

Empathic (in)accuracy during couples' conflict interactions

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Céline Hinnekins

- Thank you for your part in my journey -

Tijdens het aanvatten en afleggen van mijn tocht tot de (tijdelijke) bestemming waar ik nu ben aangekomen, hebben heel wat mensen mij aangemoedigd en in de richting van deze bestemming gegidst. Tijdens deze tocht heb ik heel wat bezienswaardigheden mogen aanschouwen, sommigen om levenslang in herinnering mee te dragen. Deze tocht kende ook hier en daar een (onverwachte) wending en wordt dan ook gekenmerkt door een assortiment aan ‘soundtracks’. Hoe kan het dan ook anders om enkele mensen even op de voorgrond te plaatsen met een aangepaste songtekst.

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A gift to bring you clarity,
to show you that your destiny
is not defined by what you've failed to see
(*Alter Bridge*)

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Belief is a beautiful armor
But makes for the heaviest sword
(*John Mayer*)

‘Den – ondertussen welgekende – bureau’ verdient een speciaal plekje gezien dit toch de grote constante was tijdens mijn tocht en dan ook één van de mooiste herinneringen zal blijven tijdens het vervolg van mijn tocht. Vanaf dag 1 deelden Marieke en ik een – weliswaar tijdelijke – bureau; we sprongen samen in het grote avontuur en werden later ook samen geïntroduceerd in ‘den echten bureau’. Samen met Elia, Gaëlle en Joke werden we het hechtste team ooit gekend in de PP05 en dit werd alleen maar versterkt toen ook Charlotte den bureau kwam vervoegen. Het codewoord van deze hechte collega- en ondertussen vriendengroep is ‘samen’. Samen gemotiveerd in een nieuw project vliegen, samen frustraties ‘afzagen’ op elkaar maar nog meer ‘afeten’, samen lachen wanneer ‘per ongeluk’ geheimen worden verklapt over zwangerschappen, geslachten, babynamen, verjaardagsverrassingen,... samen op congres, samen op preconference workshop, samen samen samen... en hopelijk blijft ‘samen’ altijd een stukje bestaan ook al zullen onze wegen uiteindelijk allemaal scheiden.

The grass was greener
The light was brighter
The taste was sweeter
The nights of wonder
With friends surrounded
The dawn mist glowing
The water flowing
The endless river
Forever and ever
(Pink Floyd)

Maar niet enkel ‘den bureau’ is gekend, ook het ruimere Family Lab staat ondertussen bekend als een leuke bende waar niet enkel gelachen en gezeverd wordt, maar waar ook een inspirerende mix van getalenteerde, collegiale en vooral aangename onderzoekers aan de slag is. Ik wil dan ook het volledige team bedanken! Een beter team had ik me niet kunnen wensen. En ook het Causa-team wil ik bedanken. Pieter (en Melanie en Bregwin), bedankt om mij de kans te geven mee te draaien in de praktijk; sinds de start is het een aangename en verrijkende uitdaging om naast mijn onderzoekstraject ook werkzaam te zijn in de klinische praktijk. Het heeft niet alleen een nieuw perspectief geboden aan mijn onderzoeksbevindingen, het heeft me ook leren relativeren en als mens doen groeien.

Gaze at the skyline
Under the ocean of stars
This is your slow dance
And this is your chance to transform
(Editors)

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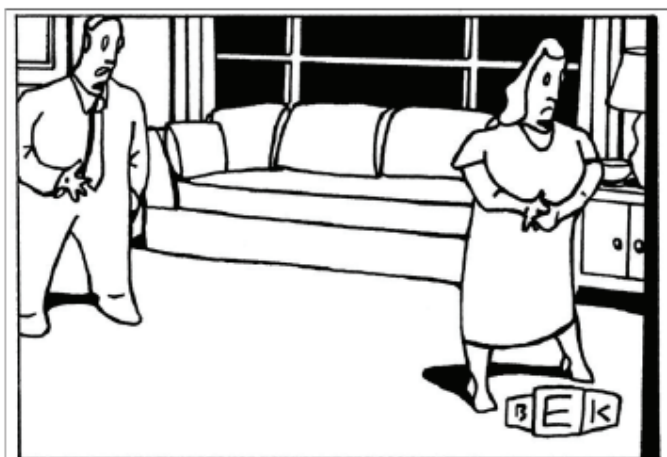
bevestigd te worden door hoe trots jullie zijn en de ruimere (schoon)familie om deze trots te bevestigen. Maar ook Anouk, Mieke, en het GoudenNestje verdienen een speciale dankjewel voor de continue warme vriendschap (ook al was het niet altijd simpel om elkaar regelmatig te zien).

'Cause you're a sky, 'cause you're a sky full of stars
'Cause you light up the path
(Coldplay)

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We're a thousand miles from comfort,
We have travelled land and sea
But as long as you are with me,
There's no place I rather be
(Clean Bandit)

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*"Of course I care about how you imagined I thought
you perceived I wanted you to feel."*

"Your mind exists somewhere altogether different; it lives in a world where feelings
simply cannot be defined by words"
(Bastille)

1

CHAPTER

GENERAL INTRODUCTION¹

¹ Based on Hinnekens, C., Verhofstadt, L. L., Vanhee, G., & Ickes, W. (2015). Weet ik wat jij denkt en voelt? Een overzicht van het onderzoek naar empathische accuraatheid en implicaties voor de klinische praktijk. *Tijdschrift Klinische Psychologie*, 45(1), 15-29.

Empathic accuracy is defined as the extent to which an individual can accurately infer another person's unspoken thoughts and feelings. The general introduction of this dissertation provides an overview of the existing – sometimes contradictory – evidence regarding the dispositional and situational predictors of empathic accuracy and its (un)favorable outcomes. This introduction starts with the conceptualization and operationalization of the concept of empathic accuracy by presenting an overview of fundamental research in the area of *understanding and perspective-taking*. We begin by introducing the Rogerian perspective on the importance of empathy in psychotherapy, which can be considered as the origin of the concept of empathic accuracy. Then, an overview of the empirical research on empathic accuracy – a field with its own research tradition that was founded in 1990 – will be provided. The second part will focus in greater detail on several important features of empathic accuracy, namely the manageability of accuracy, and the role of motivation. The third part will summarize the existing research on empathic accuracy in intimate relationships. We will conclude this general introduction with a discussion of the main gaps in the research on empathic accuracy, and the resulting objectives and research questions of the current dissertation.

INTRODUCTION OF THE CONCEPT

Accurately assessing thoughts and feelings of clients appears to be a key factor in clinical psychotherapeutic practice and is frequently cited as one of the most important predictors of successful client-centered psychotherapy (Greenberg, Watson, Elliot, & Bohart, 2001). Carl Rogers suggested that *accurate empathy* – in addition to the factors authenticity and unbiased care for the client – is a necessary characteristic of a good therapist (Rogers, 1957). Other psychotherapy schools have also emphasized the importance of perspective-taking skills, or in other words, the ability of the therapist to perceive themselves and others as social beings with subjective states of mind and internal mental processes (e.g., mentalization-based treatment; Allen & Fonagy, 2006). Additionally, empirical research has highlighted the importance of empathic accuracy in our everyday lives while interacting with significant others, including our partners and family members.

Hence, these statements raise all kinds of questions including how accurate are people when “reading” each other's mind, and are some individuals better at understanding other people's thoughts and feelings than others? For example, do clinicians have better-developed empathic abilities or is empathic accuracy a matter of possession of a given characteristic? Empirical studies have shown that the average empathic accuracy score when meeting a stranger is around 22 percent, meaning that 22 percent of the empathic inferences are correct (Ickes, Stinson, Bissonnette, & Garcia, 1990). The lower limit of this score is five percent and reflects the average accuracy score based on chance. The best “mind-readers” – those who are rather exceptional – score about 55 percent, meaning that they are still far from perfect at inferring the emotions of their interaction partner. Looking at this, we could start wondering whether our empathic efforts might seem rather hopeless or futile. It might be possible, however, to train psychotherapists or partners to become

“experts of the inner life” and through this improve the accuracy of their assessments of the other’s thoughts and feelings. These and other questions will be discussed in this general introduction, which aims to summarize the research literature on “daily mind-reading” or empathic accuracy.

