one participant, Patricia, reported being more likely to assist in an emergency that occurred at night-time. The language Patricia used symbolised how strongly she felt about the hypothetical scenario, she believed the isolation caused by night-time increased the risk to the victim, thus increasing the responsibility she felt to provide assistance.

> *… at night time you perhaps would be more diligent if somebody collapsed in front of you because you think nobody might walk along here for a minute or two. Time of day creates isolation in a sense. The more isolated it is the more I would lean towards yes most definitely helping.* (Patricia, 54 years old)

Previous research on bystander CPR supports the findings from this study. A study investigating survival from paediatric out-of-hospital cardiac arrests (OHCA) indicates fewer paediatric OHCA victims receive bystander CPR at night-time (n = 707) than during the day (n = 1034) (Kitamura et al. 2014). Similarly, Wallace et al. (2013) found that survival from OHCA was reduced at night-time, in part related to lower rates of bystander CPR (149 at night-time and 359 during the day, $p < 0.001$). Although the differences in both studies were small and neither study explored reasons why bystanders were more likely to provide assistance, they

do highlight there was a difference between rates of people who assisted at night-time as opposed to during the day.

The majority of participants of the current study believed there was a greater risk to personal safety because of the isolation night-time provided. Participants justified leaving the scene of the emergency without providing assistance as they believed their personal safety was at risk and subsequently reported no negative feelings associated with leaving. Other participants did not leave the scene of the emergency in this situation but reported continuing the series of assessments in order to make the decision of whether to provide assistance in an emergency.

### 9.3.3 Assessing victim characteristics

Some participants said that victim characteristics were influential to their assessment of the situation. These participants described looking at the scene of the emergency, and assessing the victims to determine their gender, age, appearance and behaviour. Not all participants reported looking at each of these characteristics. Some characteristics were described as being more influential to some participants and not to others. When speaking about assessing the victim's characteristics and how they influenced her decision to provide assistance, Catherine said:

> *… the only person I'd think more about it is some old smelly man, you know like an old swaggie …* (Catherine, 74 years old)

During her interview Catherine recounted her method of assessing the situation, including assessing the victim's characteristics, to inform her decision of whether to provide assistance; she believed she would help the majority of people, however, felt certain characteristics may influence her decision negatively. Table 9 (see page 148) details reasons why each characteristic influenced bystander decision-making in an emergency.

**Table 9: Assessing victim's characteristics**

| Characteristics | Details |
|---|---|
| **Gender** | **Female victim**<br>Males more likely to assist a female victim<br>Females require more help than a male<br>Increased responsibility toward females<br>Social role expectations i.e. gender roles e.g. males more likely to help to be chivalrous<br>Females more likely to assist a female victim<br>**Male victim**<br>Females less likely to assist a male victim<br>Concern for personal safety<br>Concern about being attacked by a male victim |
| **Age** | **Younger victim**<br>More vulnerable<br>Cannot help themselves<br>Increased (internal driver) responsibility to help<br>Has not lived and experienced life<br>Easier to assist – smaller, lighter<br>Less risk to personal safety – less likely to become aggressive or set the participant up<br>**Older victim**<br>Vulnerable<br>Cannot help themselves<br>Frail, not as strong and resilient<br>Less risk to personal safety - from a respectful era, more respect for women<br>**Middle age range victim**<br>Less likely to receive assistance<br>More risk to personal safety – more likely to set up or attack someone |
| **Appearance** | **Appearances that negatively influence decision to provide assistance**<br>Tattoos, piercings<br>Obesity<br>Rough looking<br>**Reasons for negative influence**<br>More likely to be aggressive, violent<br>More likely to attack or set up bystanders<br>Risk to personal safety<br>**Outcome**<br>May not provide help if victim has these characteristics<br>May reduce level of assistance |
| **Behaviour** | **Behaviours that negatively influence decision to provide assistance**<br>Victim acting as though:<br>Has a mental illness<br>Appears intoxicated or on drugs<br>Slurring their words<br>Swearing<br>**Reasons for negative influence**<br>Risk to personal safety<br>More likely to be aggressive, violent, irrational<br>More likely to attack or set up bystanders<br>Do not deserve any help – self-inflicted i.e. victim took drugs/alcohol so they do not deserve help |

#### *9.3.3.1 Gender*

Gender was reported by some participants as being influential to decision-making in an emergency because of a concern for personal safety, and the related belief that females required assistance more so than males. If participants assessed the situation and the victim's characteristics and saw the victim was a male, some of these participants felt a concern for their personal safety. They believed they could be overpowered and attacked by a male who was pretending to be victim (set up). These participants felt vulnerable and they often left the scene of the emergency without providing assistance. Other times participants decided to help, but the level of assistance they were willing to provide was influenced, for example, they may have called out to the victim as opposed to approaching them.

> *… if I was in the city and there was a man lying on the ground I'd probably be more hesitant to approach him than I would be to approach a girl ...* (Beth, 58 years old)

Several participants suggested that female victims require more assistance than males, as they are more vulnerable, which influenced their assessment of the situation and the decision of whether to provide assistance in an emergency. For example when talking about who he believed required more assistance Ralph said:

> *… oh the weaker sex (females), that's the only reason, my mindset says they are more vulnerable than a male. Maybe that's something to do with my age and upbringing ...* (Ralph, 71 years old)

A belief that female victims need more assistance than male victims of an emergency may be associated with an increased sense of responsibility related to social and gender roles, which can influence helping behaviour (as detailed in the chapter *assessing personal attributes,* page 101). Believing there is an expectation to protect females can influence and inform behaviour, for example gender role expectations can influence some males to act in a chivalrous or heroic manner (Eagly 2009). These people may feel society has an expectation, or they have a personal expectation, that women are more vulnerable than males, thus require more assistance.

As detailed in the *preliminary literature review* (see page 22) the gender of the victim was an influential factor in five of the reviewed studies (Dietze, Cantwell & Burgess 2002;

Dombrowski et al. 2012; Faul, Aikman & Sasser 2016; Lu et al. 2016; Piliavin, Piliavin & Broll 1976; Swor et al. 2006). Three of the studies indicated male victims were helped more often while two suggested women received assistance more often. However, none of these studies indicated reasons for their results. Laner, Benin and Ventrone (2001) undertook a study to investigate bystander attitudes toward helping women, children and dogs, and found that women are more likely to receive bystander assistance, especially from a male. They hypothesised it was related to men understanding the appropriateness of assisting a woman as opposed to a child (Laner, Benin & Ventrone 2001). The appropriateness referred to a concern of being seen to be inappropriately touching a person (i.e. the concern related to a child not an adult). Similarly, in a study to investigate the effect of gender on administration of analgesia, Lord, Bendall and Reinten (2014) found that gender can influence clinical reasoning and decision-making, for example, they found that males receive analgesia more often than females ($p < 0.0001$). While this reasoning differs from the suggestion of the influence of social identity, proposed within the current study, what these studies show is that for some people the gender of the victim can influence the decision of whether to provide assistance in an emergency.

#### *9.3.3.2 Age*

At times participants of the current study assessed victims to determine their age (see Table 9, page 148), which was influential to the assessment of the situation and the decision of whether to stop to assist in an emergency. Interestingly, some participants were more likely to assist if the victim was a child or perceived to be old or elderly (specific age ranges were not ascertained within the study, thus the terms younger age range refers to a child, older age range refers to an old or elderly person and middle age range refers to people who do not fall into the other ranges). Participants provided a number of reasons why the age of the victim influenced their assessment of the situation. At times, participants were more likely to assist younger victims because of a belief they were more vulnerable and could not help themselves, they were easier to assist than an adult, they were less risk to personal safety and related to participants own experience of having a child.

> *… more likely with a kid, they're usually completely helpless, they probably need more assistance, they can't help themselves …* (Ken, 68 years old)

> *… if there was an adult and a child again I would probably try and rescue the child first, and there's a practical reason for that, rescuing a child is easier physically than rescuing an adult, and if you fail at the rescue of an adult and the child's left there you may not be able to go back for the child, but if you get the child quickly and effectively you've got more chance then of rescuing both.* (Don, 62 years old)

These participants did not believe children were able to help themselves and believed that if they did not provide assistance the child may be left alone and could potentially die. This belief increased the responsibility to provide assistance when the victim was a child, which thereby increased the motivation to provide assistance. Believing a child is physically easier to help, and is less risk to personal safety, may have reduced the cost of helping for participants and increased the internal drive to provide assistance. Participants who were parents may have been more likely to provide assistance to a child because they would want someone to help their children if they required assistance, or related to feeling more empathy toward children. It is also possible participants were more willing to help a victim who was a child because of social roles and an ingrained, conditioned belief of how humans are *supposed* to behave.

> *… a child would concern me more, as a mum I'd probably feel it more, it would be more emotional.* (Patricia, 54 years old)

Six studies, detailed in the *preliminary literature review* (see page 31) (Cho et al. 2010; Dami et al. 2010; Fosbol et al. 2014; Johnston et al. 2003; Lu et al. 2016; Taniguchi et al. 2012) and studies by Laner, Benin and Ventrone (2001) and Nitta et al. (2013) found that people were more willing to provide assistance to a child. However, only one of these studies provided a reason for this finding, Cho et al. (2010) concluded that fewer people were concerned about contracting an infectious disease from a child so were more willing to provide assistance. This is an accurate assumption because children have the least number of reported cases of infectious diseases, such as hepatitis and HIV across all age groups (Australian Bureau of Statistics 2012).

In contrast, three studies (detailed in the *preliminary literature review*, page 31) found that children were the least likely to receive bystander assistance, however once again reasons were not provided (Faul, Aikman & Sasser 2016; Johnston et al. 2003; Savastano & Vanni 2011). It is possible that subjects were concerned about increasing the harm to a younger victim as they were not confident in their ability to provide assistance, which may have resulted in them being sued by the parents of the child. As detailed in the *preliminary literature review* (see page 22), these are both common concerns.

Some participants of the current study reported being more likely to assist an older victim than someone in any other age group. Reasons were similar to those provided for wanting to assist a younger victim. Some participants believed older people were more vulnerable, frail and not as strong and resilient to help themselves; and they believed the older generation were from an era where they had more respect for women, thus were less likely to become aggressive and attack the person who was helping them.

> *… I would think that a middle aged [person] may have the strength to overpower me whereas an older [person] may not, and an older [person] would be of the old school who would possibly be grateful for assistance and would probably be courteous and kind …* (Claire, 53 years old)

These participants believed older people could no longer take care of themselves and were less physically able, making them vulnerable in an emergency. This in turn increased the responsibility felt toward these older victims, thereby increasing the internal drive to provide assistance. The cost of helping an older person was reduced because of a belief they were less risk to personal safety. Participants felt older victims were less physically strong thus were less likely to overpower them if they did become aggressive. The benefit of helping an older person may have outweighed the cost, increasing the motivation to provide assistance to these victims.

As detailed in the *preliminary literature review* (see page 31), several studies support and others contradict the findings from the current study. For example, results from Johnston, Clark and FitzGerald's (2003) study to understand the factors that affected willingness to perform BCPR in Queensland, Australia, indicated no statistical difference between people who were more willing (n = 43, < 1%) and people who were less willing (n = 47, 1%) to

provide BCPR to elderly victims. It was hypothesised that some people were less willing to perform CPR on an elderly victim because the chance of survival is reduced; whereas people who were more willing to help an elderly person did so as they imagined the victim as a relative or related to a reduced concern about contracting an infectious disease. According to the Australian Bureau of Statistics (2012) and the Centres for Disease Control and Prevention (2015), elderly people had the second lowest incidence of human immunodeficiency virus (HIV), and Hepatitis A, B and C, which aligns with the hypothesis Johnston, Clark and FitzGerald (2003) provided.

When participants of the current study were asked about the group of people who did not fit into the child or elderly age groups (the middle-aged range of victims), some asserted being less likely to assist them. They were concerned this group posed more of a threat to personal safety than the young or elderly, which influenced their assessment of the situation and the victim's characteristics. For example Claire said:

> *If it had of been an elderly man I would be very likely [to help], if it had of been a middle aged man, I don't know, and that's probably because of my preconceived ideas. I would want to help and not judge, but I don't know …* (Claire, 53 years old)

Claire and some of the other participants felt that a victim in the middle aged range may possibly be setting them up and may attack them. They felt this age group was a bigger risk to personal safety and would either decide to leave the scene of the emergency without helping or continue with the series of assessments and decisions. Risk to personal safety, including the risk of being set up is detailed in the *assessing the risk* section of this chapter (see page 175).

While conducting a preliminary and a secondary literature review no research was located which examined reasons people in the middle age range were the least likely to be assisted in an emergency. Studies highlighted that younger and older people were at times more likely to receive assistance, however the middle-age range has not been mentioned. There is a lack of interpretive research on bystander assistance and the effect the age of the victim has on intervention; the studies highlight that age influenced bystander decision-making, however reasons were not ascertained. The current study suggests multiple reasons why at times participants were more willing to assist a child and why others were more willing to

assist an elderly victim of an emergency. However, further research into the link between age of the victim and willingness to provide assistance in an emergency may help to elucidate reasons people are willing to assist this particular age group.

#### *9.3.3.3 Appearance*

The appearance of the victim was another factor assessed by some participants when performing an assessment of the situation. At times, these participants looked at the victim to see if they had tattoos or piercings, were obese, or if they looked 'rough' (see Table 9, page 148). If the victim displayed any of these characteristics, participants' decision was negatively influenced and they were less likely to provide assistance.

> *… I would help unless she [the victim] looked really rough or sick or covered in tatts and piercings …* (Claire, 53 years old)

This decision was directly related to the belief that if the victim had any of these characteristics they were more likely to be a threat to personal safety by being aggressive, violent and attacking or setting the participant up. Some participants reported leaving the scene of the emergency and others provided a different level of assistance, which included phoning emergency services (detailed in *assessing the risk* section of this chapter and in Table 10, page 176). For example, Claire felt that if she witnessed or encountered an emergency whereby the victim had an undesirable appearance she would help, but in a less direct way.

> *I would more likely to still try and see what's going on from a distance, but I doubt that I would get close. I would probably call him or her from a distance, 'hey buddy how you going, are you alright over there? Can I help? Do you need some help? Do you want me to call an ambulance?', I wouldn't get close, but I would still be very likely to help …* (Claire, 53 years old)

#### *9.3.3.4 Behaviour*

Although not reported often, the behaviour of victims was at times influential to a participant's assessment of the situation, and the decision of whether to stop to provide assistance (see Table 9, page 148). If the participant believed the victim had a mental illness, was intoxicated or on drugs, was slurring their words or swearing, some participants were

less likely to offer assistance. Again this was attributed to the belief the victim was more likely to be violent and act irrationally if they were displaying certain behaviours, or because of a belief the victim did not deserve any help.

> *… if it was somebody who was a little bit unpredictable I would probably still be inclined to help, but I'd probably suss the situation out a bit clearer, and I'd probably be on guard a bit more if there was somebody who looked like they were drug affected, or alcohol affected, or looked violent. I don't know whether my preconceived judgements would make me step back a little bit and not be so ready to rush in to help, whether the risk is greater.* (Claire, 53 years old)

Catherine said she would not provide assistance to victims who were acting as though they were intoxicated or on drugs as she believed these person had made the choice to consume the alcohol or drugs, which likely caused the emergency, thus the blame was shifted to the victim.

> *… that's probably a moral thing because that's self-inflicted, they've done it themselves and this is my judgement of them. I'd have to think about that one a lot more …* (Catherine, 74 years old)

These participants stereotyped victims based on their appearance or behaviour. They believed because of certain characteristics the victim was more likely to be a threat to personal safety, or they blamed the victim for their predicament. It is likely participants saw the victim and their unfavourable appearance or behaviour, for example tattoos or swearing, and formed an impression of them, they may then, based on previous experience or perceived social roles, stereotyped the victim. These participants felt the cost of helping was too great, thus justified leaving the scene of the emergency without providing assistance, and experienced no associated negative feelings.

> *… if it had of been a fat drunken man my first reaction [was] to think, he's a drunk and he's unpredictable and he could've hurt himself and it might not be an accident, and he might turn or he might be unpredictable …* (Claire, 53 years old)

Stereotypes are formed to '… act as mental shortcuts, providing rapid and efficient access to knowledge stored in memory …' (Martin et al. 2014, p. 1777). Therefore, when seeing

someone who looks rough, or is swearing, the person may recall past experiences and stereotype the person into a category that society, and they personally, attribute to people who have such characteristics (Martin et al. 2014). In a review of the literature on street harassment, Moghrabi (2015) highlighted that an impression of a person is formed within a few seconds of seeing them. Some participants of the current study formed an impression of the victim based on unfavourable characteristics, such as having tattoos, appearing rough, or acting as though they were intoxicated, and at times presumed they were a threat to personal safety. As detailed in the *preliminary literature review* (see page 32) previous research has investigated the effect physical appearance had on bystander intervention, however all of the reviewed studies looked at appearance that was affected by an injury, including blood, vomit, or broken bones, or physical attractiveness of the victim, and not appearance as described by participants of the current study. Only two of the reviewed studies (see page 33) found a link between the behaviour of the victim and willingness to assist, but again neither study looked at reasons for the link.

Judging a person on their appearance or behaviour and allowing this to affect helping behaviour may result in a victim of an emergency not being assisted. A victim who was stumbling around and slurring their words could be perceived as intoxicated or on drugs, when in reality they may have a neurological problem. Max experienced this when he had a transient-ischemic attack (TIA) and was judged by people who believed he was intoxicated.

> *… unfortunately everybody thinks just because they're slurring their words they're drunk, but they could be having a stroke, you don't really know, you can't judge it. It's happened to me, it was a wrong diagnosis. I had to go to the specialist to find out that it was actually a stroke. The symptoms were there for a stroke but because I'd had a couple of beers, and the doctor in the hospital was not very helpful 'you've been drinking', I said 'yeah, I was sitting at home having a beer watching a movie', you know I wasn't out partying, it was nothing to do with it [alcohol]. Then it was one hundred percent confirmed it was a mini stroke.* (Max, 61 years old)

The current study highlighted and explored some of the factors that influenced participants' decisions when assessing the situation, including the victim's characteristics such as gender, age, physical appearance and behaviour. Having an understanding of how victim characteristics may become barriers to providing assistance could help direct future education and research.

### 9.3.4 Assessing severity of the emergency

Participants undertook an assessment of the situation including the emergency scene to determine the level of severity. Within this thesis the term severity of an emergency refers to the participant's perception of how 'bad' the emergency was, related to an assessment of cues and factors, including whether the emergency was a risk to the victim, and the perceived risk to personal safety. Severity of the emergency positively, negatively, or at times had no influence on participants' decision to provide assistance in an emergency. A perception that an emergency was severe was a positive influence to help for some participants. These participants felt more responsibility to help when the emergency was severe because the victim was more likely to need assistance, thus they were motivated to help by their internal drivers. For example Paige said:

> *…in a more severe emergency there's more you should be doing and quicker …* (Paige, 19 years old)

The effect the perception of severity has on an emergency situation has been discussed in the extant literature. Five studies detailed in the *preliminary literature review* (see page 28) and studies by Obermaier, Fawzi and Kosch (2014) and Fischer et al. (2011), found that when an emergency was perceived as severe, people easily recognised it, which increased the arousal felt by bystanders as a result of the victim's suffering. The arousal increased the responsibility felt toward the victim and in turn made subjects more likely to help (Obermaier, Fawzi & Kosch 2014).

