# INTERVIEWING TO ASSESS
# AND MANAGE THREATS OF VIOLENCE

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*Dedicated to Joost and Marie-Claire,*
*for nailing the art of parenting*

# ABSTRACT

Persons who pose threats of violence can be rich sources of information for professionals charged with ensuring safety and security. The interviewing of threateners is thus considered important among such professionals, but research on the topic is scarce. This thesis seeks to advance current knowledge by proposing a scientific perspective on effective threat assessment and management (TAM) interviewing. What are the expected dynamics when interacting with persons who threaten to cause harm and, given these dynamics, which interview methods work best? A novel experimental paradigm was developed and employed in Studies I, II, and III. Participants were given a fictitious case describing two conflicting parties and were then asked to take on the role of the threatening party in a subsequent interview with the conflicting party.

*Study I* (N = 157) examined whether individuals' intent to actualise a threat becomes evident in how they verbalise that threat. Intent was manipulated across three conditions through the likelihood to actualise the threat: low likelihood (no intent: bluffers), medium likelihood (weak intent: conditional actualisers), and high likelihood (strong intent: decisive actualisers). Based on theory and research in cognitive psychology, it was predicted that decisive actualisers would provide the most detail about the implementation of the threat, followed by conditional actualisers, and bluffers would provide the least. The opposite trend was found: Persons more likely to actualise a threat were found less informative about its implementation.

*Study II* (N = 179) tested the effect of two interview techniques (low vs. high suspicion-oriented) on the information provided by bluffers and actualisers. Drawing on psychological research examining lie detection, it was theorised that the need to be believed would be more urgent for bluffers than for actualisers. Hence, bluffers were expected to be more forthcoming when questioned about their threats and, in particular, when the questions communicated suspicion. As expected, bluffers provided more information in response to specific questions as compared to actualisers, especially with regard to implementation details (replicating Study I). However, the difference between bluffers and actualisers was not further accentuated by the use of suspicion-oriented questions. Furthermore, Study II explored whether threatening participants had used counter-interview strategies. Participants were found to be forthcoming, while also being strategic and adaptive to interviewers' responses.

*Study III* (N = 120) tested the hypothesis that rapport-based interviewing would be more effective for threat assessment and management purposes than direct interviewing. Against expectations, no differences were found between interview protocols pertaining to the threateners' use of counter-interview strategies, their information provision, or their willingness to pursue/discuss the threat. Furthermore, the study advanced Study II by exploring what types of counter-interview strategies threateners employ. Again, threateners were found to be both forthcoming and strategic. The most frequently reported strategies were to prove capability and to conceal information.

*Study IV* was an online study that investigated whether threat assessments made by professionals were of higher quality than those made by non-professionals. Threat assessment professionals, university students, and laypersons assessed the risk for violence in three fictitious cases. In alignment with the literature on expert decision-making, it was predicted that professionals (vs. students and laypersons) would agree more with one another with respect to risk assessments, and that their information search would show more resemblance with empirically supported threat cues. The results supported both hypotheses.

Taking the results of the studies together, it could be concluded that threateners are semi-cooperative interviewees, whose attitudes may not be impacted by general interview approaches (e.g. rapport-based, suspicion-oriented). Instead, the findings suggest that more strategic techniques developed from the perspective of threateners (which result in their motivation to be informative prevailing over their need to be strategic) are needed.

*Keywords:* human intelligence gathering, investigative interviewing, threat assessment, threat management, true and false intent

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# SWEDISH SUMMARY

Avhandlingen handlar om intervjuer för att bedöma och hantera hot (Threat Assessment and Management; TAM). Praktiker inom detta område arbetar med att bedöma och hantera individer som kan tänkas fullfölja sina hot om målinriktat våld. Dessa hot kan förekomma inom flera olika miljöer, som exempelvis i skolan, på arbetsplatsen, i hemmet eller på offentliga områden. De individer som framför hot om våld, är naturligtvis viktiga källor för TAM praktiker. Detta då det endast är de som själva hotar som har information om sina avsikter, samt att det endast är de som kan ändra sina egna avsikter. Att intervjua eller interagera med en person som hotar anses därför vara viktigt bland praktiker. Dock är forskningen på området knapphändig. Föreliggande avhandling riktade in sig på att bidra till den befintliga kunskapen på området genom att föreslå ett vetenskapligt baserat perspektiv som ser till vad som utgör effektiva TAM intervjuer. Vilka processer kan förväntas när man interagerar med individer som hotar att göra skada, och givet dessa processer, vilka intervjumetoder fungerar bäst? För att undersöka dessa frågor utvecklades ett nytt experimentellt paradigm: Deltagare fick ett fiktivt fall som beskrev två motstridande parter, och uppmanades att ta rollen av den hotande parten i en kommande intervju. Detta experimentella paradigm användes i en serie av studier (I, II, III), där varje studie adresserade ämnet från en speciell vinkel.

Studie I (N = 157) utvärderade huruvida individers avsikter att förverkliga ett hot kan visa sig i hur de formulerar (verbaliserar) hotet. Det vill säga, kommer så kallade utförare (de med verkliga avsikter) och bluffare (de med falska avsikter) formulera sina hot på olika sätt? Avsikter manipulerades över tre betingelser genom att variera sannolikheten för att hotet skulle förverkligas: ingen intention (bluffare), svag intention (potentiella utförare), och stark intention (bestämda utförare). Baserat på teori och forskning inom kognitiv psykologi predicerades att bestämda utförare skulle lämna flest detaljer om hur hotet skulle förverkligas, följt av potentiella utförare. Bluffare förväntades lämna minst detaljer. Resultatet visade en motsatt trend: Individer som var mer sannolika att fullfölja sitt hot var mindre informativa gällande hur hotet skulle förverkligas. Detta fynd var extra påtagligt när deltagare utmanades i den senare delen av intervjun; det vill säga, när de blev kritiskt utfrågade ("Hur vet jag att det du säger är sant?") eller fick en sista chans att tala ("Finns det något mer jag borde känna till?). Studiens utfall står i konflikt med idén att händelser som troligen kommer hända inom en snar framtid upplevs och behandlas i mer konkreta, "hur"-relaterade termer (Wakslak et al., 2006). En möjlig förklaring kan vara att utförare, oftare än bluffare, kan välja att inte avslöja "hur"-relaterade detaljer med syfte att försäkra en framgångsrik implementering av hotet. Denna förklaring föreslår att hotfulla meddelanden reflekterar strategiskt betänkande över vad som är bäst att avslöja, snarare än vad som är möjligt att avslöja.

Studie II (N = 179) testade effekten av två intervjustilar (låg eller hög misstänksamhetsorientering) på informationsutlämnandet av bluffare och utförare. Mot bakgrund av forskning om lögnens psykologi, teoretiserades att behovet att bli trodd borde vara mer påtagligt för bluffare än utförare. Därför förväntades bluffare vara mer öppna (forthcoming) med att lämna information när de utfrågades om sitt hot, speciellt när frågorna förmedlade misstänksamhet. Studien undersökte även om de hotande deltagarna använde motstrategier, om de ändrade strategi under intervjun, och – om så - varför de

ändrade strategi. Som förväntat, bluffare lämnade mer information som svar på specifika frågor jämfört med utförare, speciellt vad gällde implementeringsdetaljer (replikering av Studie I). Däremot ökade inte skillnaden mellan bluffare och utförare som ett resultat av misstänksamhetsorienterade frågor. Med andra ord, att kommunicera misstänksamhet under intervjun hade alltså ingen påverkan på bluffare. Vad gäller motstrategier, så blev deltagarna mer öppna med information, samtidigt som de var strategiska och adaptiva till intervjuarens respons. Det vill säga, även fast de lämnade en viss del information till intervjuaren, så beskrev nästan alla av dem att de hade använt en strategi när de kommunicerade sina hot, och hälften av dem beskrev att de hade ändrat sin strategi under intervjun för att lyckas klara av intervjuarens frågor.

Studie III (N = 120) testade hypotesen att en rapport-baserad intervjustil skulle vara mer effektiv för att uppfylla TAM-syften jämfört med att ställa direkta frågor. Personer som uttryckte hot intervjuades med ett rapport-baserat protokoll (vs. direkta frågor) förväntades använda färre motstrategier, lämna mer information, visa mindre villighet att förverkliga hotet, och visa större villighet att träffa intervjuaren igen. Emot våra förväntningar fann vi inga skillnader mellan intervjuprotokollen. Den genomförda studien byggde vidare på Studie II genom att utforska vilka motstrategier de som hotar använder sig av. I ljuset av Studie II, visade sig hotare vara semi-samarbetsvilliga när de utfrågades om sina intentioner att göra skada. De var överlag villiga att diskutera situationen och gav – i genomsnitt – en tredjedel av den information de satt på. Den absoluta majoriteten (90%) var också strategiska gällande hur de presenterade sitt fall. De strategier som oftast rapporterades var att bevisa sin kompetens att kunna genomföra hotet (dvs. kapabilitet) och att dölja information. Än viktigare, deltagare som innan intervjun var mer positiva till att implementera ett hot valde oftare att dölja information, och speciellt information gällande själva utförandet av hotet (ex. namn på kontaktpersoner, specifika bitar av bevis). Detta fynd visar att personer som hotar är beslutna att fullfölja sitt hot kan använda mer undvikande strategier än bluffare – ett fynd som matchar utfallet i Studie I och II.

Studie IV var en online-studie som undersökte om hotbedömningar utförda av praktiker var av högre kvalitet än bedömningar utförda av naiva deltagare. Praktiker inom fältet, universitetsstudenter, och lekmän bedömde risken för våld i tre fiktiva fall. Deltagarna fick först skatta i vilken grad varje bit information ökade eller minskade risken till våld i specifika fall. I nästa steg fick de lista upp till fem kompletterande bitar av information som de upplevde skulle hjälpa dem göra bättre bedömningar av risken till våld. Mot bakgrund av litteratur om hur experter fattar beslut, predicerades att praktikers (jämfört med icke-praktikers) bedömningar skulle vara mer samstämmiga gällande riskbedömningar, och att deras informationssökande oftare skulle efterfråga empiriskt förankrade ledtrådar till hot. Resultatet stödde båda dessa hypoteser.

Sammanfattningsvis, nuvarande intervjupraxis inom bedömning och hantering av hot förlitar sig på 'common-sense' kunskap (customary knowledge) – kunskap som växt fram över tid och med erfarenhet, förts vidare genom inlärning via observation och historieberättande (Hartwig et al., 2014). Syftet med föreliggande avhandling var att bidra till att på ett vetenskapligt sätt undersöka hotbedömningar och hanteringsintervjuer. Genom att integrera teori med de empiriska fynd som presenteras i avhandlingen kan det fastställas att personer som hotar är till viss del samarbetsvilliga under intervjuer, vilkas attityder och beteenden inte behöver påverkas i någon högre utsträckning av intervjumetoden som sådan

(ex. rapport-baserad intervju, misstänksamhetsorienterad intervju). Avhandlingens resultat understryker ett behov av mer strategiska tillvägagångssätt. Detta inkluderar att utveckla intervjumetoder (i) som utgår från hotarens perspektiv, så att befintliga attityder hos den som hotar kan förutses och motverkas, (ii) som skiftar hotarens motivation från att vara strategisk till att lämna mer information, och (iii) som assisterar intervjuaren att finna en balans mellan att kontrollera risk (genom att göra riskbedömningar och sätta restriktioner) och att möta behov (genom att visa stöd och arbeta mot en lösning). Vetenskapligt grundade intervjumetoder som utvecklas borde beröra en eller flera av dessa preliminära fynd. Utvecklingar av detta slag kommer sannolikt förbättra kvalitén av TAM intervjuer, och kan även sänka tröskeln till att en intervju över huvud taget blir av. Avslutningsvis, ju fler intervjuer som genomförs inom området, desto fler nya erfarenheter och desto mer data som kan verka som input för framtida forskning. Det är just den här interaktionen mellan vetenskap och praxis som behövs för att avancera fältet av bedömning och hantering av hot.

# TABLE OF CONTENTS

# PREFACE

This thesis consists of a summary and the following papers, which are referred to by Roman numerals:

I.     Geurts, R., Granhag, P. A., Ask, K., & Vrij, A. (2016). Taking threats to the lab: Introducing an experimental paradigm for studying verbal threats. *Journal of Threat Assessment and Management, 3,* 53-64. doi: 10.1037/tam0000060

II.    Geurts, R., Ask, K., Granhag, P. A., & Vrij, A. (2017). Eliciting information from people who pose a threat: Counter-interview strategies examined. *Journal of Applied Research in Memory and Cognition, 6,* 158-166. doi: 10.1016/j.jarmac. 2016.10.002

III.   Geurts, R., Ask, K., Granhag, P. A., & Vrij, A. (2017). *Interviewing to manage threats: Exploring the effects of interview style on information gain and threateners' counter-interview strategies*. Manuscript submitted for publication.