Conceptualization

For decades, individuals’ levels of accuracy while assessing other people’s psychological states or personality traits have been subject of scientific research on interpersonal perception. The investigation of empathic accuracy fits within the context of the most recent of four interrelated research traditions in psychology, i.e., within the latest stage of a clear evolution or shift from the assessment of relatively stable dispositions such as personality traits (e.g., Funder and Colvin, 1988), to the perception of less constant and more temporary states in particular personal beliefs, values, self-concepts (e.g., Sillars & Scott, 1983) and then emotional states (e.g., Watson, 1972), to a final focus on the inference of episodic thoughts and feelings (e.g., Ickes, 1993).

Empathic accuracy is a phenomenon that has been examined in an interdisciplinary manner, which originates in the contexts of clinical and consulting psychology. Rogers (1957) defined the term *accurate empathy* as the therapeutic ability to be sensitive to the contents of the sequential thoughts and feelings of a patient. He referred to a complex process in which a therapist is eager to observe and understand the inner perceptual world of the client. This means that in addition to the client’s explicit communication, the therapist should also be able to accurately evaluate the client’s continuous flow of internal cognitive and emotional interpretations. Roger’s concept accurate empathy can be seen as a precursor to the concept of empathic accuracy defined by Ickes et al. (1990), with the main difference being that Rogers stressed the empathic *process itself* while Ickes stressed

the degree of accuracy as an *outcome* of this process. Therefore, empathic accuracy is defined as “the extent to which perceivers understand a target’s episodic thoughts and feelings as they appear spontaneously during the course of a natural interaction” (Ickes, 1993, p. 588).

It should be emphasized that empathic accuracy is conceptualized as an interpersonal, multidimensional and situation-specific process between a *target* (the person who is experiencing the thoughts and feelings) and a *perceiver* (the person who infers the target’s thoughts and feelings). Hence, empathic accuracy is a dyadic process in which two individuals interact with each other and both take the roles of target and perceiver, or in which two interaction partners (targets) are observed by a third party (perceiver) who is not participating in the interaction. The perceiver attempts to achieve an accurate assessment of the inner experiences of the target through various dimensions, such as observation, memory, cognition, and reasoning (Ickes, 1997). Therefore, the perceiver must detect, and assimilate the available informational cues from the target, and integrate them into both the situation-specific context of the interaction and the already-existing cognitive schema they have that contains information of previous interactions (if the interaction partners have a shared history).

Empathy. In accordance with the above mentioned distinction between Rogers’ and Ickes’ definitions, it is important to note that empathic accuracy does not equate to ‘empathy’. A clear definition of empathy is not available because empathy has evolved as a multi-dimensional phenomenon with no clear definitional consensus (Eisenberg & Miller, 1987). The most frequently used conceptualization of empathy is the one that distinguishes between *affective empathy* and *cognitive empathy*. Affective empathy refers to the emotional response of a perceiver to the experiences and emotions of their target. This reaction can consist of *parallel empathy* (experiencing feelings that are similar to or the

same as the target; Davis, 1994), or *empathic concern* (a specific emotional response that expresses compassion or concern for the other person; Batson, 1991). Cognitive empathy refers to the process by which a perceiver tries to imagine the psychological perspective of their target, but this process does not necessarily lead to an emotional response. Empathic accuracy can therefore be considered as the outcome of this process of perspective-taking (Verhofstadt, Buysse, Ickes, Davis, & Devoldre, 2008).

Operationalization

Before 1990, research on the measurement of empathic accuracy was mainly situated in the context of training programs for students in clinical psychology or psychotherapy. These studies examined how accurately students inferred clients' thoughts and feelings during (simulated) therapy sessions. Although these studies were very enriching for the clinical practice of the students and their tutors, they proved of rather limited scientific value as the inferences made by the student (perceiver) were usually not compared with actual thoughts and feelings reported by the client (target), but rather with inferences that were made by the supervising psychotherapist (Ickes, 2003). Therefore, these empathic accuracy scores reflected faith in the expertise of the supervisor rather than an objective measurement of perspective-taking performance.

Kagan (1977) introduced the *standard stimulus paradigm* (SS-paradigm) in which participants had to observe a standard set of videos in which two targets participated in an (un)structured interaction. More specifically, the participants were asked to observe videos of therapeutic sessions that were paused each time the client had reported thoughts or feelings. During these breaks, participants had to make an assessment of the observed client's thoughts and feelings by using multiple choice options. In this paradigm, the accuracy of the inference was thus calculated based on the empathic accuracy criteria

reported by the client him/herself. However, the SS-paradigm did not require the perceiver to generate the inferred thoughts and feelings, as there was a choice of predetermined options provided.

Based on this research, Ickes and colleagues (1990) developed the so-called *dyadic interaction paradigm* (DI-paradigm), which allows measurement of empathic accuracy in a more naturalistic setting, and in an objective and reliable manner. The original DI-paradigm (also known as the *standard empathic accuracy assessment procedure*) includes two interacting partners who are both perceiver and target. In a first stage the two participants spontaneously interact with each other in a room where they are alone but secretly being videotaped. During the second phase, both participants – independently – observe their videotaped interaction and report when and what kind of thoughts and feelings they had during the interaction. In the next phase they watch the videotape for a second time while at particular moments (when the target partner indicated having had a thought or feeling) the video is paused and the perceiver is asked to infer the thoughts and feelings of their interaction partner. Finally, the agreement between the actual and the inferred thoughts and feelings is rated by independent coders resulting in an empathic accuracy score between 0 and 100. Variations on the paradigm mainly concern the relationship between the interaction partners (e.g., strangers, friends, partners; Thomas & Fletcher, 2003) or the conversation type (e.g., spontaneous conversation, therapy session, support and conflict interactions).

Hence, the DI-paradigm differs in a significant respect from the SS-paradigm in which participants only take the role of perceiver. This distinction is important because all the participants in the SS-paradigm observe the same targets which allows researchers to compare the accuracy scores of the different perceivers for the same target, or inversely, for the same perceiver over various targets.

SOURCES OF EMPATHIC ACCURACY

Cognitive Development

Perspective-taking is possible by the development of two specific neural mechanisms. The first is *self-consciousness* which refers to the ability to be conscious of one's own internal mind or mental state (e.g., intentions, opinions, perceptions, emotions). Over time, we as humans develop the ability to reflect on our own internal state or to see ourselves from a meta-position, which in turn enables us to form a *self-perspective* or *self-image* (Vogeley et al., 2001). Second, humans develop an ability to attribute an internal mind or mental state to other people. This means that our awareness of other people having their own mental state becomes more and more engaged from childhood through adolescence, prompting us to infer the thoughts and feelings of others (mind-reading; Baron-Cohen, 1995; mentalizing; Frith & Frith, 2003). A very important body of research on this topic is the so-called *theory of mind* literature (TOM; e.g., Fletcher et al., 1995), which has introduced several TOM-paradigms. The capacities described by theory of mind develop over childhood and consist of several developmental steps (Sodian & Kristen, 2010), for example, a two and a half year old infant can understand the association between someone's desires and emotional outcomes (Bartsch & Wellman, 1995), whereas false belief understanding (i.e., the understanding that a person's mental representation of reality can differ from reality) emerges at the age of four years and older (Sodian & Kristen, 2010). At the age of six, children develop an increasing understanding of interpretive frameworks (e.g., understanding of the role of social prejudice when interpreting a specific action; Pillow, 1991). However, a full grasp of theories and interpretive frameworks for the social environment develops continuously through adolescence and even adulthood (Bullock, Sodian, & Koerber, 2008).

Informational Cues

Research has demonstrated that there are various sources from which one can extract the necessary information to achieve accurate inferences of a target's thoughts and feelings. Verbal cues – literally spoken words – are the main source of empathic accuracy (Hall & Mast, 2007). Non-verbal cues such as body language, facial expressions, tone of voice, etcetera can be considered as additional clues. A possible explanation for this finding is that people are generally not very good at understanding nonverbal cues as these are often misinterpreted, or that people pay attention to the wrong cues (Hartwig & Bond, 2011). However, non-verbal cues are particularly important during everyday conversations when the target is silent, or trying to hide his or her emotions (e.g., sadness; Ickes, 2006). Within the category of non-verbal cues, vocal cues (e.g., voice volume) are the most important for empathic accuracy, while visual non-verbal cues (e.g., gesticulation) are of the least use. Of course, the individualized knowledge about the target also plays an important role. Friends and partners certainly prove to be more accurate than strangers (Stinson & Ickes, 1992). After all, people develop a person-specific schema that gives them insight into the structure and content of the memories of their interaction partner, which facilitates accuracy. Perceivers are more accurate for schema-consistent thoughts (e.g., women who think of fashion) than for schema-inconsistent thoughts (e.g., women who think of football) (Gesn & Ickes, 1999). Additionally, social cognitions or schemas about one's self, others, one's own interaction behavior, social roles, and stereotypes are also a source of empathic accuracy as they facilitate the interpretation of (non-)verbal cues, especially when interacting with an unknown target (Ickes & Hodges, 2013).