Conversely, some participants of the current study reported being less likely to offer assistance if they perceived the emergency as severe for a number of reasons including lack of confidence in their ability to help; concern for personal safety; and a concern about their ability to cope with the emergency. There were times these participants did not believe they had the ability to provide assistance at a severe emergency, they assessed the situation, determined the emergency was severe, and then reassessed their personal attributes to decide whether they had confidence in their ability to provide assistance.

> *There are some things that I know I couldn't help with. I would think I can't do anything there. There are things where I'm not going to be much help, an old lady. You can't do impossibilities, you can only do what you're capable of doing ...*
> (Margaret, 81 years old)

A lack of confidence in ability to provide assistance at a severe emergency was also related to a concern about potentially increasing the risk to the victim by inadvertently causing further harm, further discussed in the *assessing the risk* section of this chapter and in Table 10 (see page 176). When asked if Paige would be more likely to provide assistance at a severe emergency she replied:

> *Maybe not because moving someone straight away, especially in a car accident, if they've got something wrong with their back you could make it so much worse, or like a broken bone and you're moving them [it] could get displaced or something. Less [severe] would be a lot easier …* (Paige, 19 years old)

There were instances where participants assessed the emergency as severe and became concerned for their personal safety, or whether they would cope with what they might find at the scene. The concern negatively influenced their decision to provide assistance in an emergency and they left the scene while justifying their reason for not providing assistance. Other times the internal drive to help was more influential and the participant continued with the series of assessments and decisions in order to make the decision of whether to provide assistance. Concern for personal safety has been further described in the *assessing the risk* section of this chapter and in Table 10 (see page 176).

> *If a child was injured or dead, I don't know if I would then be of value because I'd go into shock, I would not be able to make a clear decision so I would be of no help to anybody, I would in fact be a hindrance just being there. I would have to leave …*
> (Claire, 53 years old)

The correlation between increased severity and reduced bystander intervention has been supported in the wider literature (see *preliminary literature review*, page 28). For example, Thierbach et al. (2004) found bystanders were less likely to intervene because they did not feel competent to provide assistance when the injury was severe, and found that interventions were more likely to be performed incorrectly. However, there were times

when participants did not assess the severity of the emergency as they believed they would provide assistance whether or not the emergency was severe.

> *… I wouldn't have cared what was in that accident, I would've helped. You can't pick and choose your accidents that you're going to help in, you can't go I'm only going to help in the ones that are clean, or the ones that don't have this, or they don't involve that …* (Patricia, 54 years old)

Participants internal drive made them feel responsible to provide assistance so they continued with the series of assessments and decisions to determine whether to provide assistance in an emergency. Participants defined an emergency as severe by the perceived risk to the victim and the risk to personal safety, as detailed below.

#### *9.3.4.1 Severity defined by risk to the victim*

The severity of the emergency was defined by determining the risk to the victim. Cues and factors were assessed to make the differentiation between life-threatening and non-life-threatening emergencies, which in turn determined the severity of the emergency. Cues and factors included the actions of the victim; the perceived injuries to the victim; and the actions of other bystanders at the scene. Figure 8 (see page 161) illustrates the cues and factors used by participants when defining severity of the emergency.

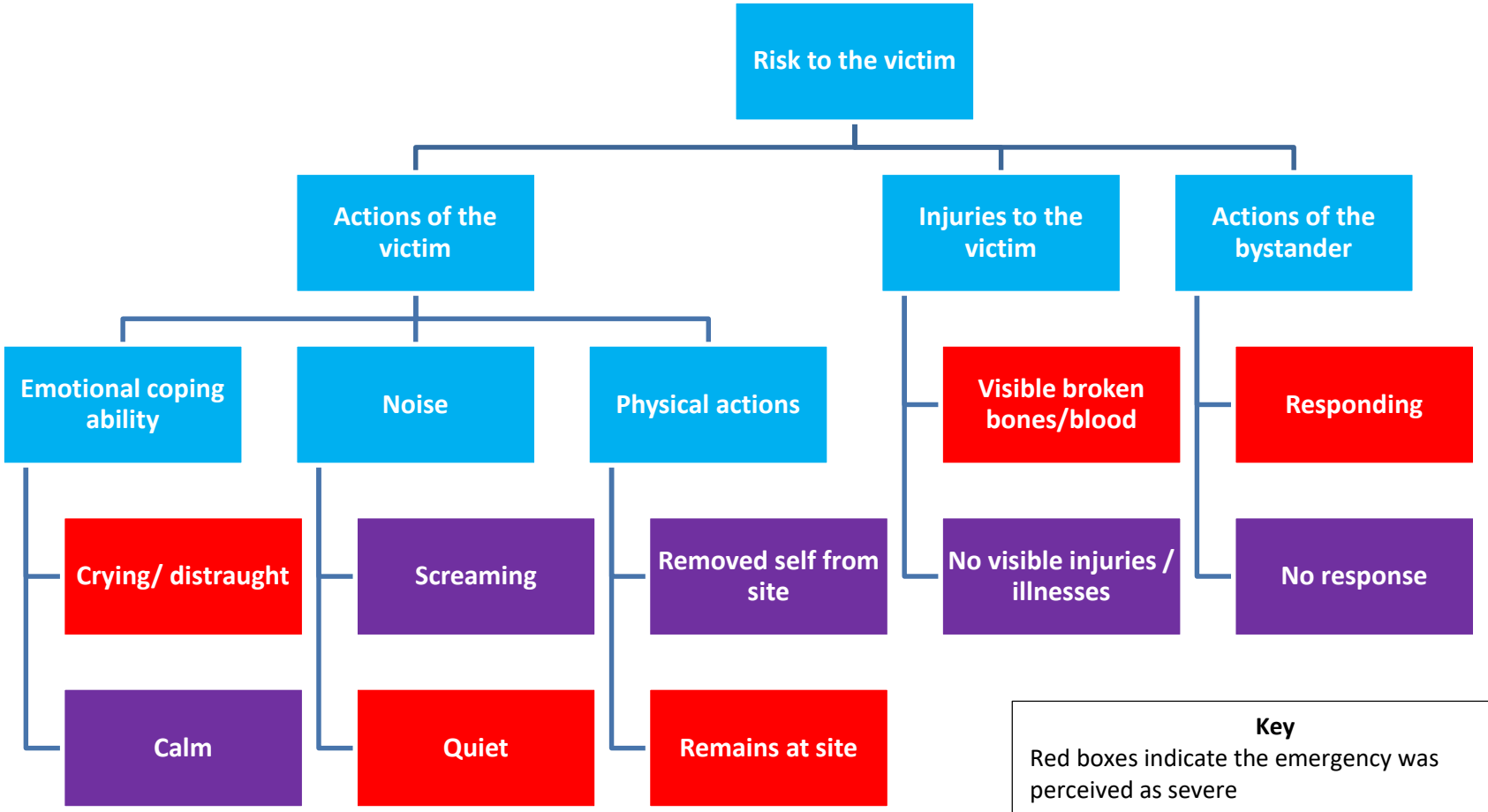



**Figure 8: Severity of the emergency defined by risk to the victim**

If perceived risk to the victim was high, the emergency was considered severe, conversely if the risk was low the emergency was not considered severe. Risk to the victim has been detailed in the *assessing the risk* category later in this chapter and in Table 10 (see page 176). The actions of the victim were assessed when deciding whether the emergency was severe, including the victim's emotional coping ability, the noise the victim was making, and the physical action of the victim. The assessment of the victim was undertaken while driving or walking past the emergency, and often from a distance. At times participants considered the emergency to be severe if they witnessed the victim crying or looking distraught, if they were quiet, or if they remained at the immediate site of the emergency.

> *… if I saw somebody [victim] lying and they were obviously very distressed, well I'd think that looks serious …* (Ralph, 71 years old)

> *… three girls in a car slammed straight into the middle of the gum tree. The driver was screaming out and carrying on, the passenger was crying and carrying on, but the one in the back seat was quiet and that was the one I was worried about.* (Max, 61 years old)

In contrast if a victim appeared to be calm, was screaming or had removed themselves from the immediate emergency site, the emergency was not considered to be severe. Participants reported assessing the victim's injuries to determine the risk to the victim, which for them defined the severity of the emergency, for example, if the participant could see blood or visibly broken bones, they perceived the emergency to be severe. Conversely, if there were no visible injuries the emergency was not considered severe. The actions of other bystanders at the scene of the emergency also played a role in the assessment of severity of the emergency. If other bystanders appeared to be responding the emergency was thought to be severe. Similarly, if no-one was providing assistance some participants believed the emergency was not severe. Mark reported:

> *… are there any actual injuries involving loss of blood, those would be the major things which would increase the severity of an incident. Level of injury determines severity, it's how badly injured the people involved are.* (Mark, 19 years old)

The assessment undertaken by participant's to determine the risk to the victim and thus severity of the emergency was interconnected and interdependent with the entire cycle of

decision-making. For example, if a participant determined the victim had severe injuries or was very unwell (indicating the victim's injuries/condition were severe), this assessment might influence confidence in their ability to provide help and the overall decision of whether to provide assistance in an emergency.

#### *9.3.4.2 Severity defined by risk to personal safety*

Some participants believed there was a correlation between greater risk to personal safety and the severity of the emergency. Risk to personal safety could be in the form of physical injury or mental or emotional risk. Figure 9 positions cues and factors in the assessment of severity, as determined by risk to personal safety.

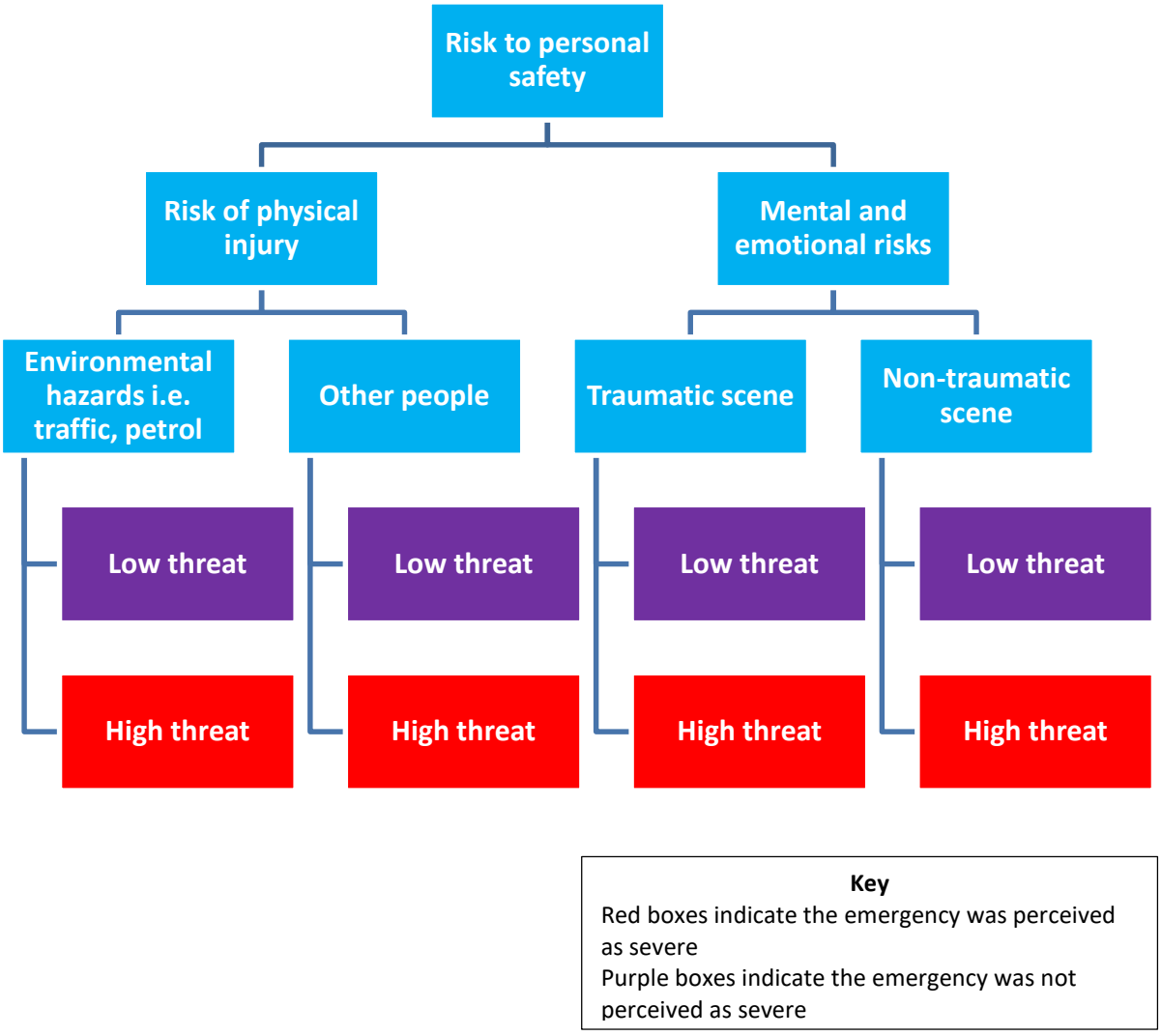



**Figure 9: Severity of the emergency defined by risk to personal safety**

Risk to personal safety encompassed a concern about risk of physical injury, which was reported to be from either environmental hazards or from other people at the scene of the emergency; and concern about mental and emotional risks, related to the risk of being traumatised by the emergency scene. These concepts have been discussed in the *risk to personal safety* section of the *assessing the risk* category (see page 175) and in Table 10 (page 176). If participants perceived the risk to personal safety as high, they sometimes decided the emergency was severe. In contrast if the risk to personal safety was deemed as low, the emergency was not considered severe. The current study highlighted possible reasons bystanders may link risk to personal safety and severity of the emergency, and how this differentiation may ultimately affect the decision of whether to provide assistance in an emergency.

> *… are there any weapons involved? Those would be the major things which would increase the severity of an incident …* (Mark, 19 years old)

## 9.4 Assessing the people

Participants not only analysed and assessed the situation, which included the emergency scene and surroundings, but they also assessed the people at the scene. The assessment consisted of counting the number of bystanders, determining their competence to provide assistance and deciding whether they were able to cope emotionally. Each cue and factor weighed differently for participants and did not stand alone in influencing the decision to provide assistance. The assessment was ongoing and interconnected with the other components of the *assessment of the scene* and the major social processes of bystander decision-making in an emergency.

### 9.4.1 Assessing the number of people at the scene

Participants described looking at the scene of the emergency to assess the number of bystanders present, which either positively or negatively influenced the series of assessments and decisions, and the decision of whether to stop to provide assistance. The assessment occurred in two ways; by a pre-determined number (the magic number), and by the ratio of victims or vehicles to bystanders at the scene. These numbers were different for each participant.

After analysing and assessing the situation some participants counted the number of other people at the scene and measured it against a predetermined number. The number was referred to by participants as a *magic number*, thus the term magic number has been used as an *in vivo* code within this thesis. The predetermined magic number was between three and six bystanders for all participants who used this factor to inform their series of assessments and decisions. Many participants were adamant about their magic number, they used language to express how definitive this factor was for them. For example when talking about how many people would need to be at the scene of the emergency before she would leave, Catherine said:

> *… if there are three people there I think they could manage it. One could be on the phone, one could be attending to the person, and the other one keeping people off the road.* (Catherine, 74 years old)

If there were fewer bystanders than the participant's magic number, they would continue with the series of assessments and decisions in order to make the decision of whether to stop to provide assistance.

> *… if that person [bystander] was alone I would definitely offer assistance …* (Claire, 53 years old)

These participants determined that without a certain number of bystanders (the magic number) there would not be enough people to provide assistance, which positively influenced their internal drive and responsibility to provide assistance. They believed the victim would not receive adequate assistance with a number fewer than their magic number, thus increasing the likelihood participants would provide assistance. These bystanders were less likely to leave the scene of the emergency as they were unable to diffuse the responsibility to others, however participants would not necessarily provide assistance, instead they continued with the series of assessments and decisions.

Conversely, if there were more bystanders than the magic number present at the scene of the emergency, some participants made the decision to leave the scene of the emergency without providing assistance.

> *… if there was anything more than four or five people there, I would keep going, I would assume that out of those four or five people there was enough ...* (Patricia, 54 years old)

These participants felt their assistance was not needed as there were other bystanders present who could help the victim. Participants were concerned they would get in the way and impede the intervention, thus diffused the responsibility to the other people at the scene and left the emergency. Participants used these reasons to justify their decision not to provide assistance, believing they made the best decision in the circumstances, therefore most did not report any associated negative feelings. There were only two examples whereby a participant assessed the number of bystanders at the scene, determined there was a greater number than their magic number, left without providing assistance, and had negative feelings associated with their decision. After witnessing a truck crash into a car Kim assessed the number of people at the scene of the emergency, saw there were more than her magic number and left the scene of the emergency without providing assistance. She reported:

> *I could see were cars everywhere, so I crawled across the intersection and thought well I could stop, but then I would estimate there was about fifty people by that point so I didn't stay … I felt really, really guilty that I didn't help …* (Kim, 48 years old)

James also witnessed a car crash and left the scene after assessing the number of people as greater than his magic number.

> *… I didn't go forward myself and when I look back on that I think I really should've gone forward, I just saw people with them and talking to them and it just seemed like it was getting handled. I should have gone forward ...* (James, 24 years old)

Not all participants left the scene of the emergency if there were more bystanders than their magic number, instead they assessed cues and factors including the other bystander's competence to provide assistance and emotional coping ability (detailed later in the chapter). These further assessments helped to inform the decision of whether to provide assistance in an emergency, or to leave without helping.

Some participants assessed the other people by counting the number of bystanders in comparison to the number of victims or vehicles involved in the emergency, to determine whether there were enough bystanders to provide assistance.

> *I would suss out the situation of people standing in comparison to the size of the accident …* (Claire, 53 years old)

These participants believed only one or two bystanders were needed when there was only one or two victims, similarly, when the emergency involved many victims many bystanders were thought to be needed. If participants determined there were not enough bystanders compared with victims or vehicles, they continued cycling through the series of assessments and decisions that inform bystander decision-making in an emergency. When participants decided there were enough bystanders, or vehicles to victims, they left without providing any help. For example, when Paul saw a car reverse and stop on top of a person he assessed the scene and determined how many bystanders were needed by comparing the number of victims to the number of bystanders already present.