IV.    Geurts, R., Granhag, P. A., Ask, K., & Vrij, A. (2017). Assessing threats of violence: Professional skill or common sense? *Journal of Investigative Psychology and Offender Profiling*. Advanced online publication. doi: 10.1002/jip.1486

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# BACKGROUND

The *Journal of Threat Assessment and Management* recently published a special edition looking back at 25 years of research and practice in threat assessment and management (Guy, 2015). Professionals in this field are concerned with assessing and managing persons believed to pose a threat of violence (Meloy, 2015). With a history of less than three decades, the field is still young. Modern threat assessment originated in law enforcement and intelligence agencies when, in the late eighties, the US Secret Service was challenged by the assassination of public officials. These incidents gave rise to one of the pioneering projects in threat assessment: The Exceptional Case Study Project (ECSP; Fein & Vossekuil, 1999). The ECSP examined 83 assassinators of Secret Service protectees and the overall aim was to reach an understanding of the perpetrators' backgrounds, motives, and behaviours. The findings of this project resulted in the first operational guidelines on how to assess threats of violence (Fein & Vossekuil, 1998). Notably, the lessons learned then still prevail today (Borum, Fein, Vossekuil, & Berglund, 1999; Guy, 2015). These lessons were: (i) violence is presumed to result from understandable thoughts and behaviours, (ii) such thoughts and behaviours develop over time, (iii) they are shaped by experiences (rather than personality), and (iv) they are often evident in subjects' behaviour prior to an attack. Identifying such behaviours is considered key to threat assessment investigations.

Has nothing changed then over the past few decades? The answer is to the contrary; the field of threat assessment has developed rapidly. A number of archival studies followed the ECSP, which not only addressed violence towards public figures but also workplace violence, school violence, and domestic violence (mostly stalking). In addition to these domains, the 9/11 attacks in 2001 brought about studies examining radicalisation and terrorist intent. Knowledge development resulted in jargon and threat assessment tools, and it allowed for specialisation. Today, practitioners can join associations for threat assessment professionals, attend conferences, enrol in training courses, and apply for certification.

When reviewing 25 years of work, it becomes obvious that remarkable progress has been made. However, such a review also shines a light on knowledge gaps and obstacles. Critiques have been raised with regard to widely used terminology and concepts (Hart, 2016a). For instance, threat assessment is often defined as assessing the risk for *targeted violence*, which implies that there exists non-targeted violence as well — but how does that differ from an accident? Moreover, subjects of concern are assumed to move through sequential stages of a pathway towards violence, but how long does it take to move from one stage to another? Can subjects move backwards or skip stages? What are the factors pushing a person to the next stage? And are there pathways to non-violence too? In addition to conceptual ambiguities, methodological difficulties limit the field. One such difficulty is that the base rates of risk factors are largely unknown (Gill, 2015). To illustrate, if there is no grasp of how many people in society experience feelings of hopelessness, it is hard to say whether or not feelings of hopelessness are typical for the offender population (and thus indicative of risk). Finally, I would allow myself to add one more issue to the list of future challenges: How can valuable information be collected from persons who pose a threat of violence?

The person posing a threat is arguably the richest source of information for threat managers. However, such subjects are also the most difficult sources of information. They may exaggerate or downplay their intentions, they may conceal or lie about their plans, they may be unable to give a comprehensive account (potentially due to mental illness), or interviewing them might increase the risk for violence (Meloy, Hart, & Hoffmann, 2014a). These conditions emphasise the need for skilled interviewing. Although the importance of interviewing is acknowledged in the literature on threat assessment (Calhoun & Weston, 2015; Fein & Vossekuil, 1998; Mohandie, 2014; van der Meer & Diekhuis, 2014), there has been surprisingly little research on *how* to conduct such interviews. Threat assessment interviewers might rely on findings from related disciplines such as suspect interviewing and crisis negotiation, or they might draw on customary knowledge that has emerged over time through experience (Hartwig, Meissner, & Semel, 2014). However, given the developments in the field, a unique research strand is merited on interviewing to assess and manage threats of violence.

The central aim of this thesis is to contribute to a scientific approach for *threat assessment and management (TAM) interviewing*. Specifically, the thesis seeks to make such a contribution by: (i) reviewing relevant research and methodology in social, legal, and cognitive psychology, and thereby providing a theoretical groundwork for examining TAM interviews, (ii) introducing and testing an experimental paradigm for studying interview dynamics in TAM contexts, and (iii) reflecting on the outcomes of the empirical studies in order to identify future avenues for research. The content of the thesis is structured accordingly.

## Defining Threats and the Scope of the Thesis

### Definitions

Deep water, bad weather, political tension, and viral outbreaks — many insecurities can be threatening. However, these are not the types of threats examined in this thesis. Instead, the focus is on *threats of violence.* Violence can be defined as actual, attempted, or threatened physical or serious psychological harm that a person deliberately directs without consent towards another person(s) (e.g. Douglas et al., 2014). According to this definition, all communicated threats should be considered violence, but not all violence involves threats. In addition, all harm that one threatens to inflict is violence as well. This can be physical, emotional, or financial harm, disturbance of peace, or persistent harassing behaviour.

Within threat assessment and management, the term *threat* can mean two things. The first meaning refers to an act that communicates an intent to cause violence—the person *makes* a threat. Persons who make a threat are, in this thesis, indicated as *threateners*, a term derived from the act of threatening. The second meaning describes a situation of potential violence. In these situations, there is concern that a specific person will act violently—the person *poses* a threat (Fein et al., 1995). A person who poses a threat is a subject of concern, yet not a threatener. The concepts of posing and making a threat relate to each other as follows. Persons can make an explicit threat without posing a threat (i.e. they are bluffing). Persons can pose a threat without making a threat (i.e. they have harmful intentions but remain silent). Lastly, persons can both make and pose a threat (i.e. they have

harmful intentions and communicate them). These three groups form the bulk of worrisome cases that professionals must triage. Note that persons can move from one group to another over time and/or in different situations. For instance, a person who makes a threat might be bluffing at first but then decides to carry out the threat when the threat is ignored. Threat assessments can thus quickly lose their validity, which is why assessment is considered a dynamic process (Meloy et al., 2014a). For the empirical studies in this thesis, participants always made a threat that they either meant to actualise or not. In other words, subjects of concern who conceal their harmful intentions have not been studied here (see the General Discussion for an elaboration of this topic).

Further, the terms *threat assessment* and *threat management* are interdependent and often used interchangeably. However, they actually refer to different aspects of the same professional field. Threat assessment is the process of information gathering to understand and evaluate a threat of violence, whereas threat management is the process of developing and executing plans to mitigate the threat of violence (Meloy et al., 2014a). Both terms are used throughout the thesis depending on the topic discussed.

Finally, this thesis examines threat assessment and management (TAM) interviewing. TAM interviewing is defined here as an *interaction* between a professional (e.g. law enforcement or health care officials) and a threatener. Typically, for the professional, the aim of this interaction is to collect information to assess the risk for violence or to recommend appropriate interventions, but the interaction can also be used to mitigate the risk for violence (e.g. reducing tension, building trust, reaching out). In line with this, the primary focus of the empirical studies has been on collecting information (Study I, II, IV) and a secondary focus has been on mitigating risk (Study III).

## Research Questions

The current thesis rests on four broad assumptions. First, social and cognitive processes guide the behaviour of threateners when they engage with professionals about the threat they may pose. Second, such processes can be studied and understood by means of experimental research. Third, understanding the cognitions of threateners allows the interviewer to adapt his/her interaction techniques accordingly. Fourth, such adaptions aids threat assessment and management. These assumptions underpin the overriding research question of the thesis: How should persons who pose a threat be interviewed in order to assess and manage the risk for violence? The thesis builds on four empirical studies addressing direct and indirect aspects of this research question. Specifically, is it possible to detect verbal cues to deceit in threat statements (Study I)? Is it possible to interview strategically to elicit or enhance verbal cues to deceit in threat statements (Study II)? Which interview approach contributes most to information gathering and threat de-escalation (Study III)? How does professional experience contribute to the quality of threat assessments (Study IV)?

# Research and Practice in Threat Assessment and Management

## Two Strands of Research

Experimental research on threat assessment is scarce. There exist some studies on threats as mechanisms of social control in an unpredictable environment (e.g. how threats can be used to influence a target; how targets react to threats; Milburn & Watman, 1981). More recently, Taylor and colleagues (2013) conducted an experiment in which they analysed language as a means to detect insider threats. However, most empirical work in the field of threat assessment falls within the following two strands of research: archival studies and efficacy studies. Both types of study address the same question. That is, is it possible to identify factors (e.g. behaviours, background characteristics) that are indicative of the risk for violence? However, the two strands of research approach this question from different perspectives. In archival studies, shared behaviours and characteristics are identified among samples of similar perpetrators ("Twenty out of 30 attackers of American celebrities were found to be psychotic."). The findings from such research are used to develop risk assessment instruments. In efficacy studies, these instruments are evaluated in terms of reliability (e.g. "Do different raters reach similar conclusions when applying the instrument?") and validity (e.g. "Does the instrument differentiate between offenders and non-offenders?"). Both strands of research are discussed below.

**Archival studies.** Archival studies in threat assessment have examined multiple domains of violence, such as public figure violence (e.g. Meloy et al., 2011), stalking (e.g. Rosenfeld & Harmon, 2002), terrorism (e.g. Corner & Gill, 2015), school shootings (O'Toole, 2009), and workplace violence (e.g. Kelleher, 1997). Within each of these domains, specific risk factors could be identified. For instance, it was found that many stalkers who assaulted their victims had first directly threatened them (Rosenfeld & Harmon, 2002), whereas most school shooters were found to have leaked their violent plans indirectly to a third party (e.g. friend, classmate) prior to the attack (O'Toole, 2009). Moreover, employment instability is considered a risk factor for workplace violence (Meloy, White, & Hart, 2013), but it has not been found to be particularly significant when considering public figure violence (Meloy et al., 2011). Instead, mental illness (primarily pathological fixation) appears as a critical factor among persons who threaten and attack public figures (Hoffmann, 2009; Mullen et al., 2009). Specifically, those who demonstrate a sense of grandiosity and self-entitlement were found to be more likely to harass celebrities (e.g. Dietz et al., 1991), politicians (e.g. Scalora et al., 2002), and royalty (e.g. James et al., 2009). When examining rates of mental illness among a sample of terrorists, high rates were found among terrorists acting alone (31.9%), but the number was almost 14 times lower among terrorists acting in groups (3.4%; Corner & Gill, 2015). These findings illustrate that risk factors can be more or less relevant within different domains of violence, and even within different subgroups of a specific domain of violence.

That said, many risk factors in threat assessment are not domain specific. Comparing checklists across domains, many of the same risk indicators become apparent (e.g. MacKenzie et al., 2009; Meloy et al., 2013). Examples of shared risk indicators are violent ideation, social isolation, mental illness (psychosis, depression), substance use, antisocial traits (narcissism, psychopathy), and a history of violence. More broadly, many risk factors

in threat assessment resemble factors that are predictive of violence in general (Harris, Rice, & Quinsey, 1993) and of suicide (Hall, Platt, & Hall, 1999). This holds particularly true for factors that are historical (e.g. prior violence), clinical (e.g. mental illness), or social (e.g. support system).

Furthermore, it has been suggested that, regardless of the domain, problematic behaviours of threateners evolve to violence along a similar pathway (Calhoun & Weston, 2003; Fein et al., 1995). This pathway consists of consecutive stages of proximity to an attack, ranging from grievance and violent ideation to preparations and the final decision to strike. It has been theorised that each stage is characterised by "warning behaviours" (Meloy, Hoffmann, Guldimann, & James, 2012). These are acute and dynamic changes in behaviour that constitute evidence of accelerating risk (e.g. buying a weapon). Empirical support for a pathway to violence and for warning behaviours is mixed. Some behaviours have been consistently identified in archival studies (e.g. fixation, leakage), whereas others seem to be drawn from anecdotes and professionals' experience (e.g. novel aggression, energy outburst; for an overview, see Meloy, Hoffmann, Roshdi, Glaz-Ocik, & Guldimann, 2014b). Moreover, little research has been conducted on the sequence of warning behaviours (Gill, 2015; Hart, 2016a). The pathway to violence is portrayed by a single, one-way, consecutive sequence, but this assumption has not yet been demonstrated.