Predictors of Empathic Accuracy

In everyday life, it is often said that some people are better than others in inferring a target's thoughts and feelings. This assumption suggests that empathic accuracy is either a *stable* trait inherent to certain individuals or an *ability* that develops over time. Hence, empirical evidence for this assumption should be found in the possibility to generate a list of characteristics inherent to a “good” perceiver. Therefore, we will present a brief exhaustive review of the research findings on this subject, classified by perceiver and target characteristics (see Hodges, Lewis, & Ickes, 2015 for an overview).

Perceiver characteristics.

Interpersonal sensitivity. Even though one would expect that perceivers who score high on measures of interpersonal sensitivity should also achieve higher levels of empathic accuracy, studies have generally found some contradictory results. For example, one study found that there were no significant associations between empathic accuracy measured by the DI-paradigm and a subject's performance on the Diagnostic Analysis of Nonverbal Accuracy (DANVA; Nowicki & Duke, 1994) – in which individuals have to assign emotions to facial expressions – or the Interpersonal Perception Task (IPT; Costanzo & Archer, 1989) – in which one must evaluate interactions based on (non-)verbal cues (Lewis & Hodges, 2009). The Interpersonal Reactivity Index (IRI; Davis, 1983), one of the most frequently used self-report questionnaires measuring empathy, has also been found to not be unambiguously correlated with empathic accuracy. The subscales that are conceptually most in line with the concept of empathic accuracy, namely perspective-taking and empathic concern, are either not correlated with or enjoy an ambiguous relationship with empathic accuracy (Stinson & Ickes, 1992). Scores on the Balanced Emotional Empathy Scale (BEES; Mehrabian & Epstein, 1972), which measures the degree of empathy for

emotions, are merely predictive of higher levels of accuracy measured in the SS-paradigm, even though targets showed a relatively high degree of expressiveness (Zaki, Bolger, & Ochsner, 2008). In summary, these self-report measures are not consistently related with levels of empathic accuracy. The most obvious explanation for these findings is that people seem rather poor at assessing their own ability to accurately infer others' minds.

Cognitive ability and style. The investigation of the link between intelligence quotient (IQ) and empathic accuracy also yielded mixed results. On the one hand, IQ and academic performance were found to be significant predictors of empathic accuracy in students (Ickes et al., 1990; Ponnet, Buysse, Roeyers, & De Clercq, 2008), but other studies have found no or a limited association (e.g., Ponnet, Roeyers, Buysse, De Clercq, & Van der Heyden, 2004). A further study by Ickes et al. (2000) found that verbal intelligence is a potential predictor of empathic accuracy but only in men.

Sex and gender. In line with the assumption that certain people are more empathically accurate than others, another dominating (gender) stereotype is that women are more empathic than men. A review article (Hodges, Laurent, & Lewis, 2011) claims that although some studies have found significant gender differences in empathic accuracy in favor of women, others have failed to find such differences. However, men have not performed better than women in any of the studies of gender differences. Another important remark is that women generally seemed more accurate than men if the gender stereotype was triggered or explicitly evaluated. This motivates women – but not men – to put more effort in to making accurate inferences and trying to meet the expectations of the female gender role (Ickes, Gesn, & Graham, 2000). Women do appear to be better at inferring the emotional significance of non-verbal cues (Hall, 1984), but this is only one component of empathic accuracy. Taken together, we can conclude that there are no generally accepted

gender differences in empathic accuracy because the significant findings are rather limited, and the differences appear to be mainly motivational in nature.

In summary, the search for *perceiver characteristics* predicting empathic accuracy has yielded mixed results. On the one hand, some promising studies have found characteristics that can explain up to 60 percent of the variance in empathic accuracy, but these findings could often not be replicated and more recent studies have often found contradictory results. It is noteworthy here that most studies that have found significant results have measured empathic accuracy using the SS-paradigm, whereas few or no perceiver characteristics have been found to be significant when using the DI-paradigm.

Target characteristics.

The lack of evidence for stable and unambiguous perceiver characteristics led to a shift from a search for predictors stemming from the perceiver to the investigation of potential *target characteristics*. This research focused on individual differences between targets that might help determine how easy or difficult it is for a perceiver to infer the thoughts and feelings of that particular target.

Readability. This concept refers to the fact that the perceiver's accuracy largely depends on how "readable" or transparent the target's thoughts and feelings are in comparison to other targets. Several studies have operationalized this readability by using an objective index that rates how difficult it is to infer a target's thoughts and feelings (i.e., the inferential difficulty measure; e.g., Marangoni, Garcia, Ickes, & Teng, 1995). This index is determined by independent observers who rate the clarity of the (non)verbal cues emitted by the target (e.g., verbal content, facial expression). This readability index has been found to significantly correlate with empathic accuracy, suggesting that some targets are less/more transparent than others. Readability had an impact on empathic accuracy that

was most significant for interaction partners who did not know each other in advance and thus could only rely on the target's cues as a basis from which to make empathic inferences (because there is no prior information or knowledge about the target).

Sex and gender. An interesting but rarely examined question concerns the existence of gender differences in the readability of targets. Hall (1984) found that women emit more obvious nonverbal cues than men, but, in contradiction with this, a study of Simpson et al. (2011) found that men were easier to read. A suggested explanation for these contradictory findings is that men might compensate for their lack of expressiveness and self-disclosure by showing greater consistency between their verbal cues and mental content (thoughts, ideas, etcetera).

In summary, the study of *target characteristics* has produced more promising findings than the study of perceiver characteristics. Moreover, the target-variance has proved to be significantly bigger than the perceiver-variance, which indicates that certain features of the target are more influential to a perceiver's empathic accuracy than characteristics of the perceiver (Ickes et al., 2000). Nevertheless, the discussed results need to be replicated, generalized and extended.

Motivational aspects.

In addition to the stable perceiver- and target characteristics discussed above, research has also described situational, and in particular *motivational*, aspects as being predictive of the level of empathic accuracy. The extent to which a perceiver is motivated to accurately infer the thoughts and feelings of their interaction partner influences the level of accuracy, independently of other factors.

Situational motives. The situational motives that have been explored in experimental research include money, the prospect of success with attractive women, social recognition, etcetera. Although one would expect a logical and straightforward connection between motives and the level of empathic accuracy, this research has also revealed mixed results. For example, Klein and Hodges (2001), found that a financial reward led to greater accuracy in the DI-paradigm; this finding is in contrast with another study that found no effect of rewards including monetary incentives (Hall et al., 2009). A potential explanation for these contradictory results can be found in the operationalization of empathic accuracy. If the DI-paradigm is used, the interaction partners generally seem to base their empathic inferences on verbal cues, in contrast to other accuracy paradigms in which nonverbal cues have more salience and need to be interpreted. The interpretation of non-verbal cues can be considered as a process that is predominantly subconscious and automatic, in contrast to the processing of verbal cues. If an individual is motivated to make accurate inferences to obtain a reward, the interpretation of non-verbal cues may become more conscious, which possibly decreases its efficiency and consequently leads to a decrease rather than increase in levels of empathic accuracy (Hall, 2011).

Perceiver-motives. The motivation of the perceiver appears to depend partially on their personality and attachment style. Individuals who have a higher need to belong to a social group and to feel connected with others perform better on the SS-task (Need to Belong Scale; Pickett, Gardner, & Knowles, 2004). This might be because being sensitive and receptive to thoughts and feelings of others is important in order to create and maintain social relationships. Anxiously attached women have also been found to be more accurate at detecting the thoughts and feelings of their partners in relationship-threatening situations (e.g., when the partner is being interviewed by a physically attractive women; Dugosh, 2001; more details on the influence of threat are described below). Conversely, securely

attached women seemed less accurate when placed in threatening situations; possibly because an (unconscious) motive triggers inaccuracy for their partner's threatening thoughts and feelings in order to protect and maintain the relationship (Simpson, Oriña, & Ickes, 2003). People with an avoidant attachment style were generally found to be less accurate, independent of the situation (Simpson et al., 2011).

Target motives. Accuracy also appears to increase if the target interaction partner is of the opposite sex and physically attractive. Presumably, this is because the perceiver might be more motivated to get to know such a target, resulting in greater empathic accuracy (Ickes et al., 1990). However, research in this area has been relatively limited to date, although other target variables such as a challenging level of intelligence or charismatic personality have also been suggested to have a positive influence on the motivation of the perceiver to be accurate (Ickes & Hodges, 2013).