> *… I think it depends on how many people need support, in that scenario you had the woman in the car as well as the person under the car that needed support, so I think actually looking around, 'is there support needed here? Who needs support? Um, are there enough bystanders, enough people already here that can provide that support?'* (Paul, 45 years old)

Ken witnessed or encountered seven emergencies and undertook similar assessments related to the number of people already at the scene:

> *… if it [is] a big accident say like a bus crash and there's a lot of people there then you need lots of people to help, virtually one-on-one because people suffer from shock they may not have a physical injury but they could have a quite serious psychological effect …* (Ken, 68 years old)

At times, participants who witnessed or encountered a vehicle crash reported not being able to see the victims involved so they counted the numbers of vehicles instead. If there were only one or two vehicles, only a small number of bystanders were thought to be required; similarly many vehicles required many bystanders. Patricia described how she assessed the

number of vehicles at the scene of a multi-car crash before using this information to determine how many people would need to assist.

> *… I heard this almighty crash and three cars had been involved in an accident. [I] quickly looked at the scene, collecting the information about what was happening in these three different cars … I figured I needed to stay as there were not enough people to help three car loads of victims.* (Patricia, 54 years old)

It appeared that participants who left the scene without providing assistance used either the magic number or the ratio of bystanders to victims or vehicles to justify their reason for leaving. Although, at times the competence and emotional coping ability of the other bystanders were assessed before making the final decision. Most participants left the scene without feeling negative or guilty as they could reason that assistance would be provided by other people, for example, Claire and Ken said:

> *… I would just keep going, I don't think I would get involved unless there were fifty car smashes and one [bystander], I think then I could see the overwhelming odds were against them and they may need help. I think if it looks like there's more people or a lot of people there I would keep going because I think it's under control …* (Claire, 53 years old)

> *If there are already people helping and it looks under control you just go.* (Ken, 68 years old)

The effect the presence of others has on bystander intervention in an emergency has been well described in the wider literature. As detailed earlier, the bystander effect is a phenomenon that explains why people are less likely to assist in an emergency when other people are present (Darley & Latane 1968; Latane & Darley 1968). The bystander effect is said to occur because of three processes (Fischer et al. 2011), which may help to explain some of the behaviour participants of the current study reported.

1. Diffusion of responsibility, whereby the bystander diffuses the responsibility of helping to other people at the scene of the emergency;
2. Evaluation apprehension, whereby the bystander is concerned about being judged by others at the scene; and
3. Pluralistic ignorance, whereby people rely on others for how to react, for example if

the other people are calm then the bystander may presume it is not an emergency.

What has not been located in the literature is the idea that at times people had a predetermined number, and other times they compared the number of bystanders to the number of victims or vehicles, which influenced the decision of whether to provide assistance in an emergency. This study illuminates the methods used by participants when assessing other people at the scene of the emergency, and how the assessments can be used to justify their decision to stay and provide assistance or leave without helping.

### 9.4.2 Assessing the competence of others

Some participants assessed the people at the scene of an emergency to determine their level of competence to provide assistance. Competence was defined by participants as how confident a person appeared when responding in an emergency and their ability to provide assistance.

> *… if I could see that things were not correct or things were being done that shouldn't be done, I'd have to say something 'back off, stop' if somebody's [victim] there and haven't been put in the recovery position and the mouth cleared and all that sort of stuff and they're choking then I'd have to do something*. (Ralph, 71 years old)

> *I might stop and assess by listening to see if they had it under control or if they sounded like panic or urgency …* (Claire, 53 years old)

Another person's competence was assessed in a number of ways; by looking at their behaviour, whether they were more qualified than the participant, their age, or by them volunteering the information. If other people at the emergency scene appeared panicked or flustered, or were running around looking as though they did not know what they were doing, they were deemed incompetent to provide assistance in an emergency. Conversely, if the participants perceived the other person's behaviour to be calm and organised they were generally considered competent to provide assistance.

> *… I would observe their actions, how confidently they were acting, if they sort of seemed anxious, or were freaked out by the situation I would think that they weren't fully competent and that it wasn't wise to leave them, the kind of speech they were using, their body language, what they were using and how they were using it to help the person …* (Narelle, 28 years old)

Competence was also determined by whether the other person at the scene of the emergency was more *qualified* to provide assistance. Being qualified was referred to in two ways: 1) being officially qualified to provide assistance in an emergency, for example a paramedic, doctor or nurse, and 2) the participant's perception that the bystander possessed greater ability to provide assistance. To determine whether the other person was more qualified to provide assistance participants looked to see if they wore a uniform, including a security guard uniform, and to see if they carried a first aid kit, equipment, or a walkie talkie. For example, when Paige witnessed a person have a seizure she saw a bystander approached the victim. Paige assessed the bystander and determined he was more competent to provide assistance.

> *… it was very easy because there was a security guard with the uniform on and the walkie talkie to be able to contact other people, I didn't have any of that …* (Paige, 19 years old)

Paige left the scene of the emergency because she believed the security guard was more qualified, thus more competent to provide assistance than her. She justified leaving the scene, believing she made the correct decision, and did not experience any negative feelings associated with the decision.

The competence of other people at the emergency scene was sometimes assessed by comparing the participant's age to the bystander's age. If the other person was older than the participant, they often believed the bystander would be more competent than them, and left the scene without providing assistance. Conversely, if participants were older, they believed a younger person would be more competent to provide assistance, as some of these participants no longer considered elderly people competent to provide assistance.

> *… it's hard because I'm so young, an adult would be much more qualified than me. If it was a car accident and adults got out of the cars, and middle aged people, I would be less likely to try and sort out what's happening …* (Paige, 19 years old)

> *… some of the young ones might know a bit more about the [first aid] training …* (Max, 61 years old)

> *If they're old and doddery and they've stopped out of the kindness of their heart, they need help too don't they …* (Catherine, 74 years old)

A person's competence was also determined by them volunteering the information, if a bystander said they were a nurse for example, it was decided they were more competent to provide assistance than the participant, so the participant left the scene of the emergency. On other occasions participants decided they would provide assistance but let the more qualified person take the lead.

> *… if they needed assistance then I'd offer to assist them and let them take the lead role and I'd do what they ask me to, but if it looked like they were already coping you don't need extra people in the way.* (Ken, 68 years old)

Some participants believed they knew how to assess the competence of others because of the first aid training they had undertaken. They had learnt how to administer first aid so would watch the other people at the scene administer first aid to determine if they were using correct procedure, which influenced their decision of whether to help. When asked how she could tell if a person was competent to provide assistance in an emergency, Belinda replied:

> *… from what I've learnt in my first aid training it just comes down to what's right and wrong, just the way I was taught.* (Belinda, 44 years old)

Some participants believed they were able to assess the competence of other people while driving past the scene of the emergency, while others had to physically stop. However, participants would not necessarily stop to assist, some made the decision to leave the scene of the emergency without helping. If a participant believed other bystanders were incompetent to provide assistance, they continued with the series of assessments and

decisions and may have decided to help despite there being more bystanders than their magic number or their ratio comparison. However, if participants deemed a bystander as competent to provide assistance, they sometimes left the scene of the emergency without helping, despite having fewer than the magic number or less bystanders than victims or vehicles. Participants rationalised the other people at the scene were competent or incompetent to provide assistance, thus justifying their reason for either staying at the scene or to leaving without providing assistance.

If participants believed the bystander was incompetent to provide assistance they felt more responsibility to provide assistance as they believed the victim may not receive any or adequate assistance from other people at the scene of the emergency.

> *… there was a guy who was just standing there, he didn't look competent to be helping so I jumped in to help the guy on the ground …* (Matt, 32 years old)

Conversely, participants may have deemed the person as competent, for example Mark said:

> *… I think it's just seeing the situation, they might completely have it under control and if it's all under control I wouldn't feel the need to help, I'd think that they're very capable of handling the situation if it's the right people doing it.* (Mark, 19 years old)

The assessment of competence links closely with the category *assessing personal attributes*. If the participant perceived the bystander to be more qualified, or competent to provide assistance than them, because they wore any kind of uniform or carried a first aid kit for example, at times it was related to a lack of confidence in their own abilities. For example, if participants lacked confidence in their ability to provide assistance in an emergency they could reason that seeing a bystander with a walkie talkie meant they were more competent, thus providing a justification for leaving. After assessing other bystanders were competent to provide assistance to a man who had fallen, Emily said:

> *… I didn't stay around, they had things under control so it seemed alright.* (Emily, 25 years old)

There were occasions participants assessed the competence of people at the scene, determined they were competent, but still stopped to ask if any help was needed, to be certain of their decision the person was competent. If participants believed adequate help was being provided they could justify their assistance was not needed absolving themselves of negative feelings associated with leaving the scene without providing assistance. For example, Lizzy asked the other people at the scene of a car crash if they needed help, when they replied 'no' she left the scene.

> *… I leant out the window and spoke to a person and said, 'do you need help, I can do CPR, I've got first aid' … they said 'no' and they looked like they knew what they were doing.* (Lizzy, 49 years old)

The link between other people at the scene of the emergency and helping behaviour has been discussed in the wider literature. As detailed in the *preliminary literature review* (see page 25), thirty-two studies incorporated the theme *other people present* and the effect it had on bystander helping behaviour, however none mentioned assessing the competence of the other people. Thornberg (2010) found that social roles can be linked with a perception of competence, which then influenced helping behaviour. For example, teachers took on the social role of being leaders and helpers, influencing them to provide assistance (Thornberg 2010). Within the current study, a person such as a nurse or doctor could be seen as having the role of someone who helps others. Similarly, participants may view a bystander who is older or younger than them as having a particular role. This role included either being competent or incompetent to help. These social roles, which informed expectations of behaviour, influenced participants' decision about whether a person was competent, which provided a justification for their decision to provide assistance or to leave the scene of the emergency without helping.

### 9.4.3 Emotional coping ability

Participants enacted an assessment of the other people at the scene of the emergency to determine whether they were coping emotionally. Emotional coping ability was an *in vivo* term used by participants when referring to a bystander's ability to emotionally deal with what they were faced with at the emergency. Participants described assessing bystanders to see if they were crying or appeared distraught, which indicated they were not coping

emotionally. If the bystander was not crying and appeared in control of their emotions, they were deemed to be coping emotionally.

> *… just looking at their demeanour and seeing are they calm, are getting really nervous and shaking, are they freaking out. Reading their voice and the way that they act in a situation. If you have someone who comes in and says 'this is what's happening can you please do this,' I would feel much more confident that they know what they're doing and I would trust their judgement a lot better than someone who is getting really emotional …* (Mark, 19 years old)

Some participants' decision to provide assistance was positively influenced by seeing another bystander who was not coping emotionally, as participants were concerned the victim would not be adequately attended to. Other participants believed they could assist the bystander, which provided them with a role in the emergency. Again this links closely with the category *assessing personal attributes*, for example, if a participant lacked confidence in their ability they may not provide assistance. However, if they determined a bystander was not coping emotionally the participant may have decided they were confident to help reassure the bystander instead.

> *… if there were some people [other bystanders] absolutely distraught I'll see if they'll take some emotional support, an arm around the shoulders or something like that. That way I'm helping but in a different way.* (James, 24 years old)

Some participants were negatively influenced by witnessing bystanders who were not coping emotionally. These participants reported not being able to cope with a bystander who themselves was not coping, thus they left the scene of the emergency without providing assistance. An assessment of other people's emotional coping ability was undertaken either while driving past the emergency or when stopped. However, stopping did not necessarily mean participants would provide assistance.

> *People tend to react fairly emotionally and can often be irrational in such emergencies when they're under pressure and they don't think straight, they can go in and quickly take over then break down …* (Geoffrey, 74 years old)

> *… it [a bystander who was not coping emotionally] has put me off because I found it really upsetting, I was just totally affected by the sound that I was hearing because I'd never heard anything like that before.* (Narelle, 28 years old)

The wider literature supports the findings of the current study in relation to the assessment of the other people at the scene of the emergency. An emergency can be a traumatic scene with horrific sights, sounds and smells. It is therefore understandable that a person with no training in emergency management may become emotional when faced with the scene and may be perceived as not being able to cope emotionally. Barhight, Hubbard and Hyde (2013) undertook a study that applied the Latane and Darley (1968) bystander decision-making model to bullying in children and found that bystander behaviour can be influenced by many factors including the behaviour of other bystanders. If a bystander is behaving in a way that gives the impression of; 1) competence, 2) incompetence, 3) of coping emotionally or 4) not coping emotionally - other people's behaviour may in turn be influenced, as was the case with participants of the current study.

The current study is the first known to collate multiple assessments undertaken by participants when assessing the people at the scene of an emergency. Other studies, described earlier, and detailed in the *preliminary literature review* (see page 25), explored aspects of assessing the people, for example the effect of having other people present, However, the majority did not explore reasons why bystander behaviour was affected. The current study presented two methods not previously discussed in the literature that people used to inform their decision of whether to provide assistance in an emergency – the magic number and ratio of victims/vehicles to bystanders. This knowledge could help to inform future policy, education, research and practice.

## 9.5 Assessing the risk

Cues and factors at the scene of the emergency were assessed to determine the potential risk to personal safety, other people, and the victim (see Table 10, page 176). As detailed earlier in this chapter all participants spoke about assessing the risk. However their perception of risk and who they wanted to prevent the risk to, was varied. The identified risks were similar to risks acknowledged in the wider literature as detailed in the *preliminary literature review* (see page 18). The current study elucidates participants' perceived risks associated with providing assistance in an emergency and examines how risk influenced the series of assessments and decisions in order to decide whether to provide help in an emergency.

*… I think that you've got to be careful you don't want to aggravate the situation in any way and you certainly don't want to expose yourself to unnecessary harm but you also do want to try to assess any further damage that may occur, and so you go in you do what you can look out for any other potential problems that may arise. Quick thinking is about decision-making on the spot.* (Geoffrey, 74 years old)

*… people generally are frightened [and] don't want to stop, I don't know if that's because people don't care about one another, but I think people are suspicious …* (Margaret, 81 years old)

**Table 10: Assessing the risk to personal safety, others and the victim**

| Assessing the risk | Possible risks | Details of possible risks |
|---|---|---|
| **Risk to personal safety** | Being traumatised | Concerned they would see something traumatic<br>Concerned they will not be able to cope with the emergency scene<br>Concerned about long-term psychological effects |
| | Environmental dangers | Risks from dripping petrol, smoke, fire, rushing water, electricity wires, traffic etc.<br>Concerned their life may be in danger |
| | Other people – bystanders, victim | Concerned about other people and time of day<br>Concerned about the other person related to their age, gender, appearance and behaviour<br>Concerned it was a possible set up and the potential victim may attack them<br>Concerned they could be attacked by others or the victim<br>Concerned the crowd of people increases risk – more people may perpetuate aggressive behaviour |
| | Location | Urban – Larger population - more chance of being set up<br>Urban - Too many people become less aware of surroundings, may not notice a risk from opportunistic predators<br>Rural – less people, isolated, less risk of being attacked |
| | Embarrassment | Concerned ambiguous scene was not an emergency – may embarrass themselves if they approach the potential victim |
| | Being sued | Possibility of doing something wrong and further harming victim – family sues<br>Possibility of victim dying - family sues |
| | Infectious diseases (ID) | Contracting an ID via blood or mouth-to-mouth CPR |
| **Risk to others** | Environmental dangers | Risks to others from environmental dangers, e.g. dripping petrol<br>Concerned their life may be in danger |
| | Being traumatised | Concerned people with them, i.e. family / friends would see something traumatic<br>Long-term psychological effects for family / friends |
| **Risk to the victim** | Increasing harm | Lack of confidence in ability to provide assistance – could increase harm to the victim<br>Concerned with the competence of other bystanders to provide assistance – possibility of causing more harm to the victim<br>Concerned other people may attack the victim |
| | Embarrassment | Concerned am ambiguous scene was not an emergency – may embarrass the victim if they approach |
| | Risk of getting in the way | Concerned there would be too many people at the emergency and they would be in the way<br>May be a nuisance<br>May impede the first aid intervention |

### 9.5.1 Risk to personal safety

When assessing the risk at the scene of the emergency, participants determined whether there was any risk to personal safety in the form of:

- Traumatised
- Environmental dangers
- Other people
- Location
- Embarrassment
- Being sued
- Infectious disease (see Table 10, page 176).

Participants were concerned they could become traumatised by seeing horrific sights at the scene of the emergency, they felt unsure they would be able to cope and were concerned they would suffer from long-term psychological effects (as discussed in *assessing personal attributes*, page 107, 120, in *assessing the situation*, page 175 and in Table 10, page 176). Some participants were concerned their lives were at risk from environmental dangers such as dripping petrol, traffic or electricity wires as discussed in assessing the *severity of the emergency* (see page 156) and in Table 10 (see page 176). Other participants were concerned about the risk to personal safety from other people, for example other bystanders or the victim.

As discussed in *assessing the situation* participants were at times concerned other people may attack them or may possibly set them up and attack them related to time of day (see page 140) and their characteristics, such as age, gender, appearance and behaviour (see page 141). Participants also felt that the location of the emergency increased the risk to personal safety (detailed in *assessing the situation*, page 139). Some participants were concerned they would become embarrassed by approaching a person in an ambiguous situation (see Table 10, page 176) if it turned out the situation was not actually an emergency. Consistent with the extant literature some participants were concerned they would administer incorrect first aid and further harm the victim and thus were at risk of being sued by the victim or their family (see Table 10, page 176). Participants were also concerned they might contract an infectious disease if they administered either mouth-to-

mouth CPR or from the victim's blood (detailed in *assessing personal attributes*, page 111, *assessing victim's characteristics*, page 145 and Table 10, page 176).

The risk to personal safety was perceived by an individual participant after witnessing or encountering an emergency and enacting the complex cycle of bystander decision-making in an emergency. The risk to personal safety was at times weighed against the benefit of helping the victim, thus it appeared some participants used a form of Dovidio et al's (1991) arousal: cost-reward model detailed in the section *internal drivers* (see page 93) and *assessing the situation* (see page 144).

> *… if I feel my personal safety is threatened then yeah I will step back …* (Emily, 25 years old)
>
> *… I'm not going to just race in there if there's a car hanging off the side of the cliff, so that's going to overtake my willing[ness] to help definitely.* (Belinda, 44 years old)
>
> *… I would be concerned if I'm not doing the right thing and this guy dies is his aunty or mother or son going to then take me to court …* (Claire, 53 years old)
>
> *… if there was an altercation between two people and somebody was getting hurt I wouldn't get involved.* (Ralph, 71 years old)

Participants reported three pathways their decision-making took. They assessed the risk to personal safety as:

1. Low risk to personal safety – continued with the series of assessments and decisions in order to make the decision of whether to provide assistance in an emergency. The internal driver of responsibility motivated them to provide assistance, thus they did not leave the scene of the emergency at this point. The reward of helping the victim of the emergency may have outweighed the cost to the participant.
2. High risk to personal safety - participants believed the risk to the victim was greater, thus at times they put themselves in danger to provide assistance. Participants were driven by the responsibility to provide assistance rather than a concern for their personal safety, thus continued with the cycle of bystander decision-making.
3. High risk to personal safety – participants reported leaving without providing assistance. These participants were concerned they would become a victim if they

provided assistance, thus believed the cost of helping to be greater than the reward. They justified leaving the scene of the emergency, believing they made the best decision in the circumstance, and had no associated negative feelings.