**Efficacy studies.** Currently, the best validated threat assessment tools have been taken from the field of violence risk assessment. It would go beyond the scope of this thesis to discuss the predictive efficacy of violence risk assessment tools as this is a research domain of its own (for an overview, see Heilbrun, Yasuhara, & Shah, 2010). Yet, some efficacy matters are worth addressing as they relate to threat assessment.

Threat managers typically make use of risk assessment instruments that fit the *structured professional judgment* (SPJ) model. The SPJ model relies on the discretion of the professionals, while providing structure to their judgments via empirically informed guidelines (Guy, Packer, & Warnken, 2012). SPJ tools detail risk factors for violence that have been identified by a literature review and these tools can be seen as a memory aid or recommendation for the professional who needs to assess and manage risks for violence. Examples of SPJ tools are the *Historical, Clinical, Risk management-20* (HCR-20; Douglas et al., 2014) and the *Sexual Violence Risk-20* (SVR-20; Boer, Hart, Kropp, & Webster, 1997) used to assess the risk for general violence and sexual violence, respectively. A meta-analytic evaluation of the SPJ model revealed good levels of predictive accuracy and, hence, supported the utility of the model in assessing the risk for violence to others (Guy, 2008). However, these accuracy levels resulted mainly from studies on institutional violence and violent recidivism and it should be noted that the accuracy level might drop when predicting events of lower-frequency, which are typical within threat assessment (Meehl & Rosen, 1955).

A few protocols developed specifically for threat assessment purposes exist. Examples are the *Workplace Assessment of Targeted Violence Risk-21* (WAVR-21; White & Meloy, 2010), the *Terrorist Radicalization Assessment Protocol-18* (TRAP-18; Meloy, Roshdi, Glaz-Ocik, & Hoffmann, 2015), and the *Communications Threat Assessment Protocol-25* (CTAP-25; James, MacKenzie, & Farnham, 2014). Although these protocols draw on empirically informed risk factors, they have yet to be extensively evaluated. To my

knowledge, no efficacy studies have been published on the CTAP-25 and only one reliability study has been conducted on the WAVR-21 (Meloy et al., 2013). This study revealed excellent interrater agreement for the overall presence of risk factors but a large variability for the presence of individual risk factors. With regard to the TRAP-18, researchers concluded that the protocol appears promising for assessing radicalisation, but that it is not yet sufficiently validated to be utilised as an SPJ instrument (Meloy & Gill, 2016; Meloy, et al., 2015).

In addition to evaluating threat assessment methods, some studies have examined the efficacy of threat management methods. In a study carried out by James and colleagues (2010), 100 consecutive cases from the Fixated Threat Assessment Centre (FTAC) were examined before and after intervention steps were taken. The FTAC is a joint police/health care centre in the UK that was established to assess and manage persons who pose a threat to public figures. The results showed that the level of concern was reduced from moderate/high to low for 80% of the cases (often because health care was offered). Similar success was demonstrated in a follow-up study consisting of a new sample of 100 cases (James & Farnham, 2016). A significant drop in the number of police call-outs, worrisome communication, and approach behaviours was found after (vs. before) FTAC interventions.

On the whole, the efficacy of threat assessment methods is still far from being systematically evaluated. One reason for this is that the field is still relatively young and the amount of data available for such analyses is limited. Another reason is that threat assessment concerns low-frequency incidents, meaning that, for these incidents, there might never be enough data available in one temporal-cohort to establish predictive accuracy (Gill, Horgan, Corner, & Silver, 2016). Finally, case specific information is often critical when interpreting risk factors. To illustrate, writing a farewell letter can be considered normal behaviour if one is fatally ill but becomes worrisome if the person is in perfect health. As it is impossible to capture all imaginable situations in a threat assessment instrument, it has been argued that threat assessment should be an inductive (or rather abductive) process, meaning that the specific facts of a particular case should guide the inferences made (Meloy et al., 2014a; Reddy et al., 2001). This approach, and related principles, will be discussed in the next section dealing with current practices.

## Current Practices

The threat assessment approach that dominates today can be best described as a set of principles widely advocated over time. These principles reflect a mix of logic, professional experience, anecdotes, and research. Some issues discussed below have already been mentioned above but are included again for the sake of providing a complete overview of what is currently considered to be standard practice.

It has been acknowledged that threat assessment is not about predicting who will or will not commit harmful acts but rather about triaging among a number of worrisome cases (Gill, 2015; James & Farnham, 2016). The triage process should result in an assessment of the overall level of concern for potential violence (low, medium, or high). The term *targeted violence* is often used to stress that threat assessment concerns not random violence but rather violence resulting from deliberation (Vossekuil, Fein, & Berglund, 2015), although some authors make no distinction between targeted violence and other violence as they employ a definition of violence that already includes a certain degree of deliberation (e.g.

Douglas et al., 2014). Moreover, violent thoughts and behaviours are primarily shaped by experiences (not personality) and these can change over time and in different situations (Borum et al., 1999). In other words, risk for violence is presumed to be dynamic. This implies that it is critical to identify conditions that bring about a change of risk such as behavioural changes or an upcoming stressful event. It further implies that an assessment holds true only for as long as the conditions under which the assessment was made remain stable (Meloy et al., 2014a, b). Threat assessment professionals must therefore be aware of situational changes and update their work accordingly (Calhoun & Weston, 2015).

For an assessment to be up-to-date, case information must be up-to-date. Information gathering is therefore considered a crucial aspect of threat assessment (van der Meer & Diekhuis, 2014). The process of information gathering is guided by so-called "key questions" or "need to knows" (Calhoun & Weston, 2015; Vossekuil et al., 2015). These questions are supposed to cover all key areas that should be inquired about in order to make a fully informed assessment of a person posing a threat. The questions tap into, among other things, the subject's motivation, intention, mental health, and capability to cause harm. Explicit threats of violence were found to be an unreliable indicator of risk as many persons who attack utter threats, yet many persons who utter threats do not attack (Warren, Mullen, & McEwan, 2014). Therefore, the common approach dictates that explicit threats should not be ignored and can be a valid reason for making a threat assessment, but they should not necessarily be interpreted as a threshold for concern (Reddy et al., 2001).

Ultimately, threat assessment is meant to identify what types of intervention are needed to mitigate the risks of a particular case. Mitigating threats of violence is referred to as *threat management* and this task is considered equally important as threat assessment (Calhoun & Weston, 2015). Examples of different forms of intervention can be to monitor a subject of concern closely through police surveillance, to arrange security for the potential victim, but also to provide health care and support for the subject. Although threat assessment originated within the context of policing and protecting, a shift has taken place towards a more multidisciplinary approach in which collaboration between police, security, health care, and social services is particularly stressed (e.g. James & Farnham, 2016).

## Threat Assessment and Related Fields

This section addresses the field of threat assessment in relation to three intersecting domains of research and practice: violence risk assessment, negotiation, and criminal investigations. It should be noted that the similarities and differences described below are not definite. Instead, while the fields overlap to some extent, the connections between them are subject to change and perspective. This section is not meant as an argument for any particular distinction over another, but rather as an attempt to position the topic of this thesis in a broader context.

**Threat assessment vs. violence risk assessment.** Risk assessment is a large and established field and it could be argued that threat assessment is one part of it. The fields share an overarching goal: to assess and manage risks for violence. The differences between the two fields stem mainly from the fact that threat assessors and risk assessors *typically* operate in different professional contexts (i.e. law enforcement vs. health care) and they therefore have different responsibilities. Whether or not the differences exist in practice and

whether they are big, small, strict or fluid is debatable (Hart, Hoffmann, de Vogel, & Kropp, 2015). However, as the literature distinguishes between risk assessment and threat assessment, these differences are discussed here (for an overview, see also Meloy et al., 2014a).

Threat assessment takes place in law enforcement/intelligence contexts and the assessments should aid *operational* decision-making (e.g. "Should this stalking victim receive security?"). Importantly, a person of concern in threat assessment is typically moving freely in society. This means that there is a short-term and urgent need to mitigate the risk for violence. Threat assessment professionals are thus required to make rapid assessments based on dynamic and ideographic risk factors (i.e. circumstances that are relevant at this very moment and in this particular case). Risk assessment, on the other hand, often takes place in health care and social services settings and the assessments are meant to aid *legal* decision-making (e.g. "Can this person be safely released from prison?"). The person of concern is typically being detained, meaning that there is no imminent risk for violence. This gives professionals time to collect information and make an assessment, but their assessment is intended to cover a longer time period. As long-term risk for violence is best predicted by static risk factors (e.g. psychopathy, criminal past), historical information is highly informative in risk assessments (Harris et al., 1993).

**Threat assessment vs. negotiation.** It could be reasoned that if negotiation is needed, it is too late for threat assessment. The task of a threat assessor is to foresee risk acceleration and to intervene before a conflict goes bad. The task of a negotiator is to reach a peaceful resolution when the conflict has already gone bad (Wells, 2015). In other words, threat management is meant to prevent a crisis, whereas negotiation is meant to reduce a crisis. Threat managers and negotiators are thus *typically* involved at different stages of escalation, which obviously affects their priorities (i.e. information gathering vs. de-escalation, respectively).

That said, professionals in both fields operate in similar domains of violence (e.g. domestic violence, terrorism) and their work concerns similar issues (e.g. mentally unstable subjects of concern coping poorly with life stressors; Rogan, Hammer, & van Zandt, 1994). Engagement with subjects of concern is important in both fields, although more central to the field of negotiation. Literature on both threat assessment and negotiation acknowledges that problem-solving and information gathering during interactions with subjects of concern is best reached through affiliation development (Giebels & Taylor, 2010; van der Meer & Diekhuis, 2014) and that mistakes by the professional may negatively impact the outcome of the interaction (Meloy, 2015; Oostinga, Giebels, & Taylor, 2017). Although, thus far, it is only within the field of negotiation where such acknowledgements have been followed up with scientific research and training on communication methods (e.g. Vecchi, van Hasselt, & Romano, 2005).

**Threat assessment vs. criminal investigations.** The field of criminal investigation is relevant to threat assessment thanks to its research on suspect interviewing. Threateners and other suspects arguably face a similar dilemma when interacting with law enforcement officials; they need to ensure they are taken seriously without being too specific about their intentions or deeds (Hartwig, Granhag, Strömwall, & Doering, 2010). Understanding the

strategies and dilemmas of suspects under interrogation has proven to be of importance for developing successful interview techniques (e.g. Granhag & Hartwig, 2015). The current thesis builds on this line of reasoning.

## Research on True and False Intentions

To anticipate risk, it is critical to understand which markers precede future actions. One such marker is intent. Malle and Knobe (1997) defined intent by directly asking people what it means to perform an action intentionally. This resulted in the following: an intended act is an act that one desires, has reasoned about in terms of consequences and skills, has decided upon, and is aware of while performing. The decision can be seen as a commitment or a belief that one is going to act. Intentions are always genuine but people may tell the truth or lie about their intentions. In research on true and false intentions, true intent therefore refers to *statements* about future acts that one truly intends to perform, whereas false intent refers to statements about future acts that one claims, but does not in fact intends to perform (Mac Giolla, Granhag, & Liu-Jönsson, 2013).

However, not all true intentions result in action. Gollwitzer (1999) differentiated between *goal intentions* and *implementation intentions*. Goal intentions reflect what is desired ("I am going to live healthier"), whereas implementation intentions reflect the specifics of when, where, and how the goal should be realised ("I will eat 200 grams of vegetables every evening for the coming six weeks"). Implementation intentions also involve plans for self-regulation, so-called "if-then" plans ("If I am going to dine in a restaurant, then I will have a salad for lunch"). Gollwitzer (1999) suggested that holding goal intentions does not necessarily leads to goal achievement. Instead, people must operationalise how they intend to achieve their goals and how they will overcome the obstacles they may encounter during goal-striving. This suggestion has received strong empirical support. A meta-analysis revealed that implementation intentions help people to initiate goal-striving, to recognise and exploit goal-congruent opportunities, and to keep a course of action by steering away from unwanted influences (Gollwitzer & Sheeran, 2006). Hence, implementation intentions were found to be better than goal intentions at leading to action and goal-achievement. Moreover, persons with no goal intentions were found unlikely to form implementation intentions (Sheeran, Milne, Webb, & Gollwitzer, 2005). These findings imply that implementation intentions may be unique to true intent.