Relationship motives. Research on relationship motives distinguishes between *short-term* or *proximal motives* such as understanding the partner during conflict (Kilpatrick, Bissonette, & Rusbult, 2002) or supporting the partner in stressful periods (Verhofstadt, Davis, & Ickes, 2011), and *long-term* or *distal motivators* such as commitment to the partner and the relationship and long-term stability of the relationship (Simpson et al., 2003). Especially in the pre- and early relationship phases, empathic accuracy is important to establish and strengthen the relationship by enabling the partners to get to know each other and to accurately estimate each other's interest and commitment (Hodges et al., 2015). Hence, not all relationship motives result in increased levels of empathic accuracy. For example, empathic accuracy and relationship duration appeared to be negatively correlated, presumably because partners develop a partner-specific schema over the course of a relationship and, therefore, start making automatic inferences based on

this schema, paying less attention to the actual cues. In addition, a negative correlation between empathic accuracy and relationship satisfaction was found, but only in relationship-threatening contexts (see Ickes & Simpson, 2001; more information below).

These findings lead to the conclusion that perceivers can in some ways *control or manage* their empathic accuracy, dialing it up or down depending on the proximal or distal motives and goals at play given the situation or context (see Smith, Ickes, Hall, & Hodges, 2011).

EMPATHIC ACCURACY IN INTIMATE RELATIONSHIPS

Theory and research suggest that partners must be relatively accurate when inferring the specific content of each other's thoughts and feelings if they want to effectively coordinate their individual and shared actions, and maintain a satisfying and stable relationship (Ickes & Hodges, 2013). Therefore, a lot of research on empathic accuracy has been conducted within the context of intimate relationships. In what follows, four important lines of empathic accuracy in intimate relationships research will be discussed, concluding with the identification of important unanswered questions on this matter.

Empathic Accuracy and Partners' Interaction Behavior

On a daily basis, partners are faced with stressors that have their source either outside or inside the relationship (Bodenmann, 2005). How couples deal with these daily challenges (i.e., partner's daily coordination) has been studied within two distinct research fields. The first of these has involved the examination of couples' *support* processes, which

can be divided into positive or negative forms of support, and individual or dyadic efforts. The second area refers to how couples solve stressors that lead to disagreement or *conflict*.

During both support and conflict episodes, partners need to coordinate their (shared) actions in order to cope successfully with these daily stressors – actions that have a greater chance of succeeding if partners achieve higher levels of empathic accuracy. Indeed, partners' level of empathic accuracy, as measured during an interaction in which a personal problem experienced by one of the partners was discussed, appeared to be positively associated with the provision of instrumental support (e.g., giving advice) and negatively associated with the provision of negative types of support (e.g., criticizing the partner, minimizing the problem) (Devoldre, Davis, Verhofstadt, & Buysse, 2010; Verhofstadt et al., 2008; 2016). Additionally, the level of empathic accuracy also seemed to play an important role in adequate problem-solving during partners' conflict interactions. Partners need to be accommodating – suppressing destructive impulses and transforming them into constructive behavior – in order to find a solution and to avoid further escalation of conflict (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Both men and women exhibit more accommodative behavior if they are more empathically accurate during conflict interactions with their partner (Kilpatrick et al., 2002).

Although this previous research suggests that empathic accuracy may help partners to demonstrate accommodative pro-relationship behavior during interactions, it seems reasonable to assume that people might also be motivated to accurately infer their partners' current thoughts and feelings for more “personal reasons”. But why so? Because accurate insight into the thoughts and feelings of a partner during conflict might enable someone to predict what kind of reaction to anticipate and which “buttons to push” in order to convince or influence their partner, thus achieving a better (personally desired) outcome. However,

to the best of our knowledge, research identifying a possible link between the ways in which partners demand change and their level of empathic accuracy, has not yet been conducted.

Empathic Accuracy and Perceived Understanding

Throughout the discussions touched upon in our introduction, it appears that most of the previous research in this field has supported the intuitive belief that mutual understanding plays a crucial role in intimate relationships, and more specifically in relationship well-being (e.g., Neff & Karney, 2005; Pollmann & Finkenauer, 2009) and adjustment (e.g., Laurenceau, Barrett, & Pietromonaco, 1998; Lemay, Clark, & Feeney, 2007; Noller & Ruzzene, 1991; Swann, 1984). However, Pollmann and Finkenauer (2009) suggested that combining the results of these studies overlooks an important distinction, namely the difference between actually being understood (i.e., *actual understanding*, referring to the perceiver's accuracy at inferring the specific content of their partner's thoughts and feelings) and feeling understood (i.e., *perceived understanding*, referring to a target's subjective rating of the degree to which they feel understood by their partner). More specifically, some studies have measured mutual understanding within relationships by documenting partners' subjective self-reports whereas other researchers have relied on objective performance measures of actual understanding (e.g., empathic accuracy). Only a few studies have investigated the particular importance of perceived understanding and demonstrated a positive association with beneficial relationship outcomes such as adjustment, intimacy and trust. Perceived understanding has also been found to be predictive of long-term relationship well-being (Pollman & Finkenauer, 2009; Reis, Clark, & Holmes, 2004).

However, there has been no corroborating research exploring the association between actual and perceived understanding. To date, no answer has been provided to the

following questions: Is someone's perception of being understood by their partner based on the partner's level of actual understanding? What is the unique contribution of both actual and perceived understanding to positive relationship outcomes?

Empathic Accuracy and Sources of Misunderstanding

Another important question is: How well are partners able to actually understand each other? Previous research has tried to answer this question by investigating understanding as a function of specific relationship characteristics (e.g., duration, satisfaction; Thomas, Fletcher, & Lange, 1997) and in several relational contexts (e.g., support interactions; Verhofstadt et al., 2016). These studies have indicated that partners are, at best, only moderately good at inferring the other partner's thoughts and feelings. According to Ickes (2011), empathic accuracy averages around 30-35% for married partners. Other research has found even lower empathic accuracy among partners, averaging around 20% (Verhofstadt et al., 2008; 2016). Logically, this means that partners are incorrect 65-80% of the time when they are inferring the other's thoughts and feelings. Additionally, clinical observation has revealed that couples seeking therapy frequently complain about a lack of mutual understanding and "misreading" in their relationship (Gurman, 2008).

A few questions that lead on from this are: How are these misunderstandings created? Why are partners "misreading" each other to this extent? The communication literature provides us with some indications of why certain "misreadings" or misunderstandings between partners may occur. One of the basic axioms of communication is that all communication has both a content and a relationship meaning (Watzlawick, Beavin-Bavelas, & Jackson, 1967), with the former referring to *declarative content* and the latter to *relational states* (e.g., respect, distance, antagonism) implied by the act of

communication. The axiom suggests that partners will not only think about the explicit topic of disagreement (e.g., cleaning, work commitments, sex), or what Watzlawick and colleagues have called the content level of communication, they will also think about the process of interaction and what it implies about the relationship. A common difference in partner perspectives during couple conflict, referred to as *content-process confusion* (Sillars, Roberts, Leonard, & Dun, 2000), occurs when one partner interprets the interaction in terms of the ostensible content or topic while the other partner thinks about the process of interaction and associated relational meanings. Furthermore, misunderstandings may not only occur at the *thematic level*, as some indications for misunderstanding at the *affective level* were also identified. Sentiment override theory suggests that the general feeling of relationship (dis)satisfaction has a significant impact on situational perceptions and emotions (e.g., Fincham, Garnier, Gano-Phillips, & Osborne, 1995; Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005; Weiss, 1980). More specifically, a general perception of the relationship develops over time and establishes a cognitive relationship schema, which in turn influences thoughts and feelings during interactions in a self-confirming fashion (e.g., Fincham, 2001; Holtzworth-Munroe & Jacobson, 1985). Therefore, a partner's ongoing thoughts and feelings during interactions will be affected by their general relationship (dis)satisfaction and will also affect the inferred affective tone of their partner's thoughts and feelings. To date, however, no research has been conducted on the misunderstandings underlying empathic inaccuracy. Therefore, little is known about why partners are only capable of low-to-moderate accuracy when inferring each other's thoughts and feelings.