When speaking about how risk to personal safety would impact his decision to provide assistance Paul replied:

> *… the risk to myself would impact on my making a decision. If a car was parked on the person's neck or head or something I would have been more distressed, more upset, and that probably would have impacted my functioning, how effective I was at making choices.* (Paul, 45 years old)

The only exception to the decision-making pathways in the face of risk to personal safety, mentioned above, was when the victim of an emergency was a child. As detailed in the category *assessing the situation*, some participants reported being more likely to provide assistance to a child despite a perceived risk to personal safety. Reasons provided by participants have been detailed above in the *victim characteristics* section and in Table 9 (see page 148). The internal drivers were intensified when the victim was a child, thus participants responsibility to provide assistance was positively influenced. These participants put themselves in danger to assist a child, as they believed the risk to personal safety was less important than the safety of the child. For example, Leonard said:

> *… I don't know that I could risk myself fully because of my family. But then again, I did run on to a road to save a child that I could see was in danger, they were in there [a car involved in a crash] and their car was going to explode. I would assess the situation, what are the risks here, what are the fore's and against, but with an adult I would weigh up the risks more.* (Leonard, 69 years old)

As discussed earlier, some participants described assessing the risk to personal safety to determine the level of action they would provide should they decide to stop. Level of action was an *in vivo* term used by participants to represent the type of intervention they provided in an emergency, for example providing first aid to the victim versus moving debris. Participants who were concerned about their personal safety were driven by their responsibility to provide assistance; however they chose not to administer first aid to the victim, instead they provided another level of assistance, for example:

> *I'd be cautious for my own safety. I would certainly ring police, I'd certainly ring an ambulance, I'd do as much as I could but I would do it from a distance …* (Patricia, 54 years old)

> *… there would be other things to do, it's not just medical …* (Claire, 53 years old)

An assessment was also undertaken by participants to determine actions to reduce the risk to personal safety should they decide to stop to provide assistance. For example, some participants reported carrying personal protective equipment (PPE), namely gloves or a CPR mask to prevent the transmission of infectious diseases.

> *I went and brought a mask with a filter and carry it with me in my car, I wouldn't help without it.* (Paula, 67 years old)

When Jim and Ken encountered crashes, they assessed the risk to personal safety and decided the benefit to the victim was greater than the risk to personal safety, so worked out the action needed to reduce the risk to personal safety.

> *… I came across a vehicle that had rolled over and it was on its roof and dripping petrol and there were three persons they'd been thrown clear of the car. The car had rolled so I was concerned about the petrol because there were rocks there and there was a chance [it would] spark a fire with it. The car was well off the road, so we simply established a cleared area and kept an eye on dripping petrol. I have to make an assessment of whether or not it's safe to intervene … (Jim, 56 years old)*

> *… [I] noticed a car in front of us about half a k [kilometre], it wobbled a bit on the road and then suddenly turned right as we got closer the car was half way up a tree. The two people were still in it, the lady was still sitting there, I had a check around the car first to make sure there was no petrol smells or nothing falling or sparks.* (Ken, 68 years old)

Both Jim and Ken decided to provide assistance after determining how they would reduce the risk to personal safety. Findings from this study highlight that participants perceive risks to personal safety in multitude ways such as embarrassment, or physical injury, which influenced their decision about whether to provide assistance in an emergency. Some of these finding are supported in the extant literature, for example several studies reported the risk to personal safety as having come from infectious diseases, the risk of litigation (Arbon,

Hayes & Woodman 2011; Faul, Aikman & Sasser 2016; Johnston et al. 2003; Sasson et al. 2013) and the risk of being attacked (Sasson et al. 2013). The risk of personal embarrassment found in this current study has also been highlighted in the wider research. Tarr, Kim and Sharkey (2005) in a study investigating the relationship between self, embarrassment and predicament response strategies, and Zoccola et al. (2011), in a study looking at embarrassment and helping behaviour, found that people who feel embarrassed in a situation (related to feeling they are being judged socially) are more likely to make up an excuse so as to not put themselves in that situation. However, neither of these studies utilised extreme situations, such as emergencies, thus it is difficult to ascertain how their participants would have acted in these circumstances.

These findings, and those highlighted in the *preliminary literature review* (see page 18) further support the current study, which showed that many participants were concerned about their personal safety, which in turn influenced their decision of whether to provide assistance in an emergency. Participants assessed the risk to personal safety and justified either continuing with the series of assessments and decisions, or leaving the scene of the emergency without providing assistance. This justification allowed them to believe they had made the right decision and they were generally left with no associated negative feelings.

The current study highlighted participants' perceived risks to personal safety, which were influential to their decision of whether to provide assistance in an emergency. Although many of the risks have been demonstrated in previous research, the current study goes further to detail other perceived risks not located within the extant emergency literature; for example the risk of being traumatised, the risk of environmental dangers, and the risk related to location. Although the literature does report a concern about the risk of being attacked, it does not report who the risk concerned. Whereas, participants of the current study reported being concerned about being attacked by either other people at the scene of the emergency or by the victim themselves.

### 9.5.2 Risk to others

Participants assessed the risk to other people, including family or friends, in order to protect them from possible risk related to:

- Environmental dangers
- Becoming traumatised as a result of seeing the emergency (see Table 10, page 176).

Similar to the perceived risk to personal safety, the assessment led to one of three decisions.

1. The risk to others was assessed as low, and participants continued with the series of assessments and decisions;
2. The risk to others was assessed as high, and participants thought of ways to reduce the risk;
3. The risk to others was assessed as high, and participants left the scene of the emergency without providing assistance.

Participants were able to justify their decision and believed they made the right decision within the circumstances, for example when speaking about risk to his family in the form of being traumatised by the emergency, Ralph stressed he would still stop to provide assistance in an emergency but would park the car further away to ensure his family did not witness the scene. Claire also suggested she would stop:

> *… I was involved in something where my family was there, if my family were at risk, then I would have to put my family first … so I would park up the road a bit so they couldn't see it.* (Ralph, 71 years old)

> *… if it was somebody in a burning car I would stop and as long as my children were safe and my grandchildren were safe …* (Claire, 53 years old)

Ralph and Claire felt responsible to provide assistance, however their internal drive motivated them to ensure their family members were safe before considering the stranger involved in the emergency. Previous research shows that people tend to assess risk to personal safety and to the victim, but not to other people at the scene of the emergency. However, the current study presents the perceived risk to others as a possible barrier to providing bystander assistance in an emergency. Understanding how and why risk to others

affects bystander decision-making in an emergency may inform future education and research.

### 9.5.3 Risk to victim

Participants were at times concerned about the risk to the victim of the emergency (see Table 10, page 176). The risk could be in the form of:

- The participant or other bystanders inadvertently increasing the risk (i.e. causing more harm) to the victim
- From other people at the scene attacking the victim
- The risk of embarrassing the victim
- The risk of getting in the way and impeding assistance.

Some participants believed they would put the victim of the emergency at risk if they provided assistance, which was attributed to a lack of confidence in their ability to provide assistance, as described in *assessing personal attributes* and *assessing the scene*. These participants believed the victim's injuries were beyond their ability and were concerned they could possibly cause more harm, thus left the scene without providing assistance believing the victim was better off.

> *… if I saw something that was beyond my capability I wouldn't go any further I would back away from it ...* (Claire, 53 years old)

Other people (bystanders) at the scene of the emergency were assessed as being a potential risk to the victim. Participants were concerned bystanders may unintentionally cause more harm to the victim by administering first aid intervention incorrectly; thus assessed the bystander's competence to provide assistance, and their emotional coping ability, as described in the category *assessing the people* (see page 169, 173).

> *I looked to see if the person who was helping was doing the right thing, I didn't want them to do the wrong thing and make it worse …* (Ralph, 71 years old)

There were times participants were concerned other bystanders at the scene would attack the victim, thereby causing them more harm, and assessed these other people to determine

their likelihood of becoming aggressive. If they believed they would become aggressive the majority of the time the participant would leave the scene of the emergency as their personal safety was at risk.

> *… I came across a lot of people on the beach who were standing around this girl that was lying on the beach, she clearly was suffering from heat, and sunburn and all the rest of it, and dehydration. I went over and asked them whether I could help and they were all drunk and said 'don't touch this girl, if you do we'll attack you, she doesn't deserve any assistance blah, blah, blah, blah,' so I'm afraid I was warned off.* (Leonard, 69 years old)

Participants were also concerned they would unintentionally embarrass the victim by approaching them in an ambiguous situation, or that the victim may become embarrassed after being attended to. After witnessing a man fall from a bicycle, Matt said:

> *… there's this really odd sense not to embarrass any one, which is surprisingly strong. You've got a person that's just come off their bicycle or their motor bike and you sort of go 'uhh, well really I should go and support their head and neck, I know how to do that, but I don't think they need it and they will be embarrassed if I make a fuss'. And it influences all these decisions [of whether to stop to provide assistance] so you sort of think 'oh yeah probably they will be fine, they look like they are okay'* (Matt, 32 years old)

There were times participants were concerned they would get in the way at the emergency, thereby increasing risk to the victim. If the participant saw other people at the scene of the emergency they became concerned they would be a nuisance and may impede intervention being provided by others, which links closely with *assessing the people* and the assessment of the number of people at the scene of the emergency.

> *… there have been occasions where I've driven past and there were people either already been there or pulling up, so they don't need someone like me getting in the way. I just don't believe in crowding a situation because it's a nuisance there's only so many people who can assist and after that it becomes a nuisance …* (Paula, 67 years old)

Assessing risk to the victim was influential to the series of assessments and decisions that make up bystander decision-making in an emergency. For some participants the risk to the

victim was low and they continued with the process of making the decision about whether to provide assistance in an emergency. Other participants perceived the risk to the victim as too great and they reported leaving the scene of the emergency. For example, after witnessing the person fall off his bicycle, Matt (in the previous excerpt, see page 185) left the scene of the emergency believing the embarrassment he would cause the victim was a greater risk than the emergency itself. Participants weighed up the cost to the victim against the benefit of helping, then justified either their decision to stay at the scene and continue cycling through the process of decision-making, or their decision to leave the scene without providing assistance. If participants were concerned they might increase the risk to the victim, related to less confidence in their ability to help, they may have believed the cost to the victim (increased harm) was greater than the benefit (receiving assistance). Unlike with risk to personal safety and risk to others, no participants mentioned thinking of ways to reduce the risk to the victim.

> *… I might not stop if someone had gotten in a really bad car accident and gotten impaled with the steering wheel or something, anything you might do could cause further damage it would just make it worse by moving them or doing anything …*
> (Paige, 19 years old)

Aspects of assessing the risk to the victim have been alluded to in the preliminary literature review and wider research, which supports findings of the current study. Faul, Aikman and Sasser (2016) and Sasson et al. (2013) hypothesised that participants were unsure of the intervention to provide in an emergency some of the time, they felt they may increase the risk to the victim, thus were less likely to provide assistance. Similarly, Arbon, Hayes and Woodman (2011) and Hall, Wotton and Hutton (2013) suggested that some participants were concerned they had performed first aid incorrectly, which again may be linked with a concern they would cause further harm to the victim.

Some participants in the current study believed they learned how to assess the risk to personal safety, to others and to the victim during first aid training. These participants recalled learning to assess for danger then applied it to real life emergencies. They not only thought of risks, such as the risk from traffic, but risks such as moving a victim. When asked if dangers would prevent her from assisting in an emergency Beth replied:

> *That would be part of the assessment I guess, and I guess that's first aid training, is looking out for danger first so it would have to be things like traffic or fire or something like that, you would have to change how you would behave then.* (Beth, 58 years old)

The current study highlighted the assessment participants enacted to determine the risk to personal safety, to others and to the victim. The study brings together these risks and details how they influenced participants' decisions of whether to provide assistance in an emergency. Some perceived risks which were not located in the wider literature were found to be influential to participants decisions such as risk of the participant or others being traumatised by the emergency scene, the risk of environmental dangers to both the participant and others, the risk from other people at the scene, risk related to location, and the risk of getting in the way. Understanding how the perceived risks to personal safety, to others and to the victim may affect decision-making in an emergency may inform policy implementation, future education and future research.

## 9.6 Chapter summary

Chapters six to nine provided an in-depth examination of the series of analyses, assessments and decisions participants enacted when witnessing or encountering an emergency and making the decision of whether to provide assistance. Importantly, the subjective nature of assessing cues and factors and how they influenced the final decision was highlighted. The interconnection and interdependence between the internal drivers, the assessment of personal attributes, assessment of competing factors and the assessment of the scene was elucidated, and how it was similar, yet different for each participant.

Chapter nine showed how participants made a series of analyses, assessments and decisions when assessing the scene, with the goal of making the decision about whether to provide assistance in an emergency. The cycle of decision-making was interconnected and interdependent and included *analysing the situation*, *assessing the situation*, *assessing the people* and *assessing the risk*. Participants cycled back and forth between series of assessments and decisions to inform their decision, which highlighted the variety of cues and factors that influenced bystander decision-making in an emergency. Chapter ten, the final findings chapter, is a theoretical discussion of the theory of *Motivated Responsibility and the*

*Construction of Reasoned Justification*, which explains the major social processes of this theory.

# CHAPTER TEN: MOTIVATED RESPONSIBILITY AND REASONED JUSTIFICATION

## 10.0 Introduction

The purpose of this research was to construct a substantive grounded theory of bystander decision-making in an emergency, specifically to explore the cues and factors that influenced bystander decision-making. The study utilised the constructivist grounded theory approach developed by Charmaz (2006, 2014), which provided a conceptual framework to develop theory grounded in the participants perspectives. The theory is an interpretation of the studied phenomenon, which was constructed to form an abstract understanding of bystander decision-making in an emergency (conceptual categories provided in chapters six to nine). Chapter ten discusses the theory in relation to its conceptual categories and how it is situated in, and extends the extant literature.

Constructivist grounded theory method (GTM) utilises an interpretive approach while theorising and acknowledging the subjective nature of the method (Charmaz 2014). The theory constructed during this study was *Motivated Responsibility and the Construction of Reasoned Justification*, which explains bystander behaviour when decision-making in an out-of-hospital emergency, specifically, when deciding whether to provide assistance. As discussed in the methods chapter, the theory was constructed through the iterative process of the '… back and forth interplay with data …' (Glaser 2007, p. 100), whilst applying the core tenets central to grounded theory.

The conceptual model developed during the study (see Figure 10, page 190) symbolises the complex, cyclic, inter-related nature of decision-making enacted by participants upon witnessing or encountering an emergency, with the goal of deciding whether to provide assistance. Focusing on the *processes* undertaken by participants was true to the theoretical perspectives of symbolic interactionism and social constructionism that underpins GTM (Charmaz 2014). This grounded theory contributes to the extant knowledge on bystander decision-making in emergencies.


**Figure 10:** ***Motivated Responsibility and the Construction of Reasoned Justification*****. Conceptual model of the grounded theory of bystander decision-making in an emergency.**

## 10.1 Constructing the grounded theory of Motivated Responsibility and the Construction of Reasoned Justification

A grounded theory is a 'theoretical interpretation or explanation of a delimited problem in a particular area', (Charmaz 2014, p. 344), it should explain the relationships between categories and elucidate a core category; while answering the question and explaining why the phenomenon occurred (Charmaz 2006, 2014; Holton 2007; Thornberg & Charmaz 2012). The interpretive nature of theory construction allows the researcher to play an integral role in theorising abstract concepts and relationships to interpret the phenomenon (Charmaz 2014; Giles, de Lacey & Muir-Cochrane 2016a). Thus the theory was my interpretation of bystander decision-making in an emergency, grounded in the participants' perspectives of reality.

## 10.2 The core category of Motivated Responsibility and the Construction of Reasoned Justification

The core category is 'the central phenomena around which all the other categories are related' (Strauss & Corbin 1990, p. 116), which is developed during the iterative process of gathering, coding and analysis of data (Charmaz 2014; Holton 2007). Initial and focused codes were raised and refined into the core category (as described in chapter three), which explained the major decisions, and interactions between decisions, made by participants. The core category was named *motivated responsibility and reasoned justification* and explained the series of assessments and decisions when making the decision of whether to provide assistance in an emergency. The core category encompassed the major decisions enacted by participants in order to determine the motivated responsibility to provide assistance, as influenced by reasoned justification for either helping or leaving the scene without helping.

## 10.3 Defining the terms motivated responsibility and reasoned justification

The phrase motivated responsibility could not be located within the research or grey literature; however the individual terms are commonly used within the domain of social psychology. A standard definition of the word motivated means to have a desire or a reason for doing something, or for acting in a certain way (Oxford Dictionaries 2016q). Participants of the current study described being motivated to provide assistance to help the victim, as they felt responsible to achieve an outcome. In a paper on motivated reasoning Kunda (1990), highlighted that motivation is driven by directional goals, also known as directional motivation. He reasoned that people can be motivated by a desire to achieve a particular goal (Kunda 1990). Within the current study participants had varied goals including providing assistance in an emergency; to ensure they did not feel guilty following making the decision about whether to provide assistance; and to ensure they did not 'look bad' to other people (see *internal drivers* chapter, page 83 for all of the motivators).

A standard definition of responsibility is to be accountable for an action (Oxford Dictionaries 2016f). Within social psychology the concept of responsibility is a 'system of practices, attitudes and judgements that support a special kind of self-governance, one whereby we recognize and suitably respond to moral considerations' (Vargas 2013, p. 2). Being or feeling

responsible toward something is a natural response built on one's beliefs, emotions and attitudes. However, there can be associated reactions (reward or consequences) for breaching the responsibility (Eshleman 2014). Within the emergency domain, if a person is motivated by responsibility to provide assistance and stops to intervene, he or she may receive a reward in the form of praise from self or others. Conversely, if deciding not to stop, despite feeling responsible, a feeling of guilt may result, and he or she may be questioned by others about the lack of response.

Participants of the current study expressed feeling morally and ethically responsible to provide assistance in an emergency. This responsibility was constructed over time and derived from natural instinct, moral and ethical values, their pre-determined social roles, the inability to rely on others to help, the concern about other people's opinions, because they themselves wanted to be helped, their religious or spiritual values, from people influential to their lives, and from personal and other's past experiences. The responsibility participants felt motivated them to provide assistance in an emergency, but could also be influenced by reasoned justification.

The term reasoned means to make a judgement or decision based on logic or 'good sense' (Oxford Dictionaries 2016r). Reasoning about a decision can include providing an explanation or a justification for the action (Oxford Dictionaries 2016s). Jean Piaget's (1997) theory of cognitive development explains that as an individual grows up and matures, so does their ability to reason. Theories of reasoning claim people access personal experiences and beliefs while thinking about a conclusion (Evans 2006). There are various types of reasoning including inductive, deductive and abductive (Flack & Kakas 2000). Participants of the current study described a form of abductive reasoning, whereby reasoning is used to deduce a hypothesis (Walton 2005). For example, participants utilised the information available to them, such as an assessment of cues and factors at the emergency scene and reflected on their beliefs, views and experiences, which informed their reasoning and subsequent series of decisions.

A standard definition of justification is 'the action of showing something to be right or reasonable' (Oxford Dictionaries 2016t). The concept of justification has its roots in epistemology while endeavouring to understand and justify beliefs (Leplin 2009). Justification is used to get from a starting point to the goal of truth (David 2001), in order to

explain behaviour, feelings and thoughts (Jost & Banaji 1994). Within the current study, the term justification was used the same way, as a means of rationalising participants' thoughts, feelings and behaviours.