Given that implementation intentions precede behaviour, it would be helpful to threat assessment if implementation intentions could be detected. In broader terms, is it possible to detect true intent? This question is central to a new branch of psycho-legal research grounded in scientific work on deception detection (Granhag, 2010). Instead of examining lies about the past, studies have focused on lies about the future. In a pioneering experiment, passengers in an airport departure hall were asked to either tell the truth or lie during an interview about their upcoming trip (Vrij, Granhag, Mann, & Leal, 2011a). The interviews were coded and judged in terms of veracity. It was found that approximately 70% of statements of intent could be correctly identified as true or false based on the number of plausible details (fewer for liars), contradictions (more for liars), and spontaneous corrections (fewer for liars). A similar level of accuracy was found in a related study that also looked at true and false claims about the future (Vrij, Leal, Mann, & Granhag, 2011b).

Although a discrimination accuracy of 70% is nowhere near perfection, it is much higher than results from deception studies on statements about the past (54%; Bond & DePaulo, 2006).

The number of statement details, contradictions, and corrections reflect cues that are studied in traditional lie detection research (Vrij, 2008), but they do not necessarily characterise intent. Subsequent laboratory studies have therefore turned to examining intention-specific cues to deceit. For instance, Granhag, Juhlin, and Vrij (2013) proposed that true intentions are goal-directed. Drawing on research showing that goal activation leads to positive automatic evaluations of goal-relevant cues (Ferguson & Bargh, 2004), it was predicted (and found) that persons who truly intend to achieve a particular goal evaluate cues relevant to this goal more positively as compared to persons with false intent (Ask et al., 2013). Moreover, planning is considered a defining feature of true intent (Granhag, 2010) and planning is related to the ability to imagine future scenarios (Szpunar, 2010). Researchers who addressed the link between true intent and pre-experiencing the future found that persons were indeed more likely to activate mental images when they planned for an activity they truly (vs. falsely) intended to carry out (Granhag & Knieps, 2011; Knieps, Granhag, & Vrij, 2013).

These findings are theoretically relevant as they suggest that different cognitive processes underpin true and false intent. However, cognitive cues such as positive evaluations and mental images are not often observable to outsiders and therefore cannot directly aid threat assessment. Of more practical relevance is whether or not markers of true intent exist that are detectable for professionals charged with assessing intent (e.g. border security personnel). For instance, does the truth reveal itself in statements about intent?

Drawing from the *Construal Level Theory* (CLT; Trope & Liberman, 2010), it could be argued that people should talk about true intentions more concretely (as opposed to abstractly). CLT was originally developed to explain how people mentally represent past and future situations such as memories, speculations, hopes, and intentions. These mental representations are called construals and range from being concrete to being abstract. Concrete construals typically reflect the feasibility of an action (i.e. *how* to act), whereas abstract construals typically reflect the desirability of an action (i.e. *why* to act; Trope & Liberman, 2010; Vallacher & Wegner, 1987). CLT holds that construals become more concrete when they concern events that are more psychologically proximate to oneself. Psychologically proximate events are those that will take place in the near future (temporal proximity), at a location close by (spatial proximity), apply to oneself (social proximity), or are certain to happen (hypothetical proximity). Importantly, CLT proposes that the level of abstraction in mental representations affects people's behaviours, evaluations, and predictions of events. Such secondary effects of mental abstraction levels are called "downstream consequences." Numerous experiments have examined the assumptions of CLT and support has been found for the effect of psychological proximity on the abstraction levels of both mental representations and downstream consequences (Soderberg, Callahan, Kochersberger, Amit, & Ledgerwood, 2014). These effects were found to be robust across time, research labs, and populations.

When studying intentions (or threats), hypothetical proximity is particularly relevant. After all, a person who holds a true intention has decided to act, in contrast to a person who holds a false intention. Research has shown that proximity differences can reveal

themselves in verbal statements. That is, people describe activities in more concrete terms when the activity is to happen soon (Liberman & Trope, 1998) and when the activity is more likely to occur (Wakslak, Trope, Liberman, & Alony, 2006). Thus, it could be theorised that statements of true intent (e.g. true threats) are coloured by concrete how-related details, whereas statements of false intent (e.g. bluffs) by comparison are characterised more by abstract why-related details.

A series of studies have provided tentative support for this theory using variants of the following experimental paradigm (Granhag & Knieps, 2011). Participants were assigned the role of truth teller or liar. Truth tellers were given a neutral task to plan and carry out (e.g. gift shopping) while liars were given a mock crime to plan and carry out (e.g. hiding a USB-stick containing illegal material in the shopping centre). In addition, liars were told to prepare a cover story in case they were apprehended. The cover story resembled that of the truth tellers' task and thus reflected a statement of false intent. After planning, but before executing their tasks, participants were apprehended and interviewed about their intentions. Truth tellers gave a truthful account, whereas liars told their cover story. Their statements were then analysed for markers of true and false intent.

Results of these studies have shown that truth tellers provide comparably more information on *how* to implement their goal, whereas liars provide comparably more information on *why* to implement their goal (Mac Giolla, et al., 2013; Sooniste, Granhag, Strömwall, & Vrij, 2014; Sooniste, Granhag, Strömwall, & Vrij, 2015). Moreover, studies have revealed that truth tellers provide longer and more detailed answers to unanticipated questions about planning (Mac Giolla & Granhag, 2015; Sooniste, Granhag, Knieps, & Vrij, 2013; Sooniste et al., 2014; 2015), are more likely to mention time management issues (e.g. "Let us spilt the group and divide the tasks"), and more often foresee potential problems pertaining to their future task (Mac Giolla et al., 2013). For a review of psycho-legal studies on true and false intentions, see also Granhag and Mac Giolla (2014).

# Research on Human Intelligence Interviewing

## Human Intelligence

Human intelligence (HUMINT) can be described as information collected by professionals through interactions with one or more persons (Justice, Bhatt, Brandon, & Kleinman, 2010). HUMINT gathering is considered a core component of law enforcement work and counter-terrorism efforts (Vrij & Granhag, 2014). HUMINT can be used as evidence in a court of law if it is acquired in accordance with country-specific rules of evidence (e.g. the Fifth Amendment in the US). However, the literature typically distinguishes between evidence and HUMINT (Evans, Meissner, Brandon, Russano, & Kleinman, 2010). Evidence is information that contributes to the conviction (or acquittal) of a suspect, whereas HUMINT is defined as information that can be used to improve local or national security. Moreover, HUMINT (as opposed to evidence) is typically gathered outside custodial settings on a voluntary basis, can take place over the course of months or years, and can contain a covert component (for an overview of similarities and differences between HUMINT and evidence, see Evans et al., 2010). The information obtained with TAM interviewing can be seen as HUMINT as it is typically used to evaluate the likelihood of a person to commit acts of violence and, then, to prevent this from happening. Most

research on investigative interviewing has focused on collecting evidence rather than HUMINT (Evans et al., 2014). The 9/11 attacks resulted in a shift of interest, but the impact of behavioural science on policies and practices within intelligence agencies long remained limited (Brandon, 2011). Emerging research on intelligence gathering is now gradually filling this knowledge gap (for a recent review of research, see Meissner, Surmon-Böhr, Oleszkiewicz, & Alison, 2017). Two research topics concerning HUMINT gathering may be particularly relevant to TAM interviewing: counter-interview strategies and interview methods.

## Counter-Interview Strategies

Counter-interview strategies can be described as all efforts by interviewees to manage the information they hold and to regulate the way they present themselves in interviews (Hartwig et al., 2010). The focus in this thesis is on *verbal* counter-interview strategies, which concerns the interviewee's spoken communication with the interviewer. Such strategies can be generated by the interviewees themselves or result from instructions given to them by others. In both cases, counter-interview strategies are ways to steer one's own behaviour towards desired interview outcomes, which can be seen as a form of self-regulation (Fiske & Macrae, 2012). The need for self-regulation increases in aversive situations with uncertain outcomes (Fiske & Macrae, 2012). Legal interviews (whether these involve suspects, sources, or threateners) are typically uncertain and aversive situations because there are risks involved for the interviewee, such as the risk for prosecution (suspect), the risk for retaliation (source), or the risk for interference with plans (threatener). Hence, counter-interview strategies should be expected in such settings.

A study of real-world interrogations revealed that terrorist suspects did indeed make use of counter-interview strategies and that the type of strategies used, differed across different terrorist groups (Alison et al., 2014a). For instance, Al-Qaeda inspired terrorists used retraction tactics (i.e. retracting previous statements) significantly more than right wing terrorists and paramilitary groups, the latter of which more often responded to interrogations with passive responses (e.g. remaining silent, no-comment response) or by providing irrelevant information, embedded lies, or scripted responses. The use of such strategies reflects manuals produced by these terrorist groups (e.g. the Al-Qaeda training manual; the IRA Green Book). In these manuals, members are advised to anticipate the interview techniques employed by the police or to say nothing during interrogations.

In addition to operational findings, experimental research has been conducted on counter-interview strategies with mock suspects. According to theory and research on self-presentation, guilty and innocent suspects are equally motivated to make a credible impression (DePaulo, 1992; Hartwig et al., 2010). However, to avoid prosecution, guilty suspects must conceal the truth, whereas innocent suspects must reveal the truth. This difference is presumed to result in avoidant versus forthcoming counter-interview strategies, respectively. In support of this presumption, research has shown that guilty suspects are more concerned with maintaining control and thereby adopt avoidant strategies (e.g. avoiding incriminating details, keeping it simple), while innocent suspects are more concerned with providing correct information thereby adopting forthcoming strategies (e.g. telling the truth like it happened; Hines et al., 2010; Strömwall, Hartwig, & Granhag, 2006). Moreover, guilty suspects (i) tend to use more and (ii) more diverse strategies than innocent

suspects (Hartwig, Granhag, & Strömwall, 2007) (iii) are more aware of the risk for not being believed (Hartwig et al., 2010) and (iv) react more strongly to the possibility that there might be evidence against them resulting in pronounced withholding or pronounced forthcoming counter-interrogation strategies (Luke, Dawson, Hartwig, & Granhag, 2014).

To develop effective interview techniques (including tactical approaches to detect deceit), it is essential to learn about interviewees' counter-interview strategies. Such knowledge improves the interviewer's ability to take perspective and consider the world from someone else's viewpoint (Galinsky, Maddux, Gilin, & White, 2008). Perspective taking allows for anticipation of the behaviour of others and professionals in legal settings could incorporate this skill into their interview techniques. They could use techniques that exploit the counter-interview strategies of both truth tellers and liars to elicit cues that are indicative of guilt or innocence. Moreover, they could use techniques that reduce the use of counter-interview strategies by semi- or non-cooperative interviewees to elicit more information (Granhag, Hartwig, Mac Giolla, & Clemens, 2015). Such techniques are referred to as strategic interviewing techniques; see the next section for an elaboration on this type of interviewing.

### Interview Methods

Methods for investigative interviewing and interrogation can be divided into three broad categories: confession-oriented (or accusatorial) methods, information-gathering methods, and strategic interviewing methods (Hartwig, Luke, & Skerker, 2016). *Confession-oriented methods* are aimed at producing confessions. Police interrogation manuals (e.g. Inbau, Reid, Buckley, & Jayne, 2011), observational studies (e.g. Leo, 1996), and controversial war practices have revealed that this is often achieved using techniques that involve physical or psychological manipulation. Confession-driven interviewing is highly criticised within the research community. Not only does the method rest on an incorrect assumption of guilt (i.e. the suspect may be innocent), but the tactics are also considered immoral as they violate the suspect's autonomy and consent (Hartwig et al., 2016). Finally, there is no scientific support for the efficacy of confession-driven interviewing, the method was even found to increase the likelihood of false confessions (Meissner et al., 2014). While such interview methods are still practiced around the world, several countries have adopted laws and interview standards that instead promote an information-gathering approach (e.g. Home Office 2003; Milne, Shaw, & Bull, 2007).

*Information-gathering methods* aim at eliciting a complete and reliable account from the subject. This is done by establishing rapport and by using open-ended questions as well as direct, positive confrontations (Meissner et al., 2014). When information-gathering methods are used for deception detection, the focus is on eliciting cues to deceit that result from cognitive (rather than emotional) differences between truth-tellers and liars (Vrij & Granhag, 2014). One advantage of information-gathering methods over confession-driven methods is that the former build on theories of how people memorise and communicate information (Milne et al., 2007). A meta-analysis of experimental studies demonstrated the positive effects of information-gathering interviewing: the likelihood of true confessions was preserved and, in some cases, increased (Meissner et al., 2014). Additionally, information-gathering methods reflect ethical progress, as the methods emphasise honesty, transparency, and respectful treatment of the suspect (Hartwig et al., 2016).