Manageability of Empathic Accuracy

As discussed in the section about motivational aspects, research has found that situational, and in particular motivational, aspects are predictive of the level of empathic accuracy. The extent to which a perceiver is motivated to accurately infer the thoughts and feelings of their interaction partner influences the level of accuracy independently of other factors. Furthermore, previous research has suggested that empathic accuracy has both the potential to harm as well as the potential to harmonize a relationship. These observations were the basis of a model developed by Ickes and Simpson (1997), and their theoretical framework stimulated further research in this area with the intention of verifying the underlying assumptions and predictions stemming from their model. In what follows, the studies considered as forming the basis of the model will be briefly discussed. Afterwards, the model will be explained and illustrated with empirical research leading to the identification of some important assumptions requiring further investigation.

Positive association between understanding and relationship outcomes. In the understanding literature – preceding the introduction of research on empathic accuracy and the DI-paradigm by Ickes and colleagues (1990) – a positive trend between relationship adjustment and understanding was observed (see Sillars & Scott, 1983). In this overview, the assumption that congruency between partners' perceptions (i.e., presence of a shared perceptual reality) is central to relationship adjustment is well documented. The authors refer to studies that had found positive associations between adjustment and understanding of the partners' attitudes, expectations, and self-perceptions (e.g., Christensen & Wallace, 1976; Corsini, 1956; Dymond, 1954; Ferguson & Allen, 1978; Guthrie & Noller, 1988; Laing, Philipson, & Lee, 1966; Luckey, 1960; Stuckert, 1963). Subsequently, a dominant narrative of advice concerning couples' communication

strategies emerged, emphasizing the importance of self-disclosure to facilitate mutual understanding (Bochner, 1981). Furthermore, studies of distressed or less-adjusted relationships have further elaborated upon this advice as they have found that partners' perceptions of communication and attributions about each other are biased and likely to be incongruent with their intentions, suggesting that distressed partners are either unable to express their intended meanings or are biased in reporting their intentions (Gottman, Markman, & Notarius, 1977; Madden & Janoff-Bulman, 1981). Thus, the general claim of these studies states that more understanding is good for relationships.

Negative association between understanding and relationship outcomes. Although this general claim has been endorsed by many practitioners and researchers, some authors expressed their concerns. They suggested that increasing openness and reducing benevolent misconceptions by both partners might also have a downside (Bochner, 1981; Parks, 1981). Several studies have indeed reinforced this concern by identifying conditions in which understanding is associated with conflict and dissatisfaction (e.g., Sillars, 1981; 1985; Sillars & Parry, 1982; Sillars, Pike, Jones, & Redmon, 1983; Sillars & Scott, 1983). First, empathic accuracy might expose *irreconcilable differences* between partners' perspectives, a condition in which further understanding will not lead to the convergence of these perspectives but will instead increase the levels of conflict or dissatisfaction. Secondly, empathic accuracy might also reveal *benign misconceptions* that should be maintained as they have the intention of stimulating positive feelings or stability. And last of all, empathic accuracy might disclose *crude or harmful truths* held by the target that can appear as an immediate or implicit threat to the perceiver's self-image or relationship. These conditions feed the assumption that the *illusion of similarity* (e.g., projection; Sillars, 1985; Sillars, Weisberg, Burggraf, & Zietlow, 1990; assumed similarity; Kenny, 1994) and the *illusion of understanding* (e.g., perceived

empathic effort; Cohen, Schulz, Weis, & Waldinger, 2012; perceived understanding; Pollman & Finkenauer, 2009) may have more positive effects in certain circumstances than actual understanding. For example, perceived agreement has been positively associated with relationship satisfaction, consensus, and affection whereas actual understanding was negatively associated with these relationship outcomes in the same study (Sillars et al., 1983). Hence, should we abandon the assumption that actual understanding is beneficial for relationships? Ickes and Simpson (1997; 2001) have presented a nuanced model that takes into account both the partners' motives and the expected outcomes of empathic accuracy given the situation, which enables us to integrate the findings on both the positive and negative effects of actual understanding.

The empathic (in)accuracy model. As shown in Figure 1, the model depicts several pathways that predict the level of empathic accuracy, as well as the expected short-term effects on the perceiver's individual and relationship well-being. The central aspect that determines whether empathic accuracy might have the potential to strengthen versus destabilize individual and relationship short-term well-being is the *threat-potential* of the given situation (i.e., potential "danger zones", as questioned in the first step of the model). If the situation is not identified as a danger zone then the perceiver will generally not feel threatened, the levels of empathic accuracy will be average to high, and they will generally positively affect well-being. However, if the situation is perceived as potentially threatening, empathic accuracy might have unwanted implications depending on how ambiguous the target's thoughts and feelings are (cf. readability). Unambiguous thoughts do not require a lot of empathic effort to infer; hence, empathic accuracy will be moderately high (e.g., if a partner confesses he or she has cheated, the harmful content of this individual's thoughts cannot be neglected by being less accurate). The model indicates that a perceiver who feels highly threatened – which will probably be the case in the previous

example – will achieve a moderately high level of accuracy and consequently, both individual and relationship well-being will drop (e.g., instability of self-esteem and/or relationship, distress, feelings of anxiety, anger or sadness). Perceivers who feel moderately threatened by their target's unambiguous thoughts or feelings will be highly empathically accurate and consequently, this might also have a distressing or destabilizing effect on their individual and relationship well-being, although this effect might not be as prominent as for the highly threatened perceivers. The last pathway of the model describes a situation in which motivated empathic inaccuracy should be most evident as the target's mind is ambiguous. In this context, the role of empathic accuracy as a protective mechanism becomes clear as the target's thoughts and feelings can be avoided (i.e., if the perceiver makes no effort to accurately infer these ambiguous thoughts they will remain unclear). Therefore, when a perceiver feels highly threatened his or her level of empathic accuracy will drop, which may protect their individual and relational well-being in the short term. When the perceiver feels less threatened, however, his or her level of empathic accuracy will be moderate which may result in a short-term experience of distress.

In summary, the model succeeded at integrating the complex findings about the mixed effects of empathic accuracy on short-term outcomes without denying the important role of accurate understanding in close relationships, especially for the long-term well-being and stability of the relationship. Some nuance in the mainly positive image of empathic accuracy was achieved by identifying the moderating effect of the threat-potential of a given situation on the association between empathic accuracy, and situational well-being. The most innovative aspect of this model is the introduction of empathic *in*accuracy as a short-term protective mechanism that implies that perceivers might be motivated to be inaccurate – without making statements about how conscious and autonomous these motives are. However, research explicitly testing the assumptions that underlie this model

has not yet been conducted. Therefore, further investigation is needed to test whether (a) partners' levels of empathic accuracy are indeed manageable, (b) perceived threat is linked to partners' levels of empathic accuracy (dialing it up or down), and (c) empathic inaccuracy may have a protective function for partners' short-term well-being.

RESEARCH OBJECTIVES AND CHAPTER OVERVIEW

The complexity of the role of empathic accuracy in intimate relationships revealed by previous research underscores the need to gain a more in-depth understanding of the concept. Therefore, a large-scale observational study called the "UGent Family Lab Couple Study" was designed for the purpose of the current dissertation. The study combined an extensive set of online questionnaires and an observational session consisting of an observed dyadic interaction task and a video-review task. The reasons to opt for one large-scale study instead of multiple smaller studies are both practical as well as theoretical/methodological in nature.

First, we wanted to investigate our research questions within a large sample of couples to meet the often encountered power-issue (due to a smaller sample size; e.g., see Verhofstadt et al., 2008; 2016). Second, the current dissertation is mainly explorative in nature as there is no previous research available that has clearly mapped the determinants and outcomes of empathic accuracy. This limited empirical basis implies that we only have a few indications on which variables (not) to include in our studies, and confirmatory research is not at issue given the fact that there is quasi no previous research to replicate. The same reasoning also accounts for our third argument as there is also no overarching theoretical model concerning the role of empathic accuracy or understanding in general, during times of conflict in couples, nor any other similar model that could guide our

predictions. Finally, an observational study provides detailed, representable, objective data on an abundant amount of highly relevant individual/couple characteristics, but is also labor-intensive, costly, and time-consuming.

Furthermore, our study is not limited to an observational paradigm only, but used a multi-method approach (i.e., a combination of global self-reports, observational data, behavior ratings, and interaction-based reports) which integrates both general and situational measures of the variables of interest. An important downside of working with one large sample is the matter of generalizability of the findings that will emerge, as we cannot rule out the fact that our findings represent sample-characteristics rather than universal associations. However, providing an answer to our research questions (see below) is an necessary explorative first step in order to encourage and stimulate further research regarding the current topic.