The term reasoned justification has been used previously in law and social psychology. Within the legal literature the phrase reasoned justification refers to furthering understanding, or elaboration, in order to explain the action (Greenawalt 1998). If a person acts in a certain way, for example he or she robs a bank, justification can be reasoned as a way of rationalising actions, thus personally justifying robbing the bank. Although similar to the way the phrase is used within the substantive theory, there are differences, which have been detailed later in the chapter.

Within the domain of social psychology, the term reasoned justification is used as a way of explaining or rationalising (Oxford Dictionaries 2016u) values, principles, judgements or obligations (Becker 1973, 1986). In a seminal paper on reasoned justification of moral judgements, Rescher (1958) claimed that reasoned justification is used by an individual as a form of evaluation for moral judgements, by use of reasons or criteria taken from the individual's 'moral rules' (Rescher 1958, p. 249). However, Rescher (1958, p. 249) claimed that only 'simple and uncomplicated moral judgements' could be justified using reasoned justification. The grounded theory presented in the current study goes beyond simple reasoned justification, and explains a complex, dynamic approach to decision-making and the use of reasoned justification.

Reasoned justification is used within this grounded theory to explain the process of people thinking about their beliefs, views, experiences and roles within society to provide justification for their behaviour. Within this grounded theory, the term reasoned justification explains a much more complex form of reasoning and justification than is used currently in law and social psychology. The definitions of the terms and phrases highlighted above provide a simplistic understanding of the terms, however the grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification* builds on these concepts, and illuminates the complex nature of bystander decision-making in an emergency.

As stated previously the phrase motivated responsibility refers to the responsibility participants were internally driven by when deciding to provide assistance in an emergency. Participants believed their responsibility came from a culmination of natural instinct, their

role within society, the constructed role of others, and personal beliefs, views and experiences (see *internal drivers* chapter, page 86). Motivated responsibility was constructed over time and drove participants to provide assistance in an emergency.

There is a large amount of literature on bystanders in emergencies, some of which is presented in the *preliminary literature review* (see page 8). From the inception of bystander research in the 1960s the concept of responsibility has been researched. However, the majority of research was empirical, making it difficult to fully ascertain where people believe the responsibility was derived from, and how it motivated them to provide assistance. The following examples of research on responsibility in emergencies since the 1960s all utilised an experimental method: Darley and Latane (1968) investigated diffusion of responsibility in groups; Ross (1971) studied the effect of increased responsibility (the presence of children) on intervention; Baumeister et al. (1988) investigated the effect of roles on responsibility; and Fischer et al. (2006) aimed to show the link between dangerous emergencies and a reduction of the bystander effect, thus in part responsibility.

The only non-experimental study that researched responsibility, was undertaken by Levine (1999), who analysed retrospective interview transcripts from the Bulgar murder in 1993 (detailed earlier in the thesis), to ascertain the relationship between social categories and non-intervention in emergencies. Levine (1999) found that bystanders who witnessed the two ten year old boys with the crying and injured toddler, perceived a familial relationship between the boys (who later murdered the toddler), and the toddler, thus the bystanders did not feel responsible to intervene. However, it was difficult to ascertain where the participants derived their interval driver of responsibility from as this study utilised a retrospective analysis of court transcripts.

Research on responsibility in emergencies indicates the person must feel responsible in order to provide assistance. However either participants themselves, or other people at the scene, can determine who is more responsible by assigning pre-determined social roles. An example is a leader of a group of bystanders (Baumeister et al. 1988), or the perception of the family role, as in the study by Levine (1999). Many of the studies mentioned above, and in the *preliminary literature review* chapter, found that people were more likely to diffuse responsibility to other people at the emergency, thus personally feeling less responsible to provide assistance (Darley & Latane 1968; Fischer et al. 2006; Levine 1999; Ross 1971).

However, none of the bystander literature examined how a person's beliefs, views and experiences influenced their responsibility, or why the feeling of responsibility motivated them to provide assistance.

Within the current study, the feeling of responsibility was inherent in the experiences participants recounted. Whether the participant chose to leave the emergency without providing assistance, or if they stayed and continued cycling through the series of assessments and decisions, there was a fundamental driver of responsibility.

## 10.4 The grounded theory of Motivated Responsibility and the Construction of Reasoned Justification

The theory of *Motivated Responsibility and the Construction of Reasoned Justification* provides an explanation for bystander decision-making in an emergency. Participants were motivated by their internal drivers, which made them feel responsible to provide assistance. Participants constructed understandings and meanings from a combination of beliefs, views, experiences, and analyses and assessments, which impacted on the complex series of decisions and the ultimate decision of whether to provide assistance.

The theory presented in this thesis highlights the complex, cyclical nature of decision-making in an emergency, while illuminating the synergism between being motivated by responsibility and the construction of reasoned justification. Reasoned justification is constructed using beliefs, views and experiences as complex criteria which were assessed when making the decision of whether to provide assistance. The motivation to provide assistance and the justifications were continually reassessed, and at any time during the dynamic process of decision-making could be used to rationalise the actions taken.

A person's beliefs, views and experiences affect the way they view the world and construct their meaning (Charmaz 2011). People learn about themselves and the world through their social interactions which become shared understandings (Blumer 1966). For example, a person may view some men as being more dangerous than women because they have heard reports on the news, or listened to stories from other people, which in turn shaped their views into social constructions of reality. Participants' belief that some men are more dangerous than women may influence their decision to provide assistance in an emergency,

thus they may then construct a reasoned justification to rationalise leaving the scene without providing assistance.

Participants also acted according to their roles in society. As highlighted in earlier chapters, participants' behaviour was influenced by pre-determined roles, including gender and age roles, professional roles, roles related to rural and urban location, and roles designated by others, for example a leader of a group of bystanders. According to Biddle (1986a) role theory, as with social constructionism and symbolic interactionism, takes the perspective that social roles are shared expectations of how to behave. These pre-determined roles are constructed within a group and learnt through being exposed to shared identity (Koenig & Eagly 2014). For example, within the current study participants expressed the belief that it was 'normal' or expected behaviour to provide assistance in a rural location. In this situation people from the rural area were a group of people who shared a social identity or role. Thus, their shared social identity constructed the expectation of how to behave.

Role theory is used to describe social behaviour, for example gender differences (Eagly & Wood 1999), or allocated roles, for example the role of a nurse (Goodwin Veenema & Thornton 2015). However, roles are rarely referred to explicitly in the bystander literature. Yet role theory is inherently linked with bystander behaviour. The literature uses language such as the 'role of bystanders' (Twemlow, Fonagy & Sacco 2004), 'the role of student leaders as empowered bystanders' (Banyard, Moynihan & Crossman 2009), and 'rethinking the bystander role' (Stueve et al. 2006), when addressing the social identity of bystanders as a whole. These studies clustered bystanders and identified them as people whose role it is to intervene in an emergency situation. The literature does not consider the complexity of bystanders in relation to these situations, however the grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification* takes into account the varied roles people construct for themselves or others, which are influential to bystander decision-making in an emergency.

Within the current study, social pre-determined roles positively or negatively influenced the drive to provide assistance. If participants or other people, saw themselves as leaders, or believed they were more caring and nurturing because they were women, responsibility to provide assistance was positively influenced increasing the likelihood of providing assistance.

For example, if their designated role was based on their younger or older age, their social identity may negatively influence their motivation to provide assistance.

Within the wider literature, the concept of motivated reasoning is used when referring to a cognitive process of searching through memory to determine if the desired goal is true, which leads to goal satisfaction (Kunda 1990). Motivated reasoning is biased toward seeking answers to goals where there is likely a positive outcome. It is used as a way to reduce negative, and increase positive feelings in relation to the desired goal (Westen et al. 2006). Motivated reasoning can also be used as an 'ego-defensive' mechanism to retain a self-image of living up to personal standards, and as a way to rationalise unethical behaviour before it occurs (Bersoff 1999, p. 28).

The theory of *Motivated Responsibility and the Construction of Reasoned Justification* is similar to, but builds on motivated reasoning as described in the literature. There are many circumstances when people decide not to provide assistance in an emergency. The person has the ability to think about why they should not help using a set of criteria that is individual to them (constructed throughout their lives), thus rationalising their decisions. However, their goals (to provide assistance, to not feel negative about their decision and for others to view them positively) were not necessarily met. If they decided not to provide assistance they went against their moral and ethical responsibility and may have possibly looked 'bad' for making the decision not to provide assistance. However, the grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification* helps to explain a person's ability to justify their series of decisions and the ultimate decision not to provide assistance. This form of reasoned justification enabled participants to explain their decision to themselves and to others and left them feeling as though they made the right decision in the circumstances.

When constructing reasoned justification, participants looked at the cues and factors derived from analyses and assessments of themselves, competing factors, the scene, the situation, people and risks, and used them as a set of criteria. Criteria included, but were not limited to, personal consumption of alcohol, perception of severity of the emergency, the participant having a friend or family member present and the location of the emergency (all of the aspects that influenced the decision to provide assistance were illuminated in previous chapters). If any of these criteria were not met, reasoned justification may have

been constructed to rationalise leaving the scene of the emergency without providing assistance.

Reasoned justifications was used to rationalise decision-making. For example, if a participant was motivated by their responsibility to provide assistance in an emergency and after enacting the cycle of decision-making they decided to help, they could use the criteria mentioned above to reinforce their decisions and the ultimate decision about whether to provide assistance. Yet the final decision could be further influenced at any time by cues and factors interpreted during analysis and assessment of the situation, scene, people and risks, and the criteria placed on the reasoned justification might alter. For example, Lizzy (49 years old) saw a truck crash into a car doing 60 kilometres per hour. The truck subsequently lost control and travelling on two wheels, still at speed, crashed into a powerline and finally a tree. Lizzy immediately parked her car to provide assistance to the truck driver, however on further assessment of the risks, and of her ability to provide assistance, made the decision to stand back and not provide assistance.

Lizzy used reasoned justification to rationalise why she did not provide assistance. She was motivated by responsibility to help the victim, however on further assessment determined in that context she did not have the ability to provide assistance, she may have been injured, or may have further injured the victim. Lizzy's constructed justification meant she saw the emergency as dangerous to herself and the victim, and beyond her ability. By using reasoned justification she expressed no negative feelings associated with her decision not to help.

People were motivated to provide assistance in an emergency because they felt morally and ethically responsible. Reasoned justifications were constructed to provide rationalisations for both helping and not helping. Participants could justify providing assistance; they may have reasoned they should stop to provide assistance, and did so. Following providing assistance they left the scene believing they made the correct decision in the circumstance. Reasoned justification could also be used to justify leaving the scene without providing assistance. The majority of the time participants believed they made the right decision to leave. However, some participants who left the scene without helping later altered their view and were left feeling guilty, highlighting the complexity of bystander decision-making in an emergency. As mentioned earlier, rewards and consequences can be associated with feeling responsible toward something (Eshleman 2014). If the person does not provide

assistance, despite feeling motivated responsibility, they may experience negative feelings, as was the case with two participants of the current study (detailed in Chapter nine, page 166).

These participants felt dissonance (lack of agreement) with the series of decisions and the final decision to not provide assistance in an emergency. They were unequally weighed between their motivated responsibility to provide assistance in an emergency and their ability to justify reasons why they should not help. The theory of *Motivated Responsibility and the Construction of Reasoned Justification* helps to explain the dissonance felt by bystanders during and following decision-making. For example, when James (24 years old) witnessed a two car crash and saw a car seat with a young child 'fly forward', on impact, He decided the emergency was beyond his ability, so left the scene without providing assistance. James was one of only two participants who used reasoned justification to rationalise why he should not help, yet experienced associated negative feelings. James' decision went against his internal drivers (motivated responsibility) and he was left feeling conflicted with his decision.

Cognitive dissonance theory was first discussed by Festinger and Carlsmith in 1959, when they suggested that people act in a certain way to avoid feeling dissonance (Bersoff 1999). To avoid feeling discomfort again the person is motivated to change their preference (Izuma et al. 2010). For example, for James to avoid feeling uncomfortable with his decision, cognitive dissonance theory suggests he would alter his decision if he experienced another similar emergency. Cognitive dissonance theory supports the construction of reasoned justification. After feeling dissonance with a decision, beliefs, views and experiences related to the decision are interrogated and added to the internal criteria used to perform reasoned justification.

The majority of participants believed they made the best decision within their unique contextual situation. They were able to justify why they should or should not provide assistance in an emergency, leaving them with no associated negative feelings. They stayed true to their internal drivers under extreme circumstances.

## 10.5 Chapter summary

The substantive grounded theory presented in this chapter provides an explanation for bystander decision-making in an emergency. Motivated responsibility provided the drive to assist in an emergency and was developed over time from natural instinct; moral and ethical values; social roles; the inability to rely on others; the concern about other people's opinions; because they themselves wanted to be helped; religious or spiritual values; from people influential to their lives; and from personal and other's past experiences. Reasoned justifications were constructed and influenced by factors including beliefs, views and experiences. These factors contributed to the meanings people ascribe and the lens used to view the world, which led to justification of decisions. Reasoned justifications were constructed when providing assistance, when making the decision to drive past the emergency and when deciding to leave the emergency without helping. The interactions between the series of decisions were subjective and illuminated the multifaceted, interconnected, interdependent nature of bystander decision-making in an emergency.

The current study and resulting grounded theory contributes to understandings of bystander decision-making in an emergency while highlighting the variety of cues and factors that can influence these decisions. This study presents a new model for understanding bystander decision-making in an emergency, using constructivist grounded theory method to illuminate the interactions between motivated responsibility and the construction of reasoned justification. The subsequent substantive theory and conceptual model depicts the complex inter-related and dynamic nature of bystander decision-making in emergencies. Chapter eleven elucidates the key outcomes and contributions, strengths, limitations, implications and recommendations of this study.

# CHAPTER ELEVEN: CONCLUSIONS AND IMPLICATIONS

## 11.0 Introduction

This thesis presented the substantive grounded theory of *Motivated Responsibility and the Construction of Reasoned Justification*, which explains bystander decision-making in an emergency. A constructivist grounded theory approach was utilised for this study and was an effective method for interpreting and exploring the theoretical concepts, and relationships between the concepts of bystander decision-making in an emergency (as detailed in chapter three, *methodology*, page 44).

This final chapter presents key outcomes from the study in a discussion of the contributions made to understanding bystander decision-making in an emergency. Strengths and limitations will be discussed, followed by implications and recommendations, which are proposed under the domains of policy, education, research and practice.

## 11.1 Key outcomes and contributions

The purpose of this study was to generate a substantive grounded theory of bystander decision-making in an emergency and the aim was to explore the cues and factors that influenced the decision. GTM afforded me the ability to theorise while engaging with people who had previously been a bystander in an emergency situation. The bystander's perspectives were presented as the principal focus; their experiences were explored and their meanings interpreted by me, giving explanation to their actions and behaviours, thus the study recognises the co-construction between the participants and me.

Since the 1960s, research on bystander assistance in emergencies has intensified. The preliminary literature review (see page 8) presented the literature since the inception of bystander research and highlighted the beliefs and perceptions of people on this area. However, the beliefs and perceptions were often discovered by use of mock scenarios, questionnaires or via retrospective analysis of previously collected data. The majority of reports in the extant literature use empirical methods and aims, and often used undergraduate cohorts as subjects, limiting the diversity of the investigated experiences. The preliminary literature review highlights the complex and at times contradictory results

between many studies, for example other people present at the scene of the emergency being both a barrier and a facilitator to bystander intervention, highlighting the knowledge deficit of bystander decision-making in an emergency.

The purpose and aim of the study were achieved by exploring the cues and factors that influenced the series of assessments and decisions undertaken by bystanders, then generating a grounded theory of bystander decision-making in an emergency. Chapters five to ten presented the findings, which made up the grounded theory, and reflected how the theory is positioned in and builds on the existing body of literature. The grounded theory contributes to knowledge and theoretical understanding of bystander decision-making in an emergency.

Despite a large amount of research about the barriers and facilitators for bystander assistance in emergencies, the rates of assistance (documented for CPR) remain relatively low. The empirical nature of much of the research has not allowed an in-depth exploration of bystander behaviour when faced with an emergency; and what could possibly be implemented to increase rates of assistance.

The following were the significant study outcomes:

- Bystander decision-making in an emergency is complex and relies on interconnected, interdependent assessments and decisions to make the ultimate decision of whether to provide assistance.

- The motivation to provide assistance and the justifications for either providing assistance or leaving the scene are continually reassessed by bystanders, and at any time during the dynamic process of decision-making can be used as a way to rationalise the actions taken.

- Motivated responsibility is complex and constructed over time. It comes from a combination of natural instinct, perceived role within society, a perception of the role others constructed for them, personal beliefs, views and experiences.

- The internal driver of responsibility motivates people to provide assistance in an emergency, however many factors interact with the internal drivers and influence the ultimate decision of whether to provide assistance.
- Reasoned justification is a dynamic process of gathering contextual information from the emergency and thinking about beliefs, views, experiences and roles within society to construct an interpretation of the phenomenon. The interpretation influences the series of decisions and the ultimate decision of whether to provide assistance in an emergency.

- Motivated responsibility to provide assistance and the reasoned justification constructed to rationalise either providing help or leaving the scene of the emergency, continuously and simultaneously interact with, and rely upon, each other when cycling through the series of assessments and decisions to inform bystander decision-making in an emergency.

- The dynamic process enacted upon witnessing or encountering an emergency is unique to every bystander in each emergency; there is no black or white, yes or no outcome. However, they all followed the decision-making model presented in this study.

- The grounded theory and conceptual model illuminate the complexity of bystander decision-making in an emergency and the barriers and facilitators to providing assistance. The series of decisions, influenced by a multitude of cues and factors, explain the many pathways bystander decision-making can take.

## 11.2 Strengths of the study

The application of GTM methods facilitated the generation of a substantive theory grounded in participants' experiences. Core tenets of GTM were considered and applied. As discussed in chapter four, *methods* (see page 71), the study demonstrated credibility, originality, resonance and usefulness, thus increasing the rigour of the study and ensuring the study met the standards and criteria for a constructivist GTM study. As suggested by Charmaz

(2014), employing constructivist grounded theory methodology and methods enabled the voices of participants to be heard, and ensured their voices were carried throughout the findings and substantive grounded theory. No other GTM study was located which researched bystander assistance and decision-making in an emergency.

Interviewing participants who had experienced being a bystander in an emergency added to the richness of data informing the theory. Twenty-seven interviews with people who had these experiences, as opposed to the use of mock scenarios, or questionnaires, provided varied experiences and perspectives in a variety of contexts within South Australia, Australia.

The substantive grounded theory and conceptual model of bystander decision-making in an emergency highlights the importance of understanding the experiences of bystanders. The theory will help to inform future education and research and has implications for policy and practice because it provides further understanding of bystander behaviour when witnessing or encountering an emergency.