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When testing the comparative efficacy of information-gathering methods on information elicitation, a distinction can be made between *direct interviewing* and *rapport-based interviewing*. Direct interviewing is the most basic information-gathering approach in which open-ended questions are asked in a business-like manner (Justice, et al., 2010). Rapport-based interviewing is comparatively more advanced and can be described as a friendly interview style characterised by acceptance, empathy, and respect for the interviewee's autonomy (Alison, et al., 2014b; Saywitz, Larson, Hobbs, & Wells, 2015). Bull (2013) reviewed literature on characteristics that contribute to skilled investigative interviewing and concluded that the best information gatherers are those who can establish and maintain rapport throughout the interview. For instance, it was found that rapport-based interviewing reduced suspects' use of counter-interview strategies (Alison, et al., 2014a), and led to an increased information yield (Alison, Alison, Noone, Elntib, & Christiansen, 2013). These findings match field research in which offenders were found more willing to provide truthful accounts in response to humane, honest, non-dominant, and respectful interviewing (Kebbel, Hurren, & Mazerolle, 2006; O'Connor & Carson, 2005).

The most recent developments in human intelligence interviewing concern *strategic interview methods.* These methods go beyond information-gathering as they rest on the belief that a skilled interviewer understands and exploits the counter-interview strategies of the interviewee (Granhag et al., 2015). One example of strategic interviewing is to play on the expectations of the interviewee by asking unanticipated questions. Liars have been found to perceive it to be more difficult to answer such questions because they cannot draw from true experiences while truth-tellers can (Vrij et al., 2009). Another technique is the Strategic Use of Evidence (SUE) technique that builds on the notion that both guilty and innocent suspects must reveal information to be perceived as credible, but that only guilty suspects must also conceal information to avoid self-incrimination (Granhag & Hartwig, 2015). The interviewer may exploit the conflicting mind-set of guilty suspects by withholding evidence from them, which leads guilty suspects (more than innocent suspects) to make statements that contradict the evidence (Hartwig, Granhag, & Luke, 2014). Moreover, strategic interview tactics have been developed to elicit information from interviewees while masking the aim of the interview, the so-called Scharff-technique (Oleszkiewicz, 2016). An interviewer using the Scharff-technique creates the illusion that s/he already knows all information interviewees hold, leading interviewees to believe they can reveal their information safely. Furthermore, the interviewer presents claims that only need to be confirmed or disconfirmed. This tactic enables the interviewer to elicit valuable information via a short (dis)confirming response only. Finally, by not pressing for information and showing little interest in new and critical information, the interviewer can hide from interviewees what information s/he is after. These tactics are considered particularly relevant for eliciting information in intelligence operations. Recent empirical work has provided support for the efficacy of the Scharff-technique (Granhag, Kleinman, & Oleszkiewicz, 2016).

# A Novel Experimental Paradigm

This thesis introduces a novel experimental approach with respect to TAM interviewing. Since planned acts of violence are extreme behaviours that occur infrequently, experimental research is uncommon in the field of threat assessment and management. Some may argue that high-stakes events cannot be investigated in a laboratory as artificial setups would limit the generalizability of the results. In this section, an explanation is given of why an experimental approach was chosen and how research based on this approach can contribute to existing knowledge on threats of violence.

One lesson learned from anecdotal studies is that every threat case is different. However, managing such cases can still be done systematically. The studies in this thesis do not investigate individual characteristics of threat cases, but rather the process of human intelligence gathering to assess and manage threats. As noted in the previous section, human intelligence gathering is nothing more than collecting information through interactions with people (Justice et al., 2010). Human intelligence gathering can therefore be viewed in the context of social and cognitive psychology (Evans et al., 2010). It is safe to assume that fundamental social and cognitive processes function similarly across populations. For instance, the avoidance-approach motivation (i.e. the motivation to approach positive stimuli and avoid negative stimuli) is central to human functioning and relates to important dilemmas and decisions that threateners face, such as to accept or reject a loss, to reveal or conceal information, and to follow through on a threat or not (Eliot, 2008). Moreover, applied research has shown that extremists commonly leave violence behind for very ordinary reasons such as burnout, feelings of guilt, missing loved ones, or longing for a normal life (Dalgaard-Nielsen, 2013). Even when dealing with persons with mental illnesses, it was found that simple matters such as helping them obtain social security benefits were effective in reducing risk (James & Farnham, 2016). These findings illustrate that despite deviant behaviours, the needs and drives of those who pose a threat might not differ from others. This presumption, among other things, merits laboratory studies on threat management using a normal population.

Furthermore, experimental research may contribute to a deeper understanding of the techniques underpinning threat management skills. Understanding a skill is not necessary to possess that skill; people can be good at something without knowing what exactly makes them good at it. The understanding, though, becomes important when teaching others. For instance, Hans Scharff was considered an outstanding WWII interrogator of the German Luftwaffe (Toliver, 1997), but it was only 75 years later that his skills were taught to law enforcement professionals (Oleszkiewicz, Granhag, & Kleinman, 2017). This development is due to the fact that researchers became inspired by anecdotal evidence of Scharff's effectiveness, then identified his tactics and tested them in laboratory studies (Oleszkiewicz, 2016). On a more general note, extensive research on interview techniques has led some police and intelligence services to take part in training sessions on science-based methods of interrogation (Meissner et al., 2017) and to adopt science-based frameworks for interviewing suspects (e.g. the PEACE model; Milne et al., 2007), for interviewing eyewitnesses and victims (e.g. Cognitive Interview; Memon, Meissner, & Fraser, 2010), and for communicating in crisis situations (e.g. the Behavioral Change Stairway Model; Vecchi et al., 2005). Researchers within these fields have to deal with similar challenges

regarding external validity as researchers within the field of threat assessment. However, such challenges have not deterred them from conducting experimental research or, more importantly, from translating research to practice and policy.

That said, it is important to strike a balance between experimental control and external validity by mirroring critical real-life aspects in the lab. As a result, the following matters were addressed in the paradigm adopted in this thesis. First, the act of threatening can be considered deviant behaviour, but it is reasonable to think that a person who makes a threat finds it acceptable (e.g. "I have no other choice" or "I must fight injustice"; Dalgaard-Nielsen, 2013). To reflect this mind-set, the case given to participants was phrased in such a way that they represented the party who was morally right according to widely accepted values, threatening a party who was morally wrong.

Second, the act the participants threatened to commit was not physically violent (for obvious ethical reasons), but was still damaging. For instance, participants threatened to leak information to the media or press charges in order to cause financial or reputational damage to a company. Third, in order to establish true intent, participants were led to believe they really could carry out the threat. Of course, participants understood this act was part of the role-play, but the critical part was that they truly believed they were going to follow their threat up with an act (e.g. delivering a USB-stick to an accomplice containing damaging video recordings). Fourth, emotional involvement was established via the content of the case (i.e. fighting injustice) and via the nature of the task (i.e. performing the fairly nerve racking act of interacting with an unknown person about conflicting interests). Fifth, the dependent measures of the studies were selected based on their practical value to threat assessment and management. Measures included for threat assessment purposes were the type, amount, and timing of the information provided by threateners during the interviews as well as their use of counter-interview strategies. As pertains to threat management, the threateners' willingness to carry out a threat was measured as well as their willingness to communicate with professionals about the threat.

# SUMMARY OF THE EMPIRICAL STUDIES

This thesis includes four empirical studies. Three of these are laboratory experiments (Studies I, II, III) and the fourth is an online passive-observational study (Study IV). The methodological parameters of the studies are summarised in Table 1. In the laboratory experiments, participants were interviewed about a threat they had made. The information provided during the interview (e.g. amount, type), the counter-interviewing strategies reported to have been used (e.g. type, change in strategy), and attitudes towards the threat and the interview (e.g. willingness to carry out the threat) were examined. The aim of these studies was to investigate how interviewing can contribute to threat assessment and management goals such as differentiating between bluffers/actualisers and increasing information yield. In the online study, threat assessment professionals and non-professionals assessed the risk for violence in fictitious cases. This study sought to examine how professional experience contributes to the quality of threat assessments.

Table 1

*Overview of Studies Constituting this Thesis*

| Study | Method | $N$ | $k$ | Independent Variables | Dependent Variables |
|---|---|---|---|---|---|
| I | Lab Experiment | 157 | 3 | Threat Intent (bluffer vs. conditional actualiser vs. decisive actualiser) | Information Provision Time of Disclosure |
| II | Lab Experiment | 179 | 4 | 2 Threat Intent (bluffer vs. actualiser) × 2 Interview Protocol (high vs. low suspicion) | Information Provision Time of Disclosure Strategy Use |
| III | Lab Experiment | 120 | 2 | Interview Protocol (direct vs. rapport based) | Information Provision Strategy Use Willingness to Carry out Willingness to Interact |
| IV | Online Passive-Observational | 133 | 3 | Professional Experience (professionals vs. students vs. laymen) | Agreement Information Search |

Note. $N$ = participants, $k$ = conditions.

# Study I

Study I introduced an experimental paradigm for studying verbal threats. The study examined whether true or false intent to actualise a threat manifests in the verbal content of the threat. Simply put, do persons with true intent to actualise threats (actualisers) formulate threats differently than persons without intent to actualise threats (bluffers)? Drawing on literature on true and false intent, it was predicted that threats reflecting true intent would be accompanied by comparatively more implementation details (*how* the threat will be actualised), whereas bluffs would be concentrated more on the formation of ideas (*why* the threat is posed). This prediction was based on the finding that people think and talk more concretely about events that are more likely to happen (Wakslak et al., 2006). Intent was manipulated across three conditions via the likelihood to actualise the threat: low likelihood (no intent: *bluffers*), medium likelihood (weak intent: *conditional actualisers*), and high likelihood (strong intent: *decisive actualisers*). It was predicted that decisive actualisers would provide the most how-related information, followed by conditional actualisers, and bluffers who would provide the least. No differences were expected with respect to the amount of why-related information disclosed. Furthermore, the point of the interview at which participants provided the most information was also explored. Did participants reveal more information in response to information-seeking questions (earlier in the interview) or in response to challenging questions (later in the interview)?

## Method

One hundred fifty-seven participants were randomly assigned to one of three experimental conditions: bluffers, conditional actualisers, or decisive actualisers. Participants were recruited via the university participant pool and were compensated with a cinema ticket. Participants were presented with a fictitious case about a conflict between a non-governmental organisation (NGO) and a clothing company. The case described how the clothing company had allegedly exploited workers in its factories in Cambodia while claiming to operate sustainably. The NGO came into possession of video evidence showing the company's malpractice. The NGO planned to threaten to leak the video to the media unless the company changed its policy.

Participants were asked to represent the NGO and make a threatening phone call to the company. Participants were instructed to either bluff when making this claim and not truly leak the recordings (bluffers), to leak the recordings only if the company refused to change its policy (conditional actualisers), or to do as they claimed and leak the recordings to a media contact right after the call regardless of the company's response (decisive actualisers). Participants were asked to prepare for the phone call and were given access to additional information (e.g. background information about the NGO, policies of the clothing company, delivery location for the recordings, and the name of the media contact). Next, the participants called the company. The call was answered by the head of Public Relations at the clothing company (i.e. a confederate in the study) who responded to the threat with four different questions/prompts. The first two questions were information-seeking questions (e.g. "Could you give me more information?"). The second two were comparatively more challenging (e.g. "How do I know what you are telling me is true?"). After the call, the experimenter informed participants that the company had decided to ignore the NGO's

demands. Participants (conditional and decisive actualisers only) were then supposed to implement their intended action and bring away the recordings to their media contact. They were intercepted immediately after starting to implement this action. The threatening calls were transcribed and coded for the number of how- and why-related information pieces.

**Results and Discussion**

Contrary to the hypothesis, participants who were least likely to actualise the threat (bluffers) provided the most detail on how the threat would be implemented. This finding became particularly pronounced when participants were challenged in the latter half of the interview, that is, when they were questioned critically ("How do I know what you are telling me is true?") or given a last opportunity to talk ("Is there anything else I should know about before ending this conversation?"). The groups did not differ in terms of disclosure of why-related information. Overall, bluffers revealed more information during the latter half of the interview as compared with decisive actualisers.