We chose to study empathic accuracy in the context of couples' conflict for four reasons. First, as outlined in the first line of research, disagreements and conflicts are inevitable in intimate relationships because each partner has his or her own expectations, goals, needs, and perspectives. Conflict arises when one person pursues these goals in such a way that it interferes with the other partner's goals (Lewin, 1948). How partners behave, think, and feel during relationship conflict has been an important topic of psychological investigation for many decades, as conflict is an important domain of interaction that occurs on a mundane basis (see Bradbury & Karney, 2014 for an overview). Although it has been intensively studied, some important aspects remain to be investigated, such as the role of empathic accuracy on partners' conflict behavior. Second, understanding each other is crucial for partners to coordinate their daily actions, especially in the context of conflict. In order to effectively discuss and resolve a conflict, partners must achieve a shared focus on

the ‘heart of the matter’ of their disagreement, and they should be able to take each other’s perspective in order to understand the other partner’s reasoning on the topic. However, previous research has suggested that this process can prove challenging during conflict. So, our third reason for studying the context of conflict is the apparent discrepancy between the need to understand each other to solve the conflict on the one hand, and the fact that conflict as a context tends to facilitate misunderstanding on the other. Finally, relationship conflict can create an opportunity to reconcile differences in partners’ goals or opinions, although, due to these conflicting goals and opinions, conflict may also trigger high levels of relationship- or self-threat, which will, again, hinder perspective-taking processes.

Taken together, the context of couples’ conflicts appears to be ideal to study our research questions, as actual understanding (i.e., empathic accuracy) seems both crucial and challenging in this context. In what follows, the specific objectives of the current project will be situated in the relevant chapters within this dissertation and discussed in greater detail.

Objective 1 - Examining the Association between Empathic Accuracy and Partners’ Conflict Interaction Behavior

The *first* objective of the current dissertation was to examine the association between partners’ empathic accuracy and their conflict behavior, especially looking at the degree to which they display demanding behavior during conflict interactions with their partner. As outlined above, previous research has already indicated that the level of empathic accuracy plays an important role in adequate couple-focused problem-solving (i.e., accommodative behavior; Kilpatrick et al., 2002; social support; Verhofstadt et al., 2016). However, more individual-focused problem-solving efforts might also benefit from higher levels of empathic accuracy.

Individuals who desire particular changes in their partner's behavior, opinions, and values or in the status quo of their relationship, are likely to initiate a conversation to work towards this desired change. Generally, these conversation-initiating partners are found to show more demanding behavior, as they are motivated to reach their intended goal (Christensen & Pasch, 1993; Eldridge & Christensen, 2002). Furthermore, as discussed above, research has demonstrated that it might be adaptive to adjust the level of empathic accuracy depending on characteristics of the situation, assuming that someone might be motivated to be more or less accurate when inferring the feelings of their partner depending on the occasion. So, because the conflict initiator's demanding behavior is driven by a strong motive to confront the source of a problem/disagreement and to resolve it by changing their partner, the relationship, the situation, or any combination of these elements, it seems likely that this motive might lead to an attempt to accurately infer the partner's current thoughts and feelings about the issue(s) at the heart of the conflict. Consequently, partners who have more demanding interaction styles might therefore be more likely to attempt to "read" their partner's minds in ways that enable them to exert more influence on their partner and thereby achieve a better outcome for themselves. Even in satisfying intimate relationships, partners who are more motivated to resolve a conflict by effecting the change they desire, should find this strategy useful.

In *Chapter 2*, the assumptions that (1) partners who display more demanding behavior will be more empathically accurate, and (2) both demanding behavior and empathic accuracy are two behavioral indicators of a shared underlying motivation by the conflict initiator to reach a certain goal, were tested by the means of two empirical studies consisting of an observed conflict interaction and subsequent video-review task. The first study tested our assumptions in a subsample of previously collected data consisting of 26 cohabiting/married partners. The second study tried to replicate the findings of the first

study in the sample collected for the purpose of the whole dissertation, which consisted of 155 cohabiting/married couples.

Objective 2 - Examining the Association between Empathic Accuracy and Perceived Understanding

The *second* objective of the current dissertation focused on the association between empathic accuracy and perceived understanding. As stipulated above, there is no previous research that has examined whether an individual's feeling of being understood by their partner (i.e., perceived understanding) is (partially) anchored in or based on reality. If this were to be the case, we should be able to find that an individual's empathic accuracy percentage (i.e., actual understanding) is related to his or her partner's scores on measures of perceived understanding. Previous studies that have tested a similar assumption regarding support processes in intimate relationships found that perceived support is more strongly related to relationship satisfaction than actual provided support (e.g., Collins & Feeney, 2000; Cutrona, Hessling, & Suhr, 1997).

In addition to someone's perception of their partner's actual understanding performance, a second issue is to what extent someone is aware of his or her own actual understanding performance. Previous studies have shown that people are not very proficient at estimating their own general capacity for perspective-taking, as is reflected in a lack of significant associations between perceivers' levels of actual understanding (i.e., empathic accuracy) and questionnaires assessing the perception of their *general* capacity for empathy (e.g., Davis, 1980; Laurent & Hodges, 2009; Stinson & Ickes, 1992). These findings raise the question of whether people are equally bad at estimating how well they understand the situational thoughts and feelings of people with whom they interact, including their partners. So, on top of a partner's level of perceived understanding, little is

also known about an individual's level of *assumed understanding* in terms of their own subjective reporting of how well they assume they have understood their partner.

In *Chapter 3*, it was examined if partners' objective levels of understanding (i.e., empathic accuracy) were associated with estimates of their own understanding performance (i.e., assumed understanding) and with their partner's reports of feeling understood (i.e., perceived understanding). Additionally, it was examined if both partners' levels of actual understanding and perceived understanding were associated with their level of dyadic adjustment. These associations were tested in the sample of 155 cohabiting/married partners described above, by the means of an observed conflict interaction followed by post-interaction self-report measures and a video-review task. Actor-Partner Interdependent Modeling was used to test (1) the association between empathic accuracy and assumed understanding (actor-effect), (2) the association between empathic accuracy and perceived understanding (partner-effect), and (3) the unique contribution of actual and perceived understanding to dyadic adjustment (both actor and partner effects).

Objective 3 - Examining the Sources of Misunderstanding and Empathic (In)Accuracy

The *third* objective of this dissertation was to investigate the low-to-moderate levels of partners' empathic accuracy scores described above, and potential misunderstandings underlying this score. More specifically, we wanted to provide an in-depth analysis of the content of partners' thoughts in addition to a merely quantitative analysis of empathic accuracy (i.e., percentage score) by examining partners' direct and meta-perspectives during a conflict interaction. Direct perspectives refer to an individual's own on-going stream of thoughts whereas meta-perspectives refer to an individual's inferences about their partner's thoughts. Previous research on communication in intimate relationships has

provided some suggestions about potential misunderstandings associated with empathic inaccuracy. At the thematic level, Sillars and colleagues (2000) pointed out that content-process-confusion may occur if one partner interprets the interaction in terms of the ostensible content or topic while the other partner thinks about the process of the interaction and its associated relational meanings. At the affective level, sentiment override theory (Verhofstadt et al., 2005; Weiss, 1980) suggests that partners' own and inferred thoughts and feelings might be affected by their general feeling of relationship (dis)satisfaction. However, research involving content analyses of the cognitions of intimate relationship partners is very scarce.

In *Chapter 4*, a content analysis of partners' direct and meta-perspectives during conflict interactions was conducted by classifying partners' thoughts into several categories based on the Interaction Cognition Coding Scheme (e.g., content thoughts, process thoughts). Afterwards, partners' direct perspectives and their meta-perspectives were compared both at a thematic and an affective level. Thereafter, the association between the identified misunderstandings (at both levels) and empathic inaccuracy was investigated by the means of several multi-level models.

Objective 4 - Examining the Manageability of Empathic Accuracy

The *fourth* objective of the current dissertation focused on the role of ability versus motivation in empathic (in)accuracy. As outlined above, motivated empathic (in)accuracy occurs when someone has “an incentive to (in)accurately infer what his/her interaction partner is thinking/feeling, resulting in an empathic accuracy score that is significantly lower/higher than those exhibited by others in the same situation” (Cuperman, Howland, Ickes, & Simpson, 2011, p. 216). In summary, both correlational and experimental data have shown that an important source of the variance in empathic accuracy is accounted for

by the perceiver's (in)accuracy motivation. Furthermore, theories of social cognition assume that reasoning processes are guided by both an *accuracy motive* (i.e., motive to reach an accurate conclusion) and an *esteem-regulatory motive* (i.e., motive to reach a desirable/esteem-enhancing conclusion) (Kunda, 1990), which has been further elaborated upon in Ickes and Simpson's empathic accuracy model (1997; see above). Additionally, the question has been raised of whether self-protection might also play an important role in this esteem-regulatory motive on top of the suggested relationship-protection motive described in this model. Therefore, we aimed to investigate if both motives play an equal role in the process of empathic (in)accuracy, above and beyond a partner's perspective-taking abilities.