## 11.3 Limitations

No research study is without difficulties and limitations, however acknowledging the limitations enhances the study by increasing transparency (Charmaz 2014; Hall & Callery 2001). My past experiences, beliefs and preconceptions as a registered nurse, a researcher and a family member of someone involved in a serious emergency influenced my interpretations. In responding to this potential limitation reflexivity was employed to acknowledge my personal assumptions and how they may have influenced the research process and theory construction, and to minimise potential bias (as detailed in *methods*, page 67). A limitation of using interview is the potential bias inherent in human interaction (Krumpal 2014). As detailed in the methods chapter (page 51) twenty-seven interviews were undertaken, coded and compared to minimise potential bias. Interview was considered the most appropriate method to gather data to meet the aim of the research.

Memories are reconstruction of past experiences, influenced by beliefs, views and experiences (Charmaz 2014; Seale et al. 2012). Although the reconstructed memory of participants experiences may not have been exactly as the emergency occurred, symbolic interactionism acknowledges these reconstructions as their experience, as interpreted by me (Charmaz 2014; Annells 1996; Blumer 1969). Thus although recall bias may be seen as a

possible limitation the method and theoretical perspective used within the study acknowledge the reconstruction and interpretation of these memories.

The grounded theory is an interpretation of bystander decision-making derived from participants from one state within Australia and therefore may not be able to be extrapolated more widely. However, the grounded theory is general so may be useful when attempting to understand bystander behaviour in other contexts.

The recruitment poster and advertisement specified that to be eligible to participate in the study the person had to be able to communicate comfortably in English. This may have deterred people who have English as their second language. However, the selection criteria were not visible when advertising the study via radio and television interviews, or when undertaking presentations; yet no one who had English as their second language volunteered for the study. Thus, this study may not represent the experiences of people who were bystanders in an emergency and who have English as their second language, or who do not speak English at all.

The purpose to generate a substantive theory of bystander decision-making in an emergency and the aim to determine the cues and factors that influenced bystander decision-making in an emergency were fulfilled. The following section, *implications and recommendations*, highlights the study implications in relation to the domains of policy, education, research and practice.

## 11.4 Implications and recommendations

The grounded theory *Motivated Responsibility and the Construction of Reasoned Justification* helps to fill the gap in knowledge about bystander decision-making in an emergency. Although the study was conducted within Australia, the theory is general enough to be applied in different settings, such as internationally. People anywhere can witness or encounter an emergency and be faced with the decision of whether to provide assistance. However the cues and factors that influence the series of decisions may be different, depending on the context and the setting. This study elucidates a number of significant implications and recommendations relevant both within Australia and internationally. Implications and recommendations drawn from this study are discussed below. The

implication and recommendations of this study cross the domains, thus there is some repetition in the following section.

### 11.4.1 Policy

Bodies responsible for policies and standards, for example the Australian and New Zealand Committee on Resuscitation (ANZCOR) and International Liaison Committee on Resuscitation (ILCOR) may benefit from being informed of the substantive grounded theory. These organisations are responsible for coordination of aspects of resuscitation and dissemination of information used for training and education. Being informed of the grounded theory may influence, or provide direction for future research, policies or standards. If these bodies are made aware of the process of bystander decision-making, for example how bystanders construct reasoned justification by assessing cues and factors derived from the situation, scene, risks and other people, it may influence change in policies enabling modification of the information taught in first aid courses. For example, these organisations could be informed of the barriers and facilitators to providing bystander assistance, such as the perceived risks to personal safety. First aid courses could then be enhanced by providing additional information about perceived risks to personal safety and what can be done to avoid the risks.

The modified courses could also include *bystander training*, which may incorporate education on barriers, facilitators, cues and factors that influence the decision and how the decisions are made using motivated responsibility and the construction of reasoned justification. Education could then be provided on how the dynamic processes are enacted and ways to overcome the barriers. This would enhance learning, may encourage people to provide assistance and provide them with a framework to refer to when faced with an emergency.

The government should also consider the first aid content taught by registered training organisations (regulated by state government) and the higher education sector, such as universities (regulated by national government). If these organisations were aware of the barriers and facilitators to providing bystander first aid in an emergency, the content of first aid courses could be modified to incorporate education focused on these areas.

Government organisations such as the Motor Accident Commission (MAC) in South Australia and the Transport Accident Commission (TAC) in Victoria would benefit from being informed of the grounded theory of bystander decision-making in an emergency. The grounded theory and conceptual model will enhance their understanding of the complexity of bystander decision-making in an emergency. They will be informed of the internal drivers that influence motivated responsibility, and of the analyses and assessments which are influenced by the cues and factors derived from the emergency. This will provide government organisations with a better understanding of what is going through a persons' mind when witnessing or encountering an emergency, which could lead to further research, public education and may influence policy changes. An example would be to target the competing factors that influence the motivated responsibility to provide assistance, such as the belief that when a bystander is unwell or injured they should not offer assistance, or a belief that when another bystander does not appear outwardly panicked the emergency is under control. Having an increased understanding of bystander behaviour may influence the information that is provided, and who is targeted, when designing public health and awareness campaigns.

One of the most significant internal drivers came from having undertaken first aid training. Confidence in ability increased, even when the first aid training had occurred many years previously. The grounded theory and conceptual model generated in this study could be used to inform government of the benefits of first aid training as a motivator to proving bystander assistance in an emergency. The government should be encouraged to include first aid training as a part of the national curriculum to ensure all children have received first aid training, which may increase confidence in their ability to provide assistance. Similarly, first aid programs could be implemented as part of the National Driver Education training to refresh the first aid knowledge received while at school, again increasing confidence in ability to provide assistance in an emergency.

### 11.4.2 Education

The core concepts of *motivated responsibility* and *reasoned justification* were identified as significantly influential to people when faced with an emergency situation. Having an understanding of where motivations are drawn from, why people feel responsible to provide assistance, and how reasoned justification informs the decision to either provide assistance or to leave the scene without helping, may help to inform education. The grounded theory can enhance understanding of these concepts in order to plan public health campaigns focussing on the benefits of bystander assistance in emergencies. Many cues and factors negatively influenced bystanders while cycling through the series of assessments and decisions, and ultimately making the decision of whether to provide assistance. Ensuring education is based on evidence, from people who have experienced being a bystander, will enhance the information and awareness provided to the general public. For example, if future bystanders were aware there are interactions between being motivated to provide assistance and various barriers and facilitators derived from the series of analyses and assessments, it may influence their behaviour. This knowledge could encourage people of all ages to provide assistance, as they would understand the other people at the scene may also be lacking confidence.

Bodies that design and implement public health and awareness campaigns, such as The Heart Foundation and Take Heart Australia can benefit from being informed of the grounded theory of bystander decision-making in an emergency. Research shows that, despite public health campaigns exposing large numbers of people to relevant information, many factors compete with the messages, for example social roles and habitual behaviours (Brinn et al. 2010; Wakefield, Loken & Hornik 2010). Future campaigns to raise public awareness of the benefits of bystander assistance could be based on in-depth data from people who have witnessed or encountered an emergency. Informing these bodies of the results will enable them to incorporate strategies to target the competing factors, which may enable campaigns to have further reach.

With an improved understanding, campaigns can be informed by the grounded theory and conceptual model, from findings from people who have been a bystander in an emergency, enabling the information to have more impact on the target audience. For example, a media campaign informing the public of the barriers to bystander assistance, which was evident in

the literature, and was built on through this study, such as a lack of confidence in ability, or the fear of causing further harm to the victim, will enable people to understand they were not alone in their concerns. The campaign could then target ways to reduce the barriers, for example, by busting the myths surrounding bystander assistance, such as the risk of infectious disease transmission or ensuing litigation.

Another significant finding was that some people lack confidence in their ability to provide bystander assistance in an emergency. The lack of confidence negatively influenced their decision and participants constructed reasoned justification for leaving the scene based on a perception of a lack of ability. Public health campaigns that support the bystander by thanking them for their service, and addressing common myths, may increase confidence in their ability to provide assistance, thereby positively influencing their decision to intervene. Another benefit of a public health campaign thanking bystanders is the incentive of a reward or benefit for offering assistance in an emergency, which may increase the willingness to offer assistance. Bystanders would receive the public 'reward' which would allow them to be seen as a positive member of society, which may in turn encourage them and others to help. Current research indicates behavioural changes occur when an incentive is offered (Giles et al. 2014), thus acknowledging bystanders enhances their image and may provide positive feelings which may increase the likelihood they will help again.

The results from this study indicated that people are motivated, in part, to provide assistance because of their social identity and social role expectation. Public health campaigns which make helping the 'normal' thing to do may influence peoples' perception of their role within society and motivate them to provide assistance. Constructing an expectation to provide assistance may in itself increase the responsibility felt by people, thus motivating them to provide assistance in an emergency. An example was the expectation that people in rural areas will help, which increased the internal drive to provide assistance, related to a perceived role expectation. If the bodies who create public heath campaigns aim to make helping normal behaviour, people may be encouraged to provide assistance in order to conform to their role expectation.

As mentioned in the policy section, having undertaken first aid training at some point increased some participants' confidence in ability to provide assistance. It may be beneficial to extend first aid training programs within schools to provide education and possibly

increase the responsibility felt by people toward providing assistance. Participants in this study indicated first aid training increased the motivated responsibility to provide assistance even when it had only occurred as a once off with no refresher course. For example Jim said:

> *I think that for me the most important thing is the exposure to some form of [first aid] training, so that you know a sequence of activities, you've got some kind of system that gives you a way of approaching a situation where some intervention might be necessary, and that includes looking at the context and what needs to be managed there, getting the information for emergency services so they've got some signposts where to look.* (Jim, 56 years old)

Barriers and facilitators to providing first aid in an emergency are important as they form the motivators to provide assistance, and justification for either providing assistance or leaving the scene without helping, therefore initiatives that build on the motivation through social expectation and those which address common fears or concerns may be useful. For example, extending first aid training in schools, even if a once-off initiative, may motivate people to provide bystander assistance by increasing their knowledge and skills of first aid and the responsibility to provide assistance.

Organisations such as Australian Red Cross, St John Ambulance Australia and private first aid training providers may be interested in the results of this study, as presented in the policy section. Adding content to first aid training courses that is based on the evidence from this study will help to ensure the information people receive is based on actual barriers and facilitators. An example is to address the perceived fears or concerns of bystanders when faced with an emergency, so as to help alleviate common fears, for example the fear of further harming a victim.

### 11.4.3 Research

This study determined there were two major concepts within the theory, specifically *motivated responsibility* and *reasoned justification*. Having a greater understanding of the concepts and of how they interact to influence the series of assessments and decisions, and the ultimate decision of whether to provide assistance, may enhance future education and have implications for policy and practice. Further research could be conducted into the individual components that make up the conceptual model, and how they interact with each other, in order to test the grounded theory and how it works. An example is to conduct a

study whereby bystanders are observed then interviewed to determine whether they undertake each of the processes and to see whether the interactions between the processes are present. Methodologies such as another grounded theory or methods such as an observational study would both be appropriate to test the model and the interactions while observing bystanders at the scene of an emergency. Further research could validate the grounded theory, increasing the generalisability, or could identify essential changes to be made.

Further research to ascertain whether the grounded theory and conceptual model are relevant to other groups may be useful to determine whether bystanders place the same importance on cues, factors, barriers and facilitators to providing assistance in an emergency. For example, research participants could include people from other states in Australia, varied cultural groups within Australia, in different environments, for example remote communities, and internationally. Establishing whether bystander decision-making is similar for these varied groups, cultures and environments may aid in the implementation of future education and policy.

The results from this study could be used to inform an Australia wide empirical, population survey to gather large amounts of data on the cues and factors that affect bystander decision-making in an emergency. Larger amounts of data would provide a better understanding of the population, and enable specific influential factors such as the age and gender of a bystander and the appearance and behaviour of the victim to be further explored. This research would increase the generalisability of the results and could then be used to drive education, public awareness campaigns and policy planning and implementation. For example, the results could help to inform public health campaigns by identifying targets for the messages, for example younger and older bystanders may need to be targeted because they lack confidence in their ability to provide assistance in an emergency.

A research study could be undertaken to identify interventions which influence the internal driver of responsibility to provide assistance, such as an evaluation of positive community interventions which increase engagement with the community, thus creating social identity. Increasing responsibility to provide assistance may increase the motivation felt by bystanders and encourage people to help in an emergency.

Future research could be undertaken to investigate measures which encourage people to provide assistance, including a study to measure the effects of a public health campaign designed to change the behaviour of people by influencing more people to provide assistance in an emergency. There have been many instances of campaigns to alter behaviour, such as road safety campaigns to encourage the use of seatbelts or to prevent mobile phone use; cancer prevention, for example *Quit*, for smoking cessation, or *Slip! Slop! Slap! Seek! Slide!*, for sun protection; which have varied effect on behavioural change. If a mass media campaign was designed and promoted, such as one of those mentioned earlier, research could be undertaken to determine how effective the campaign was at changing peoples' view of providing assistance in an emergency. Empirical research could also be done to measure whether rates of bystander CPR increased following the campaign. Results from these studies would provide direction for changes in policy, for example, information taught in first aid courses, and direction for future public health campaigns.

### 11.4.4 Practice

The grounded theory highlights the link between the motivation of responsibility and action. Providing education for health professionals concerning actions that may build the internal driver of motivated responsibility, such as engagement with bystanders, may increase the responsibility felt by bystanders. Increasing the responsibility may increase the drive and motivation to provide assistance.

Informing emergency services personnel, for example paramedics and police officers, of the grounded theory will enable them to develop further understanding of the complex series of decisions bystanders enact when faced with an emergency. Providing education to emergency services personnel on how to support and reassure bystanders may offer further insight and enable them to offer improved support to bystanders who remain at the emergency. If emergency services personnel are trained not only to manage the scene of the emergency and the victims, but to also offer brief support to bystanders, enhanced by a greater understanding of bystander decision-making in an emergency, the willingness of bystanders to provide assistance in the future may increase. For example, if a role of one of the emergency services personnel was to have a brief conversation with the bystander to thank them for their assistance, confidence in the bystander's ability to provide assistance, and willingness to provide subsequent assistance may be improved.

The brief support provided to bystanders may also avert longer term psychological distress caused by the emergency. Following witnessing or encountering an emergency and having to make the decision of whether to provide assistance a person may feel some associated negative feelings, such as stress or anxiety (Donnelly & Bennett 2014). If emergency services personnel were made aware of the complex process of bystander decision-making in an emergency they may be able to offer support in the form of a brief conversation at the scene of the emergency. This support could reassure bystanders their assistance was helpful and direct them to support services if they require it. This support may increase confidence in bystander ability to provide assistance, or encourage them to assist in future emergencies.

General practitioners (GP) are the first point of call for people experiencing psychological symptoms following witnessing or assisting in an emergency. Following the consultation the GP may refer the person to a psychiatrist, or a psychologist specialising in treatment of post-traumatic stress disorder (Smith, Robinson & Segal 2016). Informing these groups of people about the complex processes involved in bystander decision-making including the construction of reasoned justification to rationalise providing assistance or leaving the scene, will further their understanding of bystander behaviour. This may enable them to offer insights and support to bystanders based on evidence from actual bystanders, not personal opinion. The insights may be in the form of enabling bystanders to know their experience is not unusual, and that while decision-making in an emergency people are never certain about which cues and factors will influence their series of assessments and decisions, and the ultimate decision of whether to provide assistance. These and other insights may encourage bystanders to offer help in the future.

## 11.5 Concluding comments

Bystanders can and do save lives. Each year millions of out-of-hospital emergencies occur throughout the world, impacting on the lives of victims, their families and the people who witness or encounter these emergencies. Despite bystander research being conducted since the late 1960s, little has changed or been implemented to significantly increase the rates of bystander assistance. The results in the body of research highlight difficulties in understanding human, and in particular bystander behaviour when faced with a potentially traumatic scene. This study has elucidated the complexity of bystander decision-making in

an emergency, highlighting the decision is based on motivated responsibility and reasoned justification.

Understanding the process of bystander decision-making and the cues and factors that influence the series of assessments and decisions enables us to understand how the ultimate decision may be made, and reasons why these bystanders either stay to provide assistance, or leave the scene of the emergency. Having a better understanding of the complexity of bystander decision-making in an emergency may enable changes to occur in the areas of policy, research, education and practice and can be directed toward acknowledging and supporting bystanders, reducing their fears and increasing their sense of community engagement. Understanding how cues and factors, derived from analyses and assessments, influence the construction of reasoned justification, offers insight into the barriers and facilitators to proving bystander assistance in an emergency. Any advances in understanding have the ability to improve the experiences of future bystanders and victims of emergencies.

Bystanders have the ability to make a difference in the lives of the victims of these emergencies. Providing assistance whether it be calling for help, performing cardiopulmonary resuscitation or reassuring the victim, can and does impact these victims. This assistance may be in the form of saving their lives or letting them know that someone was there with them in the time of their greatest need, but whatever the intervention, it *will* make a difference.