These results contradict previous studies which suggest that detailed accounts of planning and implementation are associated with true intent (Mac Giolla et al., 2013; Sooniste et al., 2014) and with the risk that threats will be actualised (Calhoun & Weston, 2003). Furthermore, the results conflict with the notion that events likely to happen in the near future are described in more concrete, how-related terms (Wakslak et al., 2006). A potential explanation may be that actualisers, more often than bluffers, choose to keep how-related details to themselves to ensure successful implementation. This explanation suggests that threat statements reflect strategic concerns about what is *best* to reveal rather than what is *possible* to reveal. Differently put, threateners must strike a balance between what information to reveal and what information to conceal. Threat managers may benefit from learning more about such information-management strategies.

# Study II

The second study elaborated on the idea that emerged in Study I. That is, in order to elicit valuable information from threateners, it is important to learn about the strategies they employ when being questioned about their intentions (i.e. *counter-interview strategies*). Understanding the counter-interview strategies of interviewees has proven to be of great value in related settings such as suspect interviewing and human intelligence gathering (Granhag & Hartwig, 2015; Oleszkiewicz, Granhag, & Cancino Montecinos, 2014). In Study II, it was explored whether or not threatening participants used counter-interview strategies, whether or not they changed strategies during the interview, and why they changed strategies (for those who did). Additionally, it was theorised that the need to be believed is more urgent for bluffers than for actualisers as bluffers are entirely dependent on a target's willingness to meet their demands. Based on this assumption, it was predicted that bluffers (in comparison to actualisers) would be more forthcoming when asked specific questions (Hypothesis 1), would perceive more suspicion towards them when interviewed with a suspicion-oriented interview protocol (Hypothesis 2), and would provide more information when interviewed with a suspicion-oriented interview protocol (Hypothesis 3). Finally, it was theorised that actualisers would experience a need to secure successful

implementation of a threat. Hence, it was predicted that actualisers would be more reluctant to share implementation details than bluffers (i.e. how-related information; Hypothesis 4).

**Method**

The study drew on the experimental set up used in Study I. Participants ($N = 179$) were presented with the same case (i.e. NGO confronts clothing company) and asked to perform the same task. That was, to assume the role of an NGO employee, make a phone call to the clothing company, and threaten to leak a video containing evidence of malpractice. Participants expressed a threat they either intended to actualise (*actualisers*) or not (*bluffers*), and were subsequently questioned about the threat they made. Participants were questioned with an interview protocol intended to communicate either *high* or *low* suspicion (assigned randomly). The phone call included two sections: a *free report* section initiated by the threatener, followed by a series of *specific questions* initiated by the company.

After the interview, the participants were asked if they had used a strategy, if they had changed strategies during the call, and, if so, to explain why they had changed. Furthermore, participants rated to what extent they thought the company held suspicion towards them during the call. The threatening calls were coded for the number of information pieces disclosed (and further broken down into how- and why-related information). Self-reported strategies were also coded in terms of how- and why-related strategies. A data-driven coding scheme was used to identify reasons for changes in strategy.

**Results and Discussion**

Nearly all participants reported to have used a strategy when communicating their threats. Strategies focusing on the implementation of the threat (how-related strategies) were reported as often as strategies focusing on the motivation for the threat (why-related strategies). Half of all participants who reported to have used a strategy, changed strategies during the interaction in order to successfully withstand questioning. Bluffers and actualisers did not differ in their strategy use. Moreover, participants reported to be fairly willing to share information with the interviewer and spontaneously provided about half of the total amount of information to which they had access (i.e. in their free-statement). Thus, while participants were found to be forthcoming, they were also strategic and adaptive to the target's responses. These findings suggest that threateners avail of self-regulative mechanisms when being questioned about their intent regardless of whether they are bluffing or not—a suggestion that matches theory and research on self-presentation which states that both guilty and innocent suspects must regulate their behaviour (albeit in different ways) in order to make a credible impression (DePaulo, 1992; Hartwig et al., 2010).

The hypotheses were partly confirmed. Actualisers provided fewer details concerning the implementation of the threat than did bluffers (supporting H4). This finding replicated the results of Study I. Furthermore, bluffers provided more information in response to specific-questions as compared to actualisers (supporting H1). However, this difference was not increased by the use of a suspicion-oriented interview protocol (rejecting H3). The latter result is probably best explained by the finding that bluffers and actualisers reported to have experienced similar levels of suspicion (rejecting H2). Thus, communicating suspicion in the interview had no particular impact on bluffers. This finding differs from research showing that lying interviewees (which bluffers can be considered to be) are more

sensitive to the risk for not being believed (Hartwig et al., 2010; Vrij, Fisher, Mann, & Leal, 2008).

# Study III

It could be argued that skilled interviewing starts with an understanding of the interviewee's perspective (Granhag & Hartwig, 2008). Therefore, Study III advanced Study II by exploring what types of counter-interview strategies threateners employ. In addition, the study examined the efficacy of two interview approaches commonly used in law enforcement and intelligence gathering contexts: *direct interviewing* vs. *rapport-based interviewing* (Alison, et al., 2013; Justice et al., 2010). It was predicted that rapport-based interviewing would be more effective for threat assessment and management purposes (Bull, 2013; Meissner et al., 2014). Specifically, it was predicted that threateners interviewed with the rapport-based protocol would use fewer counter-interview strategies (Hypothesis 1), provide more information (Hypothesis 2), display a lower willingness to carry out a threat (Hypothesis 3), and display a higher willingness to interact (meet) with the conflicting party again (Hypothesis 4) than threateners interviewed with the direct protocol.

## Method

Participants ($N = 120$) at the University of Gothenburg were randomly assigned to one of two interview conditions: direct interviewing (questions/prompts asked in a straightforward manner) or rapport-based interviewing (questions/prompts phrased in a rapport-promoting manner). The experimental outline resembled Studies I and II. Participants were given a fictitious case describing two conflicting parties, assumed the role of the threatening party, prepared to interact with the conflicting party, took part in the actual interaction, and, finally, reported what strategies they had used during this interaction. Several changes to the initial paradigm were made to improve its external validity. First, the original case scenario (i.e. NGO confronts clothing company) was changed to represent a scenario of more personal relevance to the participants (i.e. workplace conflict). Second, participants prepared for and took part in an interview following a written threat that they allegedly had already made (i.e. to press charges against their former employer). Third, participants' willingness to actualise the threat was not manipulated by randomly appointing bluffers and actualisers (as done in Studies I and II). Instead, intrinsic attitudes towards execution were measured. That is, before and after the interview, the participants rated statements measuring the extent to which they were willing to carry out the threat (e.g. "The case is worth pursuing even if it would take time"; $1 = $ *not at all*, $9 = $ *very much*) and to interact with the conflicting party (e.g. "I would be willing to communicate with the company if the company would contact me about this case"; $1 = $ *not at all*, $9 = $ *very much*)

The case background information given to the participants contained 45 information pieces. All interviews were transcribed and coded for disclosed information pieces. Furthermore, the strategies participants reported to have used were coded into six categories: *prove capability*, *explain*, *conceal*, *self-presentation*, *negotiate*, and *other*. These categories were derived from findings in Study II and from previous research on suspects' counter-interview strategies (Hartwig et al., 2010).

The interview protocols were pretested in a separate online study. Participants ($N = 141$) listened to one of two protocols and judged the extent to which the interview protocols were rapport-promoting (e.g. "The interviewer understands the difficult situation I am in"; $1 = strongly\ disagree$, $7 = strongly\ agree$). In support of the design, participants exposed to the rapport-based interview protocol reported significantly higher ratings of rapport as compared to participants exposed to the direct interview protocol.

**Results and Discussion**

Replicating the findings of Study II, threateners were found to be semi-cooperative when questioned about their harmful intentions. They were willing to discuss their case and provided, on average, one third of the information held (and approximately 40% of the critical information held), but most of them (90%) were also strategic in presenting their case. The most frequently reported strategies were *prove capability* (e.g. "Show them that my evidence would hold in court") and *conceal* (e.g. "Answer as vaguely as possible"). These findings imply that threateners use a mix of forthcoming and withholding strategies attempting to strike a deliberate balance between proving their standpoint and concealing details.

Contrary to expectations, no differences were found between interview protocols for participants' strategy use (rejecting H1), information provision (rejecting H2), or for willingness to carry out the threat (rejecting H3) or discuss the case (rejecting H4). These outcomes stand in contrast to previous research supporting the efficacy of rapport-based interviewing over accusatorial or direct interviewing (Bull, 2013; Meissner et al., 2014). Two possible explanations for the null results are proposed. First, the rapport-promoting elements in the rapport-based interview protocol may have been too weak, implying that more profound means are needed to steer the interviewees' behaviour. Second, the nature of the case scenario may have been too functional rather than emotional. It has been suggested that functional (or instrumental) crises with a typical win-lose structure are best confronted with rational arguments as opposed to rapport-building approaches (Giebels & Taylor, 2010).

Exploratory analyses revealed that interviewing had an escalating rather than deescalating effect, regardless of the interview protocol. Specifically, threateners were more willing to carry out the threat after the interview than before and were also less willing to interact with the conflicting party after the interview than before. Furthermore, initial attitudes of the threateners were found to be predictive of post-interview attitudes. Those who were relatively more eager to carry out the threat or interact with the conflicting party from the start were also relatively more eager to do so after the interview. Importantly, participants that were initially more positive towards carrying out the threat, chose to conceal information more often, especially information concerning the actual implementation of the threat (e.g. names of contact persons, pieces of evidence). This finding suggests that threateners with serious intent to strike may employ more avoidant strategies than bluffers.

# Study IV

Study IV was an online study with professionals and non-professionals. The study investigated whether threat assessments made by professionals were of higher quality than those made by non-professionals. Based on research on expert performance, quality was defined by the ability to perform consistently (as compared with peers) and base decisions on relevant information (Dror, 2016; Einhorn, 1974). Specifically, it was predicted that professionals would agree more with one another with respect to risk assessments as compared to non-professionals (Hypothesis 1) and that professionals' search for information would be comparatively more in line with empirically supported threat cues (Hypothesis 2). Threat cues were defined as pieces of information that indicate an increased risk for violence.

## Method

Threat assessment professionals ($N = 44$), university students ($N = 44$), and laypersons ($N = 45$) assessed the risk for violence in three fictitious cases. Professionals were recruited via associations for threat assessment professionals in Europe (AETAP) and Canada (CATAP). Non-professionals were approached at Gothenburg University (students) and on Amazon Mechanical Turk (laypersons). Participants read three different cases (i.e. vignettes) in which a person had posed a potential threat of violence towards one or several other persons. Each case consisted of 15 to 21 pieces of information describing (i) the context in which the threat had evolved and (ii) the behaviours/characteristics of the person posing the threat. The information pieces reflected risk factors and protective factors derived from literature on threat assessment.

Participants rated the extent to which each information piece either increased or decreased the risk for violence in that particular case (e.g. "Frank's position within the firm is uncertain"'; -4 = *very strong decrease*, 4 = *very strong increase*). After rating all information pieces, participants were asked to list up to five additional pieces of information they would request in order to make a more adequate assessment of the risk for violence. Participants repeated this procedure for all three cases. The cases were presented in random order.

The information pieces requested by the participants were counted (range: 1-5) and classified as *key request* or *other request*. A request was considered a key request when it covered information identified in the literature as crucial for making a fully informed threat assessment (Vossekuil et al., 2015). All remaining requests were classified as other.

## Results and Discussion

The results demonstrated support for both hypotheses. A higher level of consensus on risk ratings was found among professionals than among students and laypersons (supporting H1). Moreover, the professionals requested comparatively more relevant information (i.e. key requests) and their requests covered a wider range of topics (supporting H2). These findings held true in all three cases. Both measures (inter-rater agreement and empirically supported decision-making) reflect quality standards in expert performance (Dror, 2016; Einhorn, 1974). Hence, the results suggest that domain-specific

experience adds to the quality of threat assessment practices. That said, the average risk ratings were found to be strikingly similar across all three groups. Professionals' beliefs of which information was (and was not) alarming were very similar to those of non-professionals. This finding suggests that actual assessment of information in threat cases may, in part, reflect common sense.

The results of Study IV fit neatly with previous research on expertise and risk perception in which professionals were found to excel at cue selection (i.e. what information should be looked for; Elstein & Schwarz, 2002; Fahsing & Ask, 2016) but not assumed (Slovic & Weber, 2002) or found (Bogaard, Meijer, Vrij, & Merckelbach, 2016) to be better at cue assessment (i.e. how the information should be interpreted). In brief, threat assessment professionals may contribute most to the process of gathering (rather than assessing) information.