In *Chapter 5*, the last empirical study is described. This study attempted to draw conclusions about the role of partners' abilities on the one hand, and the role of implicit (relationship- and self-protecting) motives, on the other, in empathic (in)accuracy. Ability was measured by rating partners' *baseline levels* of empathic accuracy using the SS-paradigm (where the target is an unknown interaction partner), and implicit motives were measured by comparing partners' levels of empathic accuracy during non-threatening episodes and highly threatening episodes of conflict interactions utilizing the DI-paradigm (where the target is their own partner). Pre- and post-interaction self-reports were used to assess changes in partners' situational relationship and personal well-being. Structural Equation Modeling (SEM) was used to assess the effect of empathic accuracy on short-term well-being, allowing for correlations in the outcomes between men and women.

Finally, *Chapter 6* comprises a general discussion with an integrated overview of the main findings of the different studies. Limitations of the studies are discussed together with recommendations for future research. Implications for clinical practice as well as theoretical reflections are also outlined.

It should be noted that the present dissertation consists of several papers, which have been published, are under editorial review, or have been submitted for publication. Given that each of the papers should be able to stand on its own, the text of some of the chapters may partially overlap.

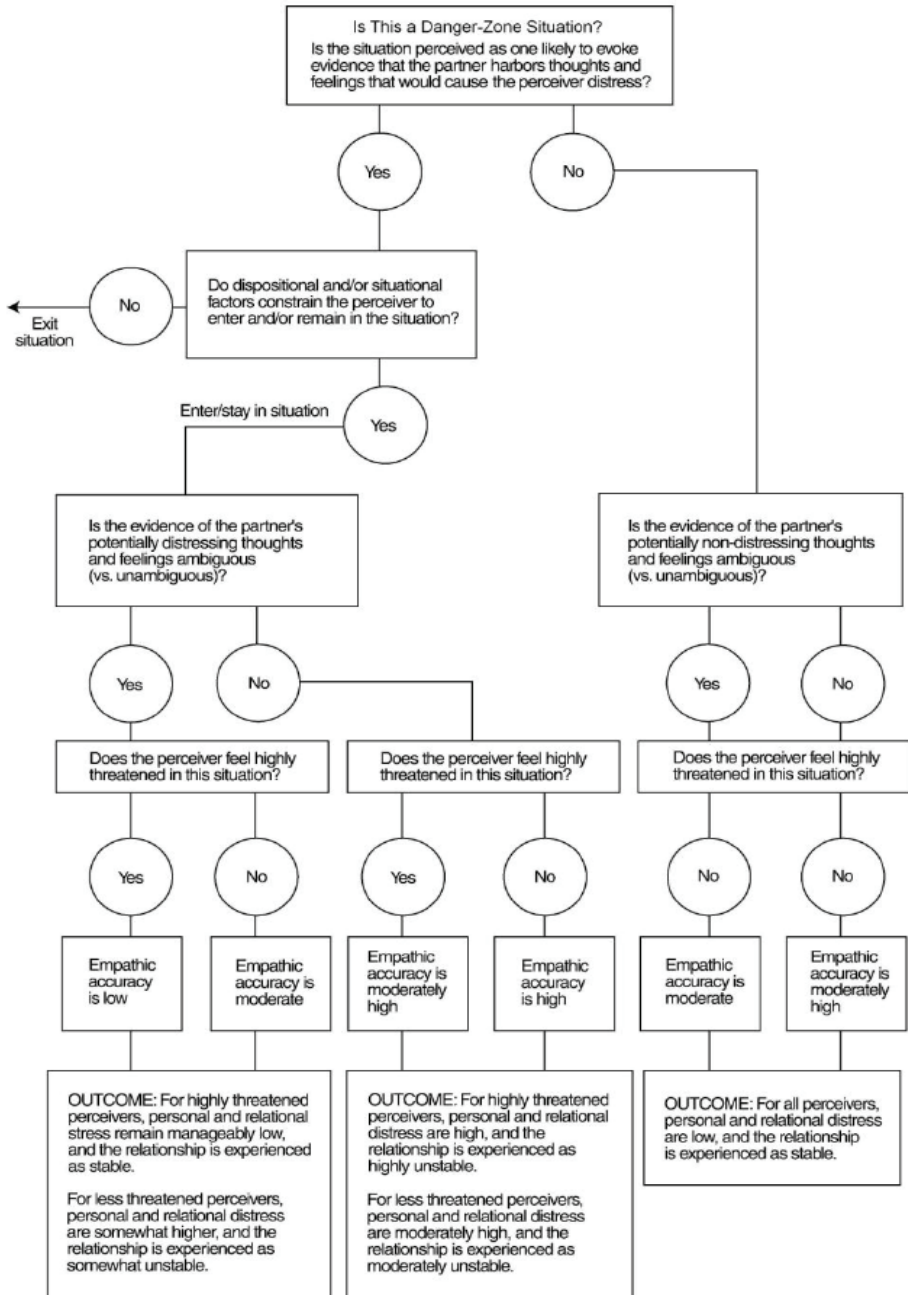
Table 1

Overview of the Different Chapters Examining Empathic Accuracy in the Context of Couples' Conflict Interactions

	Chapter 2		Chapter 3	Chapter 4	Chapter 5
	Study 1	Study 2			
Design	Questionnaires Observational	Questionnaires Observational	Questionnaires Observational	Questionnaires Observational	Questionnaires Observational
N	26 couples	155 couples	155 couples	155 couples	155 couples
EA-paradigm	DI-paradigm	DI-paradigm	DI-paradigm	DI-paradigm	DI-paradigm SS-paradigm
EA-measure	EA total	EA for thoughts EA for feelings	EA total	EA for thoughts	EA for thoughts EA for feelings
Variables of interest					
General variables	Relationship satisfaction	Relationship satisfaction	Relationship satisfaction	Relationship satisfaction	
Situational variables	Conflict initiator Demand behavior - Pressure for change - Blame	Conflict initiator Demand behavior - Pressure for change - Blame	Readability Assumed understanding Perceived understanding	Thematic content of thoughts Affective tone of thoughts Perceived threat	Readability Perceived threat Closeness Mood

Figure 1

The Empathic (In)Accuracy Model of Ickes and Simpson, 2001



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CHAPTER

EMPATHIC ACCURACY AND DEMAND BEHAVIOR IN COUPLES' CONFLICT INTERACTIONS: TWO OBSERVATIONAL STUDIES¹

¹ Study 1 based on Hinnekens, C., Ickes, W., De Schryver, M., & Verhofstadt, L. L. (2016). Demand behavior and empathic accuracy in observed conflict interactions in couples. *The Journal of Social Psychology, 156*, 437-443. doi: 10.1080/00224545.2015.1115386

Study 2 based on Hinnekens, C., Vanhee, G., De Schryver, M., Ickes, W., & Verhofstadt, L. L. (2016). Empathic accuracy and observed demand behavior in couples. *Frontiers in Psychology, 7*. doi: 10.3389/fpsyg.2016.01370

ABSTRACT

The current studies sought to extend the research on motivated empathic accuracy by exploring whether intimate partners who are highly motivated to induce change in their partner during conflict will be more empathically accurate than partners who are less motivated. In Study 1, 26 committed couples provided questionnaire data and participated in a laboratory experiment which consisted of a videotaped conflict interaction and a video-review task. The results partially confirmed our hypothesis as more blaming behavior was associated with higher levels of empathic accuracy, irrespective of whether one was the conflict initiator or not. The results also showed a two-way interaction indicating that initiators who applied more pressure on their partners to change were less empathically accurate than initiators who applied less pressure, whereas their partners could counter this pressure when they could accurately “read” the initiator’s thoughts and feelings. Study 2 tried to replicate and extend these results by including a larger sample of 155 couples. A similar trend between the role of conflict initiator and blame behavior was found. Specifically, more blame behavior by the initiator was associated with less empathic accuracy, whereas this negative association was reversed when the participant was *not* the initiator. These results suggest that applying too much demand behavior when initiating a conflict may lead to an empathic disadvantage, and to a strong ‘counter-demanding’ reaction from the other partner who accurately understands the initiator’s thoughts and feelings. However, as we could not exactly replicate the findings of Study 1, some cautiousness is warranted when drawing conclusions.