# APPENDICES

**Appendix 1: Details of studies reporting perceived barriers to bystander assistance in an emergency**

| Perceived Barrier | No. of studies | Source |
|---|---|---|
| Lack of confidence | 30 | (Axelsson, Herlitz & Fridlund 2000; Bakke et al. 2015; Bickman 1994; Breckwoldt, Schloesser & Arntz 2009; Cho et al. 2010; Clark III & Word 1974; Coons & Guy 2009; Dombrowski et al. 2012; Dwyer 2008; Johnston et al. 2003; Kliegel et al. 2000; Kuramoto et al. 2008; Larsson, Martensson & Alexanderson 2002; Lu et al. 2016; Pelinka et al. 2004; Pergola & Araujo 2008; Sasaki et al. 2015; Sasson et al. 2013; Sasson et al. 2011; Savastano & Vanni 2011; Schwartz & Clausen 1970; Senneker & Hendrick 1983; Shibata et al. 2000; Shotland & Heinold 1985; Swor et al. 2006; Taniguchi, Omi & Inaba 2007; Thierbach et al. 2004; Tomruk et al. 2007; Urban et al. 2013; Vaillancourt et al. 2014) |
| Other people present at the emergency | 28 | (Axelsson, Herlitz & Fridlund 2000; Baumeister et al. 1988; Bickman 1971, 1994; Cacioppo, Petty & Losch 1986; Clark III & Word 1972, 1974; Darley & Batson 1973; Darley & Latane 1968; Faul, Aikman & Sasser 2016; Gaertner 1975; Gaertner & Dovidio 1977; Gaertner, Dovidio & Johnson 1982; Harris & Robinson 1973; Hortensius & de Gelder 2014; Johnston et al. 2003; Latane & Rodin 1969; Piliavin, Piliavin & Rodin 1975; Ross 1971; Ross & Braband 1973; Rutkowski, Gruder & Romer 1983; Sasson et al. 2013; Schwartz & Clausen 1970; Schwartz & Gottlieb 1980; Senneker & Hendrick 1983; Shotland & Heinold 1985; Smith, Smythe & Lien 1972; Staub 1970) |
| Insufficient knowledge and skills to provide first aid / insufficient knowledge of importance of first aid | 22 | (Axelsson, Herlitz & Fridlund 2000; Bobrow et al. 2010; Cho et al. 2010; Clark III & Word 1972; Darley & Latane 1968; Dombrowski et al. 2012; Kliegel et al. 2000; Kuramoto et al. 2008; Larsson, Martensson & Alexanderson 2002; Levine et al. 2005; Pelinka et al. 2004; Pergola & Araujo 2008; Ross, Winter & Mossesso 2000; Sasson et al. 2015; Sasson et al. 2013; Senneker & Hendrick 1983; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012; Thierbach et al. 2004; Tomruk et al. 2007; Urban et al. 2013; Venema, Groothoff & Bierens 2010) |
| Fear of performing the intervention incorrectly, causing further harm to the victim | 18 | (Cacioppo, Petty & Losch 1986; Cho et al. 2010; Coons & Guy 2009; Dwyer 2008; Kliegel et al. 2000; Ross, Winter & Mossesso 2000; Sasaki et al. 2015; Sasson et al. 2013; Sasson et al. 2015; Savastano & Vanni 2011; Shibata et al. 2000; Smith, Smythe & Lien 1972; Staub 1970; Swor et al. 2006; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012; Thierbach et al. 2004; Vaillancourt, Christian et al. 2014) |
| Type of intervention required – medical / direct | 17 | (Axelsson et al. 1996; Axelsson et al. 1998; Bobrow et al. 2010; Cho et al. 2010; Clark III & Word 1972; Coons & Guy 2009; Lam et al. 2007; Lu et al. 2016; Nagao et al. 2007; Pergola & Araujo 2008; Senneker & Hendrick 1983; Shibata et al. 2000; Swor et al. 2006; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012; Thierbach et al. 2004; Urban et al. 2013) |

| | | |
|---|---|---|
| Fear of infectious disease | 16 | (Axelsson et al. 1996; Bobrow et al. 2010; Cho et al. 2010; Coons & Guy 2009; Dwyer 2008; Johnston et al. 2003; Lam et al. 2007; Lu et al. 2016; Ross, Winter & Mossesso 2000; Sasson et al. 2013; Sasson et al. 2015; Sasson et al. 2011; Savastano & Vanni 2011; Taniguchi et al. 2012; Thierbach et al. 2004; Vaillancourt, Christian et al. 2014) |
| Bystander characteristics – Female gender | 12 | (Bakke et al. 2015; Coons & Guy 2009; Dwyer 2008; Johnston et al. 2003; Pelinka et al. 2004; Piliavin & Rodin 1969; Sasaki et al. 2015; Sasson et al. 2011; Senneker & Hendrick 1983; Shotland & Heinold 1985; Tomruk et al. 2007; Venema, Groothoff & Bierens 2010) |
| The victim - Ethnicity – non Caucasian | 11 | (Benson et al. 2009; Brookoff et al. 1994; Cowie et al. 1993; Fosbol et al. 2014; Gaertner 1975; Gaertner & Dovidio 1977; Gaertner, Dovidio & Johnson 1982; Moon et al. 2014; Sasson et al. 2011; Vadeboncoeur et al. 2008; York Cornwell & Currit 2016) |
| The victim – Stranger | 11 | (Cho et al. 2010; Coons & Guy 2009; Gottleib & Carver 1980; Johnston et al. 2003; Kuramoto et al. 2008; Lu et al. 2016; Sasson et al. 2015; Swor et al. 2006; Tanaka et al. 2015; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012) |
| Ambiguity of the emergency | 9 | (Clark III & Word 1972, 1974; Faul, Aikman & Sasser 2016; Latane & Rodin 1969; Levine et al. 2005; Shotland & Heinold 1985; Smith, Smythe & Lien 1972; Solomon, Solomon & Stone 1978; Thierbach et al. 2004) |
| Fear of litigation | 9 | (Cho et al. 2010; Coons & Guy 2009; Johnston et al. 2003; Lu et al. 2016; Ross, Winter & Mossesso 2000; Sasson et al. 2013; Sasson et al. 2015; Savastano & Vanni 2011; Vaillancourt, Christian et al. 2014). |
| Emergency not witnessed | 9 | (Abrams et al. 2013; Brookoff et al. 1994; Kitamura et al. 2014; Piliavin, Piliavin & Broll 1976; Sasson et al. 2011; Straney et al. 2015; Swor et al. 2006; Takei et al. 2014; Vaillancourt et al. 2008) |
| Location of emergency - Private | 9 | (Adielsson et al. 2011; Axelsson et al. 1996; Breckwoldt, Schloesser & Arntz 2009; Brookoff et al. 1994; Sasson et al. 2011; Straney et al. 2015; Swor et al. 2006; Takei et al. 2014; Vaillancourt et al. 2008) |
| Unsure of when to assist | 8 | (Axelsson, Herlitz & Fridlund 2000; Breckwoldt, Schloesser & Arntz 2009; Dombrowski et al. 2012; Larsson, Martensson & Alexanderson 2002; Pergola & Araujo 2008; Sasson et al. 2015; Swor, R. et al. 2006; Vaillancourt, Christian et al. 2014) |
| Concerned about what others think | 8 | (Ashton & Severy 1976; Cacioppo, Petty & Losch 1986; Lu et al. 2016; Sasson et al. 2013; Sasson et al. 2015; Smith, Smythe & Lien 1972; Staub 1970; Tice & Baumeister 1985) |
| Bystander characteristics – Lower level of education | 7 | (Dwyer 2008; Kuramoto et al. 2008; Larsson, Martensson & Alexanderson 2002; Savastano & Vanni 2011; Swor et al. 2006; Tomruk et al. 2007; Urban et al. 2013) |
| Location of emergency – Low income area | 7 | (Chiang et al. 2014; Dwyer 2008; Fosbol et al. 2014; Moncur et al. 2016; Sasson et al. 2011; Vaillancourt et al. 2008; York Cornwell & Currit 2016). |
| The victim – Physical appearance affected by i.e. blood, broken bones etc. | 7 | (Adielsson et al. 2011; Axelsson et al. 1996; Johnston et al. 2003; Lu et al. 2016; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012; Vaillancourt et al. 2014) |
| Lack of confidence of physical ability to provide assistance | 6 | (Coons & Guy 2009; Dami et al. 2010; Lu et al. 2016; Sasson et al. 2013; Swor et al. 2006; Vaillancourt et al. 2014) |

| | | |
|---|---|---|
| The victim – family member / close friend | 6 | (Akahane et al. 2012; Casper et al. 2003; Fujie et al. 2014; Kuramoto et al. 2008; Lam et al. 2007; Takei et al. 2014) |
| Victim – Older age | 6 | (Cho et al. 2010; Dami et al. 2010; Fosbol et al. 2014; Johnston et al. 2003; Lu et al. 2016; Taniguchi et al. 2012) |
| Non-responsive bystanders at the scene of the emergency | 6 | (Bickman 1994; Clark III & Word 1972; Darley & Batson 1973; Gaertner, Dovidio & Johnson 1982; Piliavin, Piliavin & Rodin 1975; Ross 1971) |
| Bystander characteristics - Older age | 5 | (Coons & Guy 2009; Dwyer 2008; Larsson, Martensson & Alexanderson 2002; Swor et al. 2000; Takei et al. 2014) |
| Possibility of being robbed or injured | 5 | (Clark III & Word 1972; Faul, Aikman & Sasser 2016; Sasson et al. 2013; Sasson et al. 2015; Sasson et al. 2011) |
| Too busy to help | 5 | (Batson et al. 1978; Darley & Batson 1973; Faul, Aikman & Sasser 2016; Ross, Winter & Mossesso 2000; Vaillancourt et al. 2014) |
| Perception of severity of the emergency - Severe | 5 | (Ashour et al. 2007; Axelsson, Herlitz & Fridlund 2000; Bakke et al. 2015; Dami et al. 2010; Thierbach et al. 2004) |
| Bystander characteristics – Male gender | 4 | (Dombrowski et al. 2012; Faul, Aikman & Sasser 2016; Lu et al. 2016; Swor et al. 2006) |
| Lack of knowledge of changing first aid guidelines | 3 | (Sasson et al. 2013; Sasson et al. 2015; Urban et al. 2013) |
| Type of intervention required – Non-medical / indirect | 3 | (Latane & Rodin 1969; Schwartz & Clausen 1970; Schwartz & Gottlieb 1980) |
| The victim – Female gender | 3 | (Adielsson et al. 2011; Faul, Aikman & Sasser 2016; Sasson et al. 2011) |
| The victim - Younger age | 3 | (Faul, Aikman & Sasser 2016; Johnston et al. 2003; Savastano & Vanni 2011) |
| Location of emergency – Rural | 3 | (Faul, Aikman & Sasser 2016; Straney et al. 2015; Takei et al. 2014) |
| Location of the emergency – Urban | 2 | (Jennings et al. 2006; York Cornwell & Currit 2016) |
| The victim - Male gender | 2 | (Dietze, Cantwell & Burgess 2002; Piliavin, Piliavin & Broll 1976) |
| The victim - Behaviour i.e. acting as though intoxicated | 2 | (Faul, Aikman & Sasser 2016; Piliavin & Rodin 1969) |
| Bystander characteristics – Younger age | 2 | (Staub 1970; Urban et al. 2013) |
| Location of emergency – Public | 1 | (Faul, Aikman & Sasser 2016) |
| Bystander characteristics - Ethnicity – Caucasian | 1 | (Ross, Winter & Mossesso 2000) |

**Appendix 2: Details of studies reporting perceived facilitators to bystander assistance in an emergency**

| Perceived Facilitator | No. of studies | Source |
|---|---|---|
| Type of intervention required – Non-medical / indirect | 17 | (Axelsson et al. 1996, 1998; Bobrow et al. 2010; Cho et al. 2010; Clark III & Word 1972; Coons & Guy 2009; Lam et al. 2007; Lu et al. 2016; Nagao et al. 2007; Pergola & Araujo 2008; Senneker & Hendrick 1983; Shibata et al. 2000; Swor et al. 2006; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012; Thierbach et al. 2004; Urban et al. 2013) |
| The victim - Family member/close friend | 14 | (Akahane et al. 2012; Cho et al. 2010; Coons & Guy 2009; Dombrowski et al. 2012; Dwyer 2008; Gottlieb & Carver 1980; Johnston et al. 2003; Lu et al. 2016; Sasson et al. 2013; Swor et al. 2000; Swor et al. 2006; Tanaka et al. 2015; Taniguchi, Omi & Inaba 2007; Taniguchi et al. 2012) |
| Bystander characteristics -Male gender | 12 | (Bakke et al. 2015; Coons & Guy 2009; Dwyer 2008; Johnston et al. 2003; Pelinka et al. 2004; Piliavin & Rodin 1969; Sasaki et al. 2015; Sasson et al. 2011; Senneker & Hendrick 1983; Shotland & Heinold 1985; Tomruk et al. 2007; Venema, Groothoff & Bierens 2010) |
| The victim - Ethnicity – Caucasian | 11 | (Benson et al. 2009; Brookoff et al. 1994; Cowie et al. 1993; Fosbol et al. 2014; Gaertner 1975; Gaertner & Dovidio 1977; Gaertner, Dovidio & Johnson 1982; Moon et al. 2014; Sasson et al. 2011; Vadeboncoeur et al. 2008; York Cornwell & Currit 2016) |
| Sufficient knowledge and skills to provide first aid | 11 | (Axelsson, Herlitz & Fridlund 2000; Clark III & Word 1974; Dombrowski et al. 2012; Dwyer 2008; Johnston et al. 2003; Kliegel et al. 2000; Lu et al. 2016; Pelinka et al. 2004; Sasaki et al. 2015; Swor et al. 2006; Tomruk et al. 2007) |
| Location of the emergency– Witnessed the emergency | 9 | (Abrams et al. 2013; Brookoff et al. 1994; Kitamura et al. 2014; Piliavin, Piliavin & Broll 1976; Sasson et al. 2011; Straney et al. 2015; Swor et al. 2006; Takei et al. 2014; Vaillancourt et al. 2008) |
| Location of the emergency - Public | 9 | (Adielsson et al. 2011; Axelsson et al. 1996; Breckwoldt, Schloesser & Arntz 2009; Brookoff et al. 1994; Sasson et al. 2011; Straney et al. 2015; Swor et al. 2006; Takei et al. 2014; Vaillancourt et al. 2008) |
| First aid training – increased confidence to provide assistance | 9 | (Bakke et al. 2015; Cho et al. 2010; Coons & Guy 2009; Dwyer 2008; Pelinka et al. 2004; Sasaki et al. 2015; Shotland & Heinold 1985; Swor et al. 2006; Tomruk et al. 2007) |
| Concerned about what others think | 8 | (Ashton & Severy 1976; Cacioppo, Petty & Losch 1986; Lu et al. 2016; Sasson et al. 2015; Sasson et al. 2013; Smith, Smythe & Lien 1972; Staub 1970; Tice & Baumeister 1985) |
| The victim – Stranger | 8 | (Akahane et al. 2012; Casper et al. 2003; Cho et al. 2010; Coons & Guy 2009; Fujie et al. 2014; Gottlieb & Carver 1980; Kuramoto et al. 2008; Taniguchi et al. 2012) |
| Bystander characteristics -Higher level of education | 7 | (Dwyer 2008; Kuramoto et al. 2008; Larsson, Martensson & Alexanderson 2002; Savastano & Vanni 2011; Swor et al. 2006; Tomruk et al. 2007; Urban et al. 2013) |
| Social influence | 7 | (Axelsson, Herlitz & Fridlund 2000; Axelsson et al. 1998; Bickman 1994; Dombrowski et al. 2012; Rutkowski, Gruder & Romer 1983; Staub 1970; Vaillancourt et al. 2014) |
| Location of the emergency– High income area | 7 | (Chiang et al. 2014; Dwyer 2008; Fosbol et al. 2014; Moncur et al. 2016; Sasson et al. 2011; Vaillancourt et al. 2008; York Cornwell & Currit 2016) |

| | | |
|---|---|---|
| Previous experience – Have provided assistance or someone they knew helped | 6 | (Axelsson et al. 1996; Axelsson et al. 1998; Dombrowski et al. 2012; Dwyer 2008; Sasaki et al. 2015; Urban et al. 2013) |
| Other people present at the emergency | 6 | (Axelsson et al. 1998; Nishi et al. 2013; Staub 1970; Takei et al. 2014; Vaillancourt et al. 2014; Venema, Groothoff & Bierens 2010) |
| Bystander characteristics - Younger age | 5 | (Coons & Guy 2009; Dwyer 2008; Faul, Aikman & Sasser 2016; Larsson, Martensson & Alexanderson 2002; Swor et al. 2000) |
| The victim - Younger age | 5 | (Coons & Guy 2009; Dwyer 2008; Faul, Aikman & Sasser 2016; Larsson, Martensson & Alexanderson 2002; Swor et al. 2000) |
| Perception of severity of the emergency - Severe | 5 | (Clark III & Word 1972; Dietze, Cantwell & Burgess 2002; Faul, Aikman & Sasser 2016; Gaertner & Dovidio 1977; West & Brown 1975) |
| Bystander characteristics - Female gender | 4 | (Dombrowski et al. 2012; Faul, Aikman & Sasser 2016; Lu et al. 2016; Swor et al. 2006) |
| The victim - Female gender | 4 | (Dombrowski et al. 2012; Faul, Aikman & Sasser 2016; Lu et al. 2016; Swor et al. 2006) |
| Type of intervention required – Medical | 3 | (Latane & Rodin 1969; Schwartz & Clausen 1970; Schwartz & Gottlieb 1980) |
| Bystander characteristics - Older age | 3 | (Faul, Aikman & Sasser 2016; Johnston et al. 2003; Savastano & Vanni 2011) |
| Location of the emergency – Urban | 3 | (Faul, Aikman & Sasser 2016; Straney et al. 2015; Takei et al. 2014) |
| The victim - Older age | 3 | (Faul, Aikman & Sasser 2016; Staub 1970; Urban et al. 2013) |
| The victim - Physical appearance – Attractive | 3 | (Lu et al. 2016; Piliavin, Piliavin & Rodin 1975; West & Brown 1975) |
| Bystander characteristics - Ethnicity – Caucasian | 2 | (Piliavin & Rodin 1969; Urban et al. 2013) |
| The victim - Male gender | 2 | (Dietze, Cantwell & Burgess 2002; Piliavin, Piliavin & Broll 1976) |

## Appendix 3: Participants profiles

| Interview order | Pseudonym | Age | Gender | Number of emergencies witnessed/encountered | Time since latest emergency |
|---|---|---|---|---|---|
| **1** | Matt | 32 | M | 4 | < 1 year |
| **2** | Alissa | 28 | F | 1 | 12 years |
| **3** | Carl | 72 | M | 2 | < 2 years |
| **4** | Kim | 48 | F | 4 | < 1 year |
| **5** | Emily | 25 | F | 2 | 1 year |
| **6** | Jim | 56 | M | 8 | < 1 year |
| **7** | Paula | 67 | F | 3 | > 30 years |
| **8** | Geoff | 42 | M | 2 | < 1 year |
| **9** | Paul | 45 | M | 2 | < 1 year |
| **10** | Paige | 19 | F | 1 | < 1 year |
| **11** | Beth | 58 | F | 1 | < 2 years |
| **12** | Claire | 53 | F | 1 | < 4 years |
| **13** | Catherine | 74 | F | 1 | 38 years |
| **14** | Max | 61 | M | 9 | < 6 weeks |
| **15** | Ken | 68 | M | 6 | 16 years |
| **16** | Margaret | 81 | F | 5 | 9 years |
| **17** | Patricia | 54 | F | 1 | 6 years |
| **18** | Lizzy | 49 | F | 7 | < 1 year |
| **19** | Leonard | 69 | M | 3 | < 20 years |
| **20** | James | 24 | M | 3 | 2 years |
| **21** | Don | 62 | M | 2 | < 8 years |
| **22** | George | 74 | M | 3 | 20 years |
| **23** | Ralph | 71 | M | 1 | < 40 years |
| **24** | Narelle | 28 | F | 1 | 3 years |
| **25** | Belinda | 44 | F | 1 | 9 years |
| **26** | Mark | 19 | M | 1 | < 1 year |
| **27** | Patricia* | 54 | F | 1 | 6 years |

* Patricia was re-interviewed

**Appendix 4: Themes from the preliminary literature review**

| Theme | Sub-theme | |
|---|---|---|
| The Bystander | Knowledge and skills to provide assistance | Confidence to provide assistance |
| | | Knowledge and skills to provide first aid / Knowledge of importance of first aid |
| | | Knowledge of changing first aid guidelines |
| | | Knowing when to assist |
| | | Confidence in physical ability to provide assistance |
| | Fears and concerns | Performing the intervention incorrectly, causing further harm to the victim |
| | | Litigation |
| | | Infectious disease |
| | | Possibility of being robbed or injured |
| | | Concerned about what others think |
| | Bystander characteristics | Gender |
| | | Age |
| | | Ethnicity |
| | Level of education | Completed higher or lower level of education |
| | Too busy to help | Too busy to help |
| The Emergency | Other people present | Other people present at the emergency |
| | | Non / responsive bystanders at the scene of the emergency |
| | Location of the emergency | Low vs. high income area |
| | | Public vs. private |
| | | Urban vs. rural area |
| | | Witnessed vs. not witnessed |
| | Perception of severity of the emergency | Severe vs. not severe |
| | | Type of intervention required – medical / direct vs. non-medical / indirect |
| | Ambiguity of the situation | Ambiguous vs. non-ambiguous |
| The Victim | Victim characteristics | Gender |
| | | Age |
| | | Ethnicity |
| | | Physical appearance - injury affecting physical appearance i.e. blood, broken bones etc. / Physically attractive |
| | | Behaviour i.e. acting as though intoxicated |

**Appendix 5: Recruitment poster used for this study**

# Have you witnessed an emergency?

**I am looking for volunteers to take part in a PhD study, on what influences people's decision-making in an emergency.**

**As a participant in this study you must be:**

- **18 years or older**
- **have no health care qualifications**
- **be able to have a conversation comfortably in English**
- **have witnessed or assisted at an out of hospital emergency where someone required significant medical or first aid assistance**

**For more information, or to volunteer for this study, please contact Anna:**

Phone: xxxx xxx xxx

or

Email: xxxxxxxxxxxxxxxxxxxxxxxxxxxx

This study has been reviewed by, and received ethics clearance through, the Social and Behavioural Research Ethics Committee, Flinders University.