# GENERAL DISCUSSION

The aim of this thesis is to contribute to a scientific approach for threat assessment and management (TAM) interviewing. It is important that threat assessment professionals, to the fullest extent possible, engage with persons who pose a threat because only *they* hold first-hand information of their intentions and only *they* can change their intentions. While TAM interviewing has long been acknowledged and practiced, the topic has been ignored in research. This thesis is one of the first attempts to fill that gap. An experimental paradigm was developed to examine interview dynamics in a threat assessment context. The paradigm was tested and used in a series of studies, each addressing the topic from a slightly different angle. The first two studies were developed from a deception detection perspective. Specifically, is it possible to elicit verbal cues to deceit in threat statements (Study I) and can one interview strategically to create verbal cues to deceit in threat statements (Study II)? In the follow-up studies, there was a shift of perspective from deception detection towards risk assessment and information gathering. Specifically, what interview approach contributes most to information gathering and de-escalation in threat cases (Study III) and do threat assessment professionals gather and assess information in threat cases differently to non-professionals (Study IV)? Irrespective of the research angle (deception detection or information gathering), it is argued throughout the thesis that it is vital for TAM interviewers to understand what attitudes and behaviours can be expected from the threatener. Counter-interview strategies were therefore explored in both Studies II and III.

## Main Findings

### Avoidant Actualisers

The most consistent outcome of the laboratory studies was that persons more likely to carry out the threat were found to be less informative about its implementation. In Studies I and II, the likelihood of carrying out the threat was manipulated by assigning participants to either bluff about the threat (bluffers) or actualise the threat (actualisers). Actualisers in both studies disclosed fewer details than bluffers regarding how they would carry out the threat. In Study III, it was found that persons who reported to be more willing to carry out the threat more often reported to have concealed information as part of their strategy. In particular, they reported to have withheld information that could aid the implementation of the threat, such as contact details of accomplices. In all three lab-studies, bluffers and actualisers were found to be equally informative on a general level when explaining their case and their motivation for threatening.

These findings are neither in line with the experience of professionals, nor theory and research in cognitive psychology. For instance, according to the FBI's National Center for the Analysis of Violent Crimes (NCAVC), the more detailed a threat is, the more serious the risk for actual implementation (O'Toole, 2009). Their reasoning parallels the Construal Level Theory (CLT) holding that the specifics of an event dominate people's minds if the event is likely to occur (Trope & Liberman, 2010). Supporting the CLT, previous research has shown that people tend to give detailed accounts describing events they believe to be

likely to happen (Wakslak et al., 2006) or when describing actions they truly intend to carry out (Mac Giolla, et al., 2013; Mac Giolla & Granhag, 2015; Sooniste et al., 2014; 2015).

Despite being based on evidence and logic, the CLT was not supported in the present studies on threat assessment. This outcome might be best explained in the light of self-regulation (Fiske & Macrae, 2012). Concretely, the mind-set of actualisers might be detailed and implementation-oriented, but, to prevent others from interfering with their plans, actualisers must conceal critical details from the conflicting party. Avoidant regulation strategies (e.g. keeping the story simple, avoiding lies) have been found to be particularly common in interrogations with guilty suspects who have a need to conceal criminal involvement (Hartwig et al., 2007; Strömwall et al., 2006). In threat cases, critical details are most likely to be about the implementation of the threat (i.e. how-related details). For instance, an actualiser who leaks the time or location of the planned attack allows authorities to arrange for extra security measures. Moreover, revealing the names of accomplices could hinder successful implementation and challenge social bonds. Thus, actualisers maintain a critical advantage by concealing information from the interviewer.

Practically, the present findings imply that detailed threat accounts should not automatically be interpreted as cause for concern. Yet, suggesting the opposite ("He is elaborating on the implementation of the threat so he is probably bluffing") would be taking a step too far. For starters, the studies within this thesis did not directly test the diagnostic value of implementation details in threat statements. Furthermore, previous studies that did examine the ability to distinguish between statements of true and false intent revealed error rates of approximately 30% (Vrij et al., 2011a, b). Such error rates are unacceptable when assessing the risk for violence in real cases. Perhaps, the most important conclusion to be drawn here is that threateners treat information about their case strategically when being questioned; they choose what information to reveal and conceal. This notion is valuable for TAM interviewers because a strategic approach from the interviewee allows for, or even requires, a strategic approach from the interviewer. This topic will be discussed in more depth in the next section.

## Semi-Cooperative Interviewees

Threateners' counter-interview strategies were examined in two of the three laboratory studies (II and III). Threateners in both studies were found to be semi-cooperative interviewees. On one hand, threateners reported to be willing to interact and share information with the interviewer, they truly provided a fair amount of information (25-30% of all the information they held), and no one refused to speak. On the other hand, nearly all threateners (90-94%) reported to have approached the interview strategically. Semi-cooperative attitudes were also revealed in the type of strategies participants reported to have used. Forthcoming strategies (e.g. "I wanted to show them that my evidence against them is strong") were often combined with withholding strategies (e.g. "I tried to answer as vaguely as possible").

In brief, the findings support the self-regulation perspective which states that people tend to control their behaviour in social settings in order to reach desired outcomes (Fiske & Macrae, 2012). Self-regulation is assumed to be of particular significance in challenging social interactions. Examples of challenging social interactions are those in which a person must conceal the truth to protect matters of personal relevance (e.g. freedom, money,

opportunities) and those in which the integrity of a person is openly questioned. Since both of these aspects are typically part of interrogation situations, the self-regulation perspective provides a relevant theoretical framework for research on how to interview suspects (DePaulo, 1992; Hartwig et al., 2010).

Drawing a parallel between previous studies on suspect interviewing and the current findings, two things are notable. First, reported strategy use in the current studies is much higher than that from research on suspect interviewing. Hartwig and colleagues (2007) found that 60% of guilty suspects and 37% of innocent suspects reported to have had a strategy before the interrogation. An explanation for the high rates among threateners may be that they perceive the burden of explanation to rest on themselves. In contrast, suspects are involuntarily taken in for questioning which automatically places suspects in a comparatively more reactive position ("Let's see what they have on me"). Second, the participants making threats seemed to combine a typical innocent-suspect attitude (being forthcoming; Strömwall et al., 2006) with a typical guilty-suspect attitude (being strategic; Hartwig et al., 2007). This combination might result from the fact that the difference between morally right (i.e. being innocent, telling the truth) and morally wrong (i.e. being guilty, telling a lie) is less clear when stating a threat. Bluffers have no intention to commit harm, but they are guilty of lying about their intentions (i.e. innocent liars). Actualisers intend to commit harm, but they are honest in their claim (i.e. guilty truth-tellers). Taken together, both threat interviewing and suspect interviewing represent challenging interactions that require self-regulation by the interviewee. Yet, the act of threatening clearly differs from a suspect giving a statement and this could explain the unique patterns found in the current studies.

The finding of forthcoming threateners fits well with professional reports that threateners are typically willing to discuss their case (van der Meer & Diekhuis, 2014; White, 2014). However, the finding that threateners can be strategic in TAM interactions is rarely mentioned in the literature, with the exception of Meloy and Mohandie (2014) who note that persons posing a terror threat may use countermeasures to undermine the interview. The strategic aspect is an important addition. Being aware of counter-strategy use is the first step towards altering and exploiting it.

## Persistent Interviewees

Studies II and III examined the efficacy of different interview styles but none of those examined led to significant differences in the interviewees' behaviours or attitudes. Suspicion-oriented interviewing did not result in differences between the statements of bluffers and actualisers (Study II). Moreover, rapport-based and direct interviewing evoked similar responses in terms of the threateners' strategy use, information provision, and willingness to pursue or discuss the threat (Study III). These outcomes deviate from research supporting the efficacy of rapport-based interviewing over accusatorial or direct interviewing (Bull, 2013; Meissner et al., 2014), as well as from theory and research demonstrating that guilty and innocent suspects respond differently to the risk of not being believed (Hartwig et al., 2010).

The lack of impact from different interview styles may be explained by methodological shortcomings. The manipulation of perceived suspicion levels and rapport might not have been powerful enough or, perhaps, suspicion levels and rapport are not critical to TAM

interviews. In other words, more intense manipulation or other independent variables might have been more influential (see also Limitations). An alternative explanation could be that threateners are particularly steadfast interviewees. Two of the current findings support this argument. The first is the frequent use of counter-interview strategies (reported in both studies) and the second is the correlation found between pre- and post-interview attitudes (documented in Study III). In other words, threateners approached the interview with a set attitude and prepared accordingly. Basic psychological research on persuasion has shown that persons who approach a task deliberately are less affected by how a particular message is presented (Petty & Cacioppo, 1986).

If threateners are indeed steadfast interviewees, then stronger means are needed to steer their behaviours. In fairness, however, it is still too early to arrive at any definite conclusions. These findings stem from just two laboratory studies and cannot compete with the much stronger body of research on the effectiveness of rapport-based and strategic interviewing (Meissner et al., 2017). Furthermore, it is important to acknowledge that threateners in the current studies may have been unaffected by the *style* of interviewing but not by the *interview* as such. Specifically, the interview impacted the threateners' attitudes and information provision, but this impact was independent of the interview style.

## Empirically-Driven Professionals

Study IV examined how professional experience affects the assessment of threats of violence. The results demonstrated that, on average, professionals and non-professionals made almost identical risk assessments, but professionals agreed more with one another. Furthermore, professionals' additional information requests covered more, and more relevant (empirically-based) content as compared to the requests of non-professionals.

The finding of identical risk assessment points towards the notion that the judging of threat cues may in part reflect common sense. Critically, common sense does not necessarily mean bad sense. The assessments of the professionals were found to conform with the literature (i.e. known risk factors were identified as risk increasing and known protective factors were identified as risk decreasing), but so were the assessments of the non-professionals. This result may be explained by literature on risk perception stating that risk assessment is largely affective in nature even when approached rationally (Slovic & Weber, 2002). It has been theorised that people tend to rely on two different systems when assessing risk in financial, health, and safety domains: an affective system and a cognitive system (Slovic, Finucane, Peters, & MacGregor, 2004). The affective system is inherently present in both experts and novices as responding to threats is deeply rooted in human evolution, while the cognitive system is more developed in experts than novices. This difference is mostly due to experts having a better notion of probabilities, whereas the general public tends to overweight infrequent but catastrophic events (e.g. a terrorist attack; Weber, 2001). However, this typical difference between experts and novices might not always impact risk assessments. The two systems are said to operate in parallel whereby emotions have a strong impact on reasoning, a phenomenon referred to as affective rational (Damasio, 2001; Slovic et al., 2004). The two systems usually combine to identical risk assessments (Slovic & Weber, 2002), but, when emotional reactions to risk differ from cognitive assessments of risk, emotions are assumed to drive behaviour (Loewenstein, Weber, Hsee, & Welch, 2001). This theory might explain how common sense notions on

risk can overrule professional experience when assessing threats of violence. However, the role of emotion in professional threat assessment needs yet to be investigated.

Two other findings suggest that the professionals' performance was superior to that of the non-professionals. These were, higher levels of inter-rater agreement and empirically-driven information searches. Both measures reflect quality standards in expert performance (Dror, 2016; Einhorn, 1974). Agreement between professionals cannot be taken for granted in fields of expertise. To illustrate, studies among forensic experts revealed that their conclusions about DNA evidence, fingerprints, and footwear identifications were often inconsistent (Dror & Hampikian, 2011; Majamaa & Ytti, 1996; Ulery, Hicklin, Buscaglia, & Roberts, 2012). However, it should be noted that these studies examined dichotomous judgements (e.g. Could the suspect have contributed to the DNA mixture?). Such judgements result in clearer inconsistencies as compared to the continuous judgements examined in the current study (e.g. To what extent does this information contribute to the risk for violence?) where the spread in the ratings was used as a proxy for agreement.

The finding that professionals requested empirically-based information more often than non-professionals may reflect a superior ability to make decisions based on relevant information without being biased by irrelevant contextual information (Dror, 2016). Theory and research into expertise suggest that experienced performers (whether criminal investigators, physicians, or other professionals) possess an exceptional understanding of which information is critical to the problem at hand and are quick to recognise this information in a larger bulk of information (Alison, Barrett, & Crego, 2007; Elstein & Schwarz, 2002). These competences help experienced performers generate more and qualitatively better hypotheses as compared to less advanced performers or novices (Fahsing & Ask, 2016; Wright, 2013). Thus, both the current findings and previous research demonstrate that experts know best what information to pursue.

What do these findings mean in practice? First, agreement among professionals is reassuring as it suggests that professionals tend to reach similar conclusions. Second, threat assessment professionals may contribute most to the process of information gathering (as opposed to information assessment). This means that, in a case with limited resources, expertise is best utilised in tasks concerning the information search. For instance, this would involve evaluating what intelligence is missing or setting the scope of a TAM interview.