**Appendix 6: Advertisement placed in news bulletins**

# Have you witnessed an emergency?

**I am looking for volunteers to take part in a PhD study, on what influences people's decision-making in an emergency.**

**As a participant in this study you must:**

- **be 18 years or older**
- **have no health care qualifications**
- **Be able to have a conversation comfortably in English**
- **have witnessed or assisted at an out of hospital emergency where someone required significant medical or first aid assistance**

**For more information, or to volunteer for this study, please contact Anna:**

Phone: xxxx xxx xxx

or

Email: xxxxxxxxxxxxxxxxx

This study has been reviewed by, and received ethics clearance through, the Social and Behavioural Research Ethics Committee, Flinders University.

**Appendix 7: Advertisement placed on social media sites**

## Why ordinary people become heroes

You've just witnessed a horrific car crash. Your heart is pounding, you're in shock. And the decision you make in the next thirty seconds could be the difference between life and death.

Will you help, or walk away?

The factors influencing a person's decision to provide assistance, or not, in a life-threatening medical emergency are being explored in a new Flinders University study.

As part of her PhD, Anna Hall from Flinders' School of Nursing and Midwifery will interview witnesses to a range of real-life emergencies, including car accidents, heart attacks, fires and falls, to find out what motivated their decision to intervene before ambulance crews arrived on scene.

By gaining insights into why people chose to help or not, Ms Hall says she hopes her research will inform policy and debate on the role of bystanders in emergencies.

**For further information on the study, or to participate, email xxxxxxxxxxxxxxx or call xxxxxxxxxx.**

**Appendix 8: In Daily press release**

## Why ordinary people become heroes

You've just witnessed a horrific car crash. Your heart is pounding, you're in shock. And the decision you make in the next thirty seconds could be the difference between life and death.

Will you help, or walk away?

The factors influencing a person's decision to provide assistance, or not, in a life-threatening medical emergency are being explored in a new Flinders University study.

As part of her PhD, Anna Hall from Flinders' School of Nursing and Midwifery will interview witnesses to a range of real-life emergencies, including car accidents, heart attacks, fires and falls, to find out what motivated their decision to intervene before ambulance crews arrived on scene.

With ambulance response times on the rise due to increasing callouts, Ms Hall said the help provided by bystanders in the minutes before paramedics arrive could save a life.

"Nationally, there are more than 1.4 million emergency situations every year," Ms Hall said.

"The number of emergency callouts is increasing so ambulance response times are getting longer, with response times varying from 8.5 to 19.7 minutes in capital cities and 8.3 to 23.1 minutes in South Australia," she said.

"These extended response times mean that people who are at the emergency scene may be the difference between life and death for the victims.

"While paramedics do an incredible job, the victims still need to be alive when the paramedics arrive. Anything bystanders can do to help the victim in turn helps the paramedics."

While she is still recruiting interview participants, Ms Hall said she suspects a range of factors influence a bystander's decision-making process, including shock and the fear of being sued.

"Witnessing a medical emergency can be extremely traumatic – these witnesses are potentially faced with broken bones, severed limbs, unconscious people or death.

"Sometimes they're in shock so they freeze. Sometimes they don't know what to do – or think they'll do more harm than good – and sometimes they're scared of being sued, which is a myth because Good Samaritan laws protect people from undue liability when they provide assistance, advice or care to another person in an emergency."

Now in her second year of research, Ms Hall says she was inspired to explore the issue after her brother, Joe, received life-saving care from a bystander following a serious car crash in 2009.

"He wouldn't be alive if it weren't for the witness who stopped to help when other people kept driving.

"It got me thinking, why do some people decide to help while others turn away?"

Study participants will receive information about counselling services, Ms Hall said, in case they are feeling traumatised by their experience.

"I'll be interviewing ordinary, everyday people who aren't health workers so it's important to conduct the research sensitively and provide pathways to support if they are suffering post-traumatic stress."

By gaining insights into why people chose to help or not, Ms Hall says she hopes her research will inform policy and debate on the role of bystanders in emergencies.

"Research shows that if a victim of an emergency receives first-aid before paramedics arrive they have an increased chance of survival.

"If we understand what goes through peoples' minds at the scene of an emergency we could potentially develop guidelines to alleviate their fears and ultimately encourage more people to help."

**For further information on the study, or to participate, email Anna Hall.**

**Appendix 9: Article published in the affiliated University's research journal**

# What influences peoples' decision-making in an emergency

PhD candidate Anna Hall, from the School of Nursing and Midwifery is researching the reasons why some people help in an out-of-hospital emergency, and why some people do not. Nationally, there are over 1.4 million emergency events per year. These events can include any situation that requires medical attention or first aid, such as car crashes, heart attacks or head injuries. People often witness or encounter these emergency situations and are potentially faced with broken bones, severed limbs, unconscious people or death. These people (bystanders) are then faced with the decision of whether or not they will help, which is a decision that will potentially save lives.

Due to the increase in the number of emergency call outs, ambulance response times are increasing. Response times vary from 8.5-19.7 minutes within capital cities and 8.3-23.1 minutes state-wide. These extended response times mean that bystanders may be the difference between life and death for the victims. Research shows that if a victim of an emergency receives first aid before the Paramedics arrive they have an increased chance of survival.

After witnessing or coming upon the emergency, bystanders are faced with the decision of whether or not to provide assistance. A number of factors influence this decision-making process and impact on the final decision. Exploring these factors will help to understand why people chose to either stop and assist at the emergency or decide not to assist.

Anna is currently inviting people who have witnessed or come across an emergency to participate in her study. For more information please contact Anna at xxxxxxxxxxxxxxxxxx.

**Appendix 10: Letter of introduction provided to potential participants**

**Professor Paul Arbon AM**
Dean
School of Nursing & Midwifery
GPO Box 2100
Adelaide SA 5001
Telephone +61 8 8201 3558
Facsimile +61 8 8276 1602
paul.arbon@flinders.edu.au
www.flinders.edu.au

Dear

This letter is to introduce Miss Anna Hall who is a PhD student in the School of Nursing and Midwifery at Flinders University.

She is undertaking research leading to the production of a thesis and other publications on the subject of what influences people's decision-making in an emergency.

She would be most grateful if you would volunteer to assist in this project, by granting an interview which covers certain aspects of this topic. No more than one hour would be required for this interview. If the researcher has any other questions you may be asked to participate in another interview, which would take no more than half an hour.

Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Since she intends to make a tape recording of the interview, she will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, report or other publications, on condition that your name or identity is not revealed, and to make the recording available to other researchers on the same conditions. It may be necessary to make the recording available to secretarial assistants for transcription, in which case you may be assured that from the audio tape you will not be able to be identified. A number or a fictional name will be the only identifier made available to the secretarial assistant.

Any enquiries you may have concerning this project should be directed to me at the address, telephone number, fax number or email address given above.

Thank you for your attention and assistance. Yours sincerely

Professor
Paul Arbon
Dean, School of Nursing & Midwifery

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 6288). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.*

**Appendix 11: Information sheet provided to potential participants**

**Professor Paul Arbon**
**School of Nursing & Midwifery**
GPO Box 2100
Adelaide SA 5001
Tel: 8201 5135
Paul.arbon@flinders.edu.au
http://nursing.flinders.edu.au/

**Professor Kristine Gebbie**
**School of Nursing & Midwifery**
GPO Box 2100
Adelaide SA 5001
Tel: 8201 5135
Kristine.gebbie@flinders.edu.au
http://nursing.flinders.edu.au/

**Professor Hugh Grantham**
**School of Nursing & Midwifery**
GPO Box 2100
Adelaide SA 5001
Tel: 8201 5135
Hugh.grantham@flinders.edu.au
http://nursing.flinders.edu.au/

INFORMATION SHEET

What influences people's decision-making in an emergency

Principal researcher
**Anna Hall**
**School of Nursing and Midwifery**
**Flinders University**
**Phone: xxxxxxx Mobile: xxxxxxxxxxxxxxx**
**Email: xxxxxxxxxxxxxxxxxxxxxxxxx**

Purpose of the study

**The project entitled 'What influences people's decision-making in an emergency' explores the cues or factors that influence people when deciding whether or not to assist in an out of hospital emergency event which requires significant medical or first aid intervention.**

**The aims of this study are:**

- **To further understand what influences decision-making for people in an emergency**
- **To further understand decision-making**

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 6288). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au*

Eligibility criteria

**To be eligible for this study you must fit the following criteria: be eighteen years or older, not have a health care qualification (Doctor, Nurse, Paramedic, CFS, MFS or SES), be able to comfortably have a conversation in English and have witnessed an emergency event whereby someone required significant medical or first aid treatment.**

What you will be asked to do

**Should you choose to participate in the study, you will be asked a series of questions in the form of an interview. The interview will be undertaken in a place of your choice for no longer than one hour. If the researcher requires more information you may be asked if you would participate in a follow-up interview for no longer than half an hour.**

The interview will be recorded using a digital voice recorder to help with looking at the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file and then destroyed once the results have been finalised. This is voluntary.

**What benefit will I gain from being involved in this study?**

The sharing of your experiences will further knowledge surrounding the area of decision-making and how it is effected in an emergency situation.

**Will I be identifiable by being involved in this study?**

Your identity will remain confidential throughout the study and in any publications or presentations of the final results. A code or a pseudonym will be used throughout the research and in professional publications and conference presentations.

Once the interview has been typed-up and saved as a file, the voice file will then be destroyed. Any identifying information will be removed and the typed-up file stored on a password protected computer that only the coordinator (Mr Joe Bloggs) will have access to. Your comments will not be linked directly to you.

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 6288). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au*

**Are there any risks or discomforts if I am involved?**

**Within this interview you may be asked questions that may be of a sensitive nature. If during the interview you become distressed, the interview will be stopped until you are ready to resume. Your local doctor, Lifeline (13 11 14) or Griefline (9935 7400) can provide free counselling or support should you need it.**

**How do I agree to participate?**

Participation is voluntary. You may answer 'no comment' or refuse to answer any questions and you are free to withdraw from the interviews at any time without effect or consequences. A consent form accompanies this information sheet. If you agree to participate please read and sign the form and send it back to me at xxxxxxxxxxxx or GPO Box 2100, Adelaide, SA, 5001.

**How will I receive feedback?**

Outcomes from the project will be summarised and given to you by the investigator if you would like to see them.

**Your assistance in this study would be greatly appreciated.**

**Thank you for your attention and assistance**

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 6288). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au*

**Appendix 12: Consent form provided to potential participants**

**CONSENT FORM FOR PARTICIPATION IN RESEARCH**
**by interview**

What influences people's decision-making in an emergency

I ……

being over the age of 18 years hereby consent to participate as requested in the Information Sheet for the research project on 'what influences people's decision-making in an emergency.'

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio recording of my information and participation.
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
5. I understand that:
   - I may not directly benefit from taking part in this research.
   - I am free to withdraw from the project at any time and am free to decline to answer particular questions.
   - While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.
   - I may ask that the recording be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.
6. I agree/do not agree to the tape/transcript being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that my identity is not revealed.
7. I have had the opportunity to discuss taking part in this research with a family member or friend.

**Participant's signature……Date……..**

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

**Researcher's name…….....**

**Researcher's signature……..Date…….**

**Appendix 13: Human research ethics committee final notice**

## FINAL APPROVAL NOTICE

| | |
|---|---|
| Project No.: | **6288** |
| Project Title: | What factors influence people's decision-making in an emergency |
| Principal Researcher: | Miss Anna Hall |
| Email: | anna.hall@flinders.edu.au |

| | | | |
|---|---|---|---|
| Approval Date: | 18 December 2013 | Ethics Approval Expiry Date: | **31 December 2016** |

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided.

### RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

**1. Participant Documentation**

Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.
- the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 'INSERT PROJECT No. here following approval'). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.*

**2. Annual Progress / Final Reports**

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research (March 2007)* an annual progress report must be submitted

each year on the **18 December** (approval anniversary date) for the duration of the ethics approval using the annual / final report pro forma available from Annual / Final Reports SBREC web page. *Please retain this notice for reference when completing annual progress or final reports.*

If the project is completed *before* ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please submit either (1) a final report; or (2) an extension of time request and an annual report.

Student Projects

The SBREC recommends that current ethics approval is maintained until a student's thesis has been submitted, reviewed and approved. This is to protect the student in the event that reviewers recommend some changes that may include the collection of additional participant data.

Your first report is due on **18 December 2014** or on completion of the project, whichever is the earliest.

**3. Modifications to Project**

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such matters include:

- proposed changes to the research protocol;
- proposed changes to participant recruitment methods;
- amendments to participant documentation and/or research tools;
- change of project title;
- extension of ethics approval expiry date; and
- changes to the research team (addition, removals, supervisor changes).

To notify the Committee of any proposed modifications to the project please submit a Modification Request Form to the Executive Officer. Download the form from the website every time a new modification request is submitted to ensure that the most recent form is used. Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Change of Contact Details

Please ensure that you notify the Committee if either your mailing or email address changes to ensure that correspondence relating to this project can be sent to you. A modification request is not required to change your contact details.

**4. Adverse Events and/or Complaints**

Researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or human.researchethics@flinders.edu.au immediately if:

- any complaints regarding the research are received;
- a serious or unexpected adverse event occurs that effects participants;
- an unforeseen event occurs that may affect the ethical acceptability of the project.

## Appendix 14: Southern Adelaide clinical human research ethics committee approval

FLINDERS MEDICAL CENTRE

Government of South Australia
Southern Adelaide Health Service

27 June 2014

Ms Anna Hall
School of Nursing and Midwifery
Flinders University
GPO Box 2100
ADELAIDE SA 5001

Dear Ms Hall

**HREC reference number**: ARF 2 / 6288
**Project title**: What influences people's decision-making in an emergency.
**Ethics approval**: 31 December 2016

RE: SA Health access request form

Thank you for submitting your access request form. I am pleased to inform you that authorisation has been granted for data collection at:

- Flinders Medical Centre
- Noarlunga Health Service
- Repatriation General Hospital

Documents authorised:

- SA Health access request form submitted 03 June 2014
- Flinders University social or behavioural research involving human subjects application form
- Flinders University ethics approval dated 18 December 2013
- Letter of support from Professor Paul Arbon, Dean, School of Nursing & Midwifery Flinders University
- Recruitment flyer
- Recruitment flyer with pull off tabs

Should you have any queries about the consideration of your access request form, please contact Bev Stewart Campbell on 08 8204 4507.

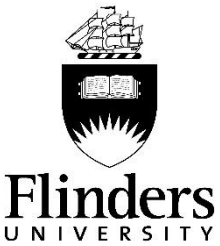
The reference number should be quoted in any correspondence about this matter.

Yours sincerely

Bev Stewart Campbell
Research Governance Officer
Southern Adelaide Clinical Human Research Ethics Committee

*Flinders Medical Centre*
*The Flats G5 – Rooms 3 and 4*
*Flinders Drive, Bedford Park SA 5042*
*T: 08 8204 6453*
*F: 08 8204 4586*
*E:Research.ethics @health.sa.gov.au*

**Appendix 15: Confidentiality form provided to transcriptionist**




## CONFIDENTIALITY AGREEMENT

## Transcription Services

What influences people's decision-making in an emergency.

I, _____, transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentation received from Anna Hall related to her doctoral study on 'what influences people's decision-making in an emergency'. Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents;

2. To not make copies of any audiotapes or computerized files of the transcribed interview texts, unless specifically requested to do so by Anna Hall;

3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession;

4. To return all audiotapes and study-related documents to Anna Hall in a complete and timely manner.

5. To delete all electronic files containing study-related documents from my computer hard drive and any backup devices.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber's name (printed) _____

Transcriber's signature _____

Date _____

**Appendix 16: Demographic questions asked to participants**

## Demographic questionnaire

1. Can you please tell me your age?
2. How many emergencies have you witnessed or encountered?
3. How long ago did each of these occur?
4. Have you undertaken first aid training?
5. Do you have a current first aid certificate?
6. Are you happy to be contacted for a follow up interview or to discuss the preliminary results?

**Appendix 17: Original interview guide and prompts**

**Interview questions**

1. Tell me about your experience from the time you knew there was an emergency event
2. Could you please describe the events leading up to the emergency
3. Could you please describe the events after the emergency
4. Who, if anyone influenced your actions?
5. As you look back on the emergency, are there any other events that stand out in your mind?
6. How has any experience you have had, before the emergency, affected how you handled the situation?
7. Have your views/actions changed since the incident?

**Possible prompts**

1. If you recall, what were you thinking when…?
2. Tell me about how he/she influenced you
3. What happened next?
4. Please describe each of these
5. Could you tell me about how
6. Could you further describe your actions from the time you saw there was an emergency event?
7. Can you tell me how that felt?
8. Can you tell me what you saw?
9. Can you tell me what you did?
10. Can you tell me more about...?
11. Can you tell me what you meant by...?
12. What did you mean by...?
13. Can you further explain...?
14. That is interesting, could you tell me more about…?

**Appendix 18: Modified interview guide – Interview 22**

1. Did you always know you would help in an emergency?
2. If not did they change their minds? Why?
3. Have you done a first aid course? And is it current?
4. If you have done one, why did you do the course?
5. Do you have a first aid kit? And what does it consist of?
6. Does having this kit give you more confidence to help?
7. How do you think your age influences your decision of whether to provide assistance? What is the reason for your answer?
8. If the incident occurred near you are you more likely to help than if it happened further away? What is the reason for your answer?
9. How do you think the location of the emergency, for example country or city, influenced your decision? What is the reason for your answer?
10. How do you determine other people's competence at the scene?
11. Are some people more likely to accept help than others? I.e. Older, gender. What is the reason for your answer?
12. Do you think one gender is more likely to help? What is the reason for your answer?
13. Is there anything else you can think of that would prevent you from stopping to help?
14. Is there anything else you would like to tell me

# REFERENCES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