# Limitations

The studies rest on the assumption that social cognitions of threateners are similar to those of other people. Hence, it was argued that experimental findings can be generalised as long as basic human dynamics are studied. A limitation of the studies in the thesis is that this assumption was theorised but not tested. Furthermore, the assumption is debatable. Threatening typically involves strong emotions, and personal interests are at stake. Moreover, the type of threats within the field of threat assessment are typically violent threats meaning that the threatener is perpetrating a criminal act by merely uttering the threat. These conditions were not fully mirrored in the design of the studies. Although the current paradigm involved a threat to damage the reputation of the conflicting party, the threat was not inherently illegal or even immoral. Finally, known risk factors in the field of threat assessment (e.g. substance abuse, violent attitudes, and mental illness) were probably

underrepresented in the studied samples. Despite the measures taken to maximise external validity (see Introducing an Experimental Paradigm) and the notion that real-world resemblance is not always required to examine a phenomenon (Mook, 1983), no direct evidence was obtained on the generalizability of the present findings as the findings stem exclusively from lab-studies of student samples. The question therefore remains whether or not real-world threateners would respond similarly as compared to the participants in the studies.

A number of limitations pertain to the interview protocols employed in the studies. First, the interviews might have come across as rigid to the interviewees. The prompts and questions comprising the protocols were carefully designed, both in phrasing and sequence, and the interviewers were instructed to stick to the protocols. This instruction was given for the sake of experimental control but might have hindered the natural flow of the interactions. Second, the interviews were short, particularly in Studies I and II. It is therefore unlikely they covered all dynamics of TAM interviewing. Third, the manipulations of suspicion (Study II) and rapport (Study IV) might have been insufficient to result in the predicted effects. Although manipulation checks were found to be significant, the protocols that were supposed to communicate suspicion and rapport received only moderate ratings in these regards (5.44 and 4.05 on a 7-point Likert scale, respectively).

The studies did not examine a sample from the population of persons who pose a threat without making a threat. These are persons who plan to carry out an attack while aiming to remain under the radar. This group is comparably large and obviously dangerous and, hence, forms a substantial part of the threat assessment domain (Vossekuil et al., 2015). Different interview dynamics could be expected as compared to what was found in the present research. As persons in this group do not seek interaction, they might be less forthcoming and would probably deny having harmful intentions (instead of stressing them when threatening). Thus, the data from the present studies might not apply to these subjects of concern.

Another limitation is that the studies did not test for individual or cultural differences among threateners. Diversity issues are plausibly influential in TAM interviews. Modern societies are increasingly multicultural and threat assessment professionals will likely encounter persons with diverse ethnicities, religions, languages, and cultural practices. Research has shown that interviewees from different cultures can respond differently to interrogation and negotiation tactics such as rational persuasion, authority, and relationship-building (Beune, Giebels, & Sanders, 2009; Beune, Giebels, & Taylor, 2010; Giebels & Taylor, 2012). In a recent publication, Hart (2016b) cast doubt on the cross-cultural validity of risk and threat assessment instruments and appealed to professionals to enhance general awareness of diversity issues. The present research fails to answer this call. Nonetheless, it is acknowledged here that it is important to address cultural and individual differences in research and practice in TAM interviewing (see Future Research).

This final remark is more a nuance than limitation. This thesis does not advocate TAM interviewing as the solution to all threat cases. There are plenty of imaginable circumstances in which authorities should decide to not interview. For instance, cases in which the safety of the interviewer cannot be guaranteed, in which an interview would interfere with an ongoing investigation (and the threat is not imminent), in which the mental condition of the threatener hinders a coherent conversation (e.g. they suffer from a psychosis), or in which

it is impossible to reach or trace the threatener (e.g. threatener is located in a warzone; threat is a cyber-threat). However, it is argued here that refraining from interviewing in threat cases should be a conscious decision and not a default scenario.

# Future Research

One way of moving TAM interviewing research forward is to increase its sheer quantity. The number of studies examining TAM interviewing is far behind the corpus of interview studies within the related fields of interrogation, negotiation, and intelligence gathering. On a general level, additional research could refine existing theories and terminology in threat assessment. For instance, is there a difference between risk assessment and threat assessment (discussed on p. 10)? What exactly does targeted violence mean (see p. 1)? How do subjects of concern progress along the pathway towards violence (see p. 6)? There is a need to clarify such conventional yet controversial concepts in the field. More specifically, with regard to TAM interviewing, future research should strengthen and expand the interview manipulation techniques tested in the present studies in order to reach a fuller understanding of interview dynamics in TAM contexts. Furthermore, refinements to the current set-up should be made to optimise the balance between the realism of the paradigm, the real-life relevance of the paradigm to the participant sample, and research ethics. The realism of the paradigm might be improved by having participants threaten with an illegal act, for instance, to leak information covered by a confidentiality agreement signed by participants. Replications could further contribute to the robustness of the current findings, especially if conducted across different labs and samples. Eventually, mechanisms examined in laboratory studies must be tested in applied settings to prove the assumption of generalizability (see Limitations).

The generalizability of interview approaches is limited by individual and cultural differences. There is a need to explore these limitations so that interview approaches can be customised for specific target groups. It has been suggested that cultural norms and values become more prominent under stress, meaning that stress leads people to fall back on the cultural patterns with which they were raised (Giebels & Taylor, 2012). Yet, cultural issues are not sufficiently studied within the field of threat assessment (Hart, 2016b). Cultural frameworks that could be explored include the distinction between low-context cultures (i.e. cultures that use more direct and content-oriented communication) and high-context cultures (i.e. cultures that use more indirect and context-oriented communication; Giebels & Taylor, 2012) and, in the light of terrorism, aspects of Western and Muslim subcultures. Moreover, some individual characteristics are worth studying. For instance, researchers examining real-world interviews with extremists and terrorists have noted that such interviewees display little self-reflection (Alison, 2016) and strong dualistic worldviews (e.g. us/them, good/bad; Dalgaard-Nielsen, 2013). Future studies should incorporate measures that tap into these individual/group belief systems. Such research may help to establish a good fit between interview objective, interview strategy, and interviewee.

A topic that might broaden the scope of future research is interviewing as a *means* to managing a threatening situation. The typical aim of TAM interviewing is to gather information to assess risk and recommend intervention measures. However, interviewing could also be employed to steer the threatener away from violence. One strategy to evoke

change in others is motivational interviewing (Miller, 1983). Motivational interviewing is typically used in clinical settings and rests on the idea that people are best persuaded by arguments they hear themselves defend. Hence, the therapist tries to encourage the patient to talk about motivations for change, so-called "change talk". Numerous studies have proven the efficacy of motivational interviewing (Hettema, Steele, & Miller, 2005). Another threat management strategy could be the use of counter-narratives (Dalgaard-Nielsen, 2013). Counter-narratives are stories providing a view of the world that challenges the narratives supporting violence or extremism (Braddock & Horgan, 2016). Counter-narratives are intended to cast doubt on a theatener's plan or ideology in order to alter dangerous worldviews. While the use of counter-narratives is considered one of the U.S.'s core strategies in preventing extremist ideologies, researchers have only recently turned their attention to the development of evidence-based narratives (Beutel, et al., 2016; Braddock & Horgan, 2016). Finally, threat managers may use an interview to reach out to a threatener to offer practical help (James et al., 2010) or to seek mutual gain (Shapiro, 2006). None of these strategies have been systematically tested in a TAM context. Yet, each of them may benefit threat management outcomes such as increased cooperation, higher likelihood of future interactions being constructive, de-escalation, and, ultimately, refrainment from violence.

Currently, little is known about how or how well professionals interview threateners. The study of professionals included in this thesis (Study IV) examines what information they would search for when making a threat assessment. However, to address professionals' skills for TAM interviewing, future research should include questions on how they would conduct an interview with a person of concern. For instance, what information would they ask for (and why) and what strategies would they use (and why)?

# Ethical Considerations

**TAM interviewing in the laboratory**

The experimental paradigm used in Studies I, II, and III required participants to make a threat or to discuss a threat they had made. The act of threatening as well as discussing the threat might have been stressful for the participants. Several efforts were made to minimise a potentially negative experience for the participants. To avoid or reduce moral constrains, the case given to participants was phrased in such a way that participants represented the party that was right according to widely accepted moral values, and were to threaten a party that was morally wrong. Also, the harm participants threatened to inflict was not violent or otherwise unlawful but instead implied financial/reputational damage.

To further ensure ethical research practices, all participants read and signed an informed consent in which they agreed to have understood participation is voluntary, confidential, and that the data would only be used for research purposes. The document specifically stated they were allowed to quit at any point in time. This, in fact, was done by 21 out of 496 participants (4.2%) because they felt uncomfortable with the interactive part of the study. They received full compensation. In the debriefing, all participants were given the opportunity to share their thoughts on the experiment. Subsequently, they were informed of the actual goal of the research, the position of the interviewer, the fictitious

nature of the case, and, furthermore, it was emphasised that no one acted correctly or incorrectly in the experiment as there was no correct or incorrect behaviour.

Approval for the studies was obtained from the Regional Ethical Review Board in Gothenburg (Studies I, II, and III) and the ethics committee at the University of Portsmouth (Study IV). For favourable decisions received, see Appendix A.

## TAM interviewing in practice

Practitioners in the field of threat assessment and management can have many different professional backgrounds (e.g. police, law, medicine, behavioural science, security). Some professionals operate under governmental flags while others work for corporate businesses or run private consulting firms. Moreover, some professionals are full-time threat managers while others perform TAM tasks as an integral part of their jobs. The large diversity among threat assessment and management professionals is challenging to ethical conduct, but several efforts toward professionalisation have been made over the past three decades. For instance, the American Threat Assessment Association published a code of conduct outlining professional standards of ethical practices (ATAP Code of Ethical Conduct, 2010). In addition, training and certification programmes have been developed and, since 2015, practitioners can apply for a "Threat Manager Certificate" that is awarded by ATAP.

Despite these efforts, steps are yet to be taken to guarantee qualitative, ethical, and lawful practices in threat assessment and management. One of these steps is the further expansion of professionalisation from the US to other parts of the world. This trend is emerging with the rise of Canadian, European, and Asian sister organisations of ATAP. However, these organisations are much smaller than ATAP and, although accreditation processes are in progress, they are still in their infancies.

Another step forward would be to develop conduct codes into more concrete implications for TAM interviewing (and other TAM tasks). For instance, it is stated in the conduct code that professionals should operate within the boundaries of their competence, and that they should respect privacy and confidentiality—but what does this mean in practice? Who exactly is authorised to conduct TAM interviews? Under what circumstances should these interviews take place? Can the interviewee refuse to take part? Who is responsible for managing the aftermath of the interview, including possible escalation? These questions remain unanswered.

Finally, there exists no legal authority to guard ethical or lawful conduct in the field of threat assessment and management. Certified expertise thus stands or falls with acknowledgement in the field. Acknowledgement here means that professionals, clients, and organisations are aware of quality standards and choose to live up to these. Developing such a support base takes time and effort. However, as long as certification is not required by law, TAM practitioners remain free to practice their work however they see fit as long as it does not conflict with criminal law, civil law, or laws applying to their particular profession.

# Conclusions

Current threat assessment and management (TAM) interviewing draws on customary knowledge, which can be explained as knowledge that has emerged over time and through experience and has been passed on through observational learning and storytelling (Hartwig et al., 2014). The present thesis seeks to advance this knowledge by proposing a science-based perspective on effective TAM interviewing; what dynamics can be expected and, given these dynamics, what interview methods work best? Combining the theory and findings presented in this thesis, it could be concluded that threateners are semi-cooperative interviewees whose attitudes and behaviours may not be significantly influenced by general interview approaches (e.g. rapport-based interviewing, suspicion-oriented interviewing). Instead, the findings point to a need for more strategic approaches that (i) are developed from the perspective of the threatener so his/her existing attitudes can be anticipated and exploited, (ii) make the threatener's motivation to be informative prevail over the need to be strategic, and (iii) strike a balance between controlling risk (by making risk assessments and placing restrictions) and meeting needs (by reaching out to the threatener and working towards a solution). Science-based interview techniques should be developed that tap into one or more of these preliminary findings. Such developments will most likely improve the quality of TAM interviewing but may also lower the threshold for conducting such an interview in the first place. In turn, more real-world interviewing will give rise to new experiences and data that can serve as input for future research. It is this interplay between science and practice that is needed to advance the field of threat assessment and management.

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