INTRODUCTION

Demand Behavior During Conflict

Disagreements and conflicts are inevitable in intimate relationships because each partner has his or her own expectations, goals, values, and perspectives (Lewin, 1948). How partners behave, think, and feel during relationship conflict has been an important topic of psychological investigation for many decades (see Bradbury & Karney, 2014 for an overview). Although relationship conflict can be perceived as a threatening or stressing event, it can also be viewed as an opportunity to reconcile partners' different goals or opinions, to expose personal needs or desires, or to express concern about the partners' inappropriate behavior or the current status of the relationship. By raising a certain topic of disagreement, partners generally want to change the status quo of the relationship or to induce a certain change in their partner's opinion or behavior (Eldridge & Christensen, 2002). In the literature, this partner is referred to as the conflict initiator or the agent of change (e.g., Christensen & Pasch, 1993). This conflict-initiating partner often relies on *demanding communication*, which is defined as the tendency to demand change in a critical and blaming manner, for example, by nagging, complaining, criticizing, or "pressing" the other. The other partner may react by withdrawing, reflected in avoiding the other partner or by terminating or escaping from the conflict (Christensen, 1988).

A certain level of demand-withdraw behavior is commonly observed during conflict interactions, even in satisfied couples (Baucom, McFarland, & Christensen, 2010; Eldridge, Sevier, Jones, Atkins, & Christensen, 2007). However, a polarized pattern of demand-withdraw behavior can be associated with relationship distress, power differences – and even violence – within the relationship (Sagrestano, Heavey, & Christensen, 1999), as well as with relationship dissatisfaction in the long-term (Eldridge & Christensen, 2002).

Although some studies have reported a tendency for women to take the demanding role and men the withdrawing role (Christensen, 1988; Eldridge & Christensen, 2002), other studies have found that the role of initiating a disagreement or the conflict topic *per se* is more predictive of being in the demander role than is gender (Christensen & Heavey, 1990; Eldridge et al., 2007; Heavey, Layne, & Christensen, 1993). For example, the results of a study by Christensen & Heavey (1990) demonstrated a significant women demand/men withdraw pattern when women initiated a discussion concerning a relationship issue, while another study found a reversed pattern when men selected the topic of discussion (Holtzworth-Munroe, Smutzler, & Stuart, 1998).

Consistent with this conclusion, we assume that a partner who desires change on a particular topic is more likely to initiate a conversation to reach this desired change (i.e., the conflict initiator, also called the agent of change), and has generally been found to show more demanding behavior than the other partner who may react by withdrawing more.

Empathic Accuracy and Demand Behavior

Empathic accuracy in couples refers to “the extent to which [partners] understand each other’s unspoken thoughts or feelings as they spontaneously occur during the course of their everyday interactions” (Ickes, 1993, p. 588). Although empathic accuracy refers to one’s understanding of the inner world of the other, which is a difficult process to operationalize, Ickes and colleagues succeeded in developing a paradigm (i.e., the *unstructured dyadic interaction paradigm*) to measure the interaction partners’ levels of empathic accuracy in an objective but naturalistic manner (Ickes, Stinson, Bissonette, & Garcia, 1990). Within this paradigm, the perceiver’s level of empathic accuracy is determined by coding the degree of similarity between the target’s reported

thoughts/feelings during an interaction and the perceiver's inferences about each of the target's thoughts/feelings.

This paradigm has been frequently used in studies on the role of motivation in partners' level of empathic (in)accuracy. The results of these studies have provided considerable evidence that different forms of motivation – either stable long-term motives or more transient, situational-specific motives – play an important role in the perceiver's level of empathic accuracy (Ickes, 2011). This motivation might be relationship-promoting, as a certain level of accurate insight into each other is needed when partners want to effectively coordinate their individual and shared actions (e.g., in providing adequate support; Verhofstadt, Davis, & Ickes, 2011; in reinforcing perceived closeness; Simpson, Oriña, & Ickes, 2003; in accommodating behavior during relationship conflict; Bates & Samp, 2011; Kilpatrick, Bissonnette, & Rusbult, 2002). Motivation that stimulates the intention to be accurate might also stem from individual characteristics, such as being encouraged to comply with gender-role stereotypes (i.e., according to which women are more empathic; Ickes, Gesn, & Graham, 2000), or partners experiencing a sense of distrust reflected in an anxious attachment style (Dugosh, 2001).

There are some cases, however, in which the perceiving partner is motivated to be *less* accurate, particularly when the other partner (i.e., the target) is likely to be harboring thoughts and feelings which, if accurately inferred, would threaten the relationship (Simpson, Ickes, & Blackstone, 1995; Simpson et al., 2003). It now appears that intimate partners are capable of “managing” their empathic accuracy, dialing it up or down depending on the demands of the situation or their own motivations (e.g., Ickes & Simpson, 1997; Ickes & Simpson, 2001; Smith, Hall, Hodges, & Ickes, 2011). Our current study extends the research on motivated accuracy/inaccuracy by exploring the question of

whether intimate partners who are highly motivated to induce change in their partner during conflicts will be more empathically accurate than partners who are less motivated.

Consistent with the empirical evidence described above, we expect that a partner who desires change on a particular topic is likely to initiate a discussion and behave in a way that allows him/her to accomplish this desired change (i.e., by demanding). This same individual might also be motivated to accurately infer the partner's current thoughts and feelings about issue(s) at the heart of the conflict. Why? Because the conflict initiator's demanding behavior is driven by a strong motive to confront the source of the problem/disagreement and to resolve it by changing the partner, the relationship, the situation, or any combination of these elements, it seems likely that this motive might lead first to an attempt to accurately infer the partner's current thoughts and feelings about issue(s) at the heart of the conflict. As much as anything else, therefore, what is being "demanded" of the partner in this situation is insight into his or her thoughts and feelings.² Accurate insight into the thoughts and feelings of the partner during conflict might enable one to know what kinds of reactions to anticipate and which "buttons to push" in order to convince or change the partner.

The Current Research

Because greater motivation to be accurate typically leads to greater empathic accuracy (Ickes, 2011), partners who have more demanding interaction styles might therefore be more likely to "read" their partner's minds in ways that enable them to exert more influence on their partner and thereby achieve a better outcome for themselves. Even

² Although the primary motives for engaging in demanding behavior in conflict situations are to improve one's own outcomes and relative power in the relationship, such behavior might also enhance empathic accuracy because of its potential to further these goals.

in satisfying intimate relationships, the partners who are more motivated to resolve a conflict by effecting desired change should find this same strategy useful. Consistent with this reasoning, we predicted that the partners' levels of demanding communication during a conflict discussion, consisting of "blame" and "pressure for change", would be positively associated with their own levels of empathic accuracy. We also explored whether this association was moderated by whether or not the perceiver was the person who initiated the conflict.

Study 1 explored this prediction in a observational lab study in a sample of 26 cohabiting or married couples. The aim of Study 2 was to replicate and extend the previous study by (1) examining a larger sample, (2) integrating the potential effect of gender and the corresponding three way-interaction effects as there is more power in Study 2, and (3) differentiating between empathic accuracy for feelings and empathic accuracy for thoughts, which made it possible to examine the assumed associations with empathic accuracy in a more fine-grained way.

STUDY 1

Method

The present data were collected within a broader observational study on support and conflict in couples; some results of this study – unrelated to the present research questions – have already been published (Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005).

Participants. The recruitment of participants was twofold. First, a general call was placed in magazines and newspapers recruiting couples who were willing to participate in a research project on close relationships. Second, the research assistants approached

couples in public places such as shopping areas. The inclusion criteria stipulated that the participants had to have been in a heterosexual relationship for at least one year and either married or cohabiting for at least six months. Couples participated voluntarily and could withdraw from the investigation at any time. The sample consisted of 52 partners (age: $M_{\text{Men}} = 36.96$ years, $SD = 13.24$; $M_{\text{Women}} = 35.23$ years, $SD = 12.49$) who represented 26 cohabitating/married heterosexual couples (relationship duration: $M = 10.64$ years, $SD = 11.58$).

Procedure. The couples who expressed an interest in being included in the study were informed about the project and were evaluated for their eligibility to participate. Each couple completed a set of relationship questionnaires and then participated in a videotaped conflict interaction task. The questionnaires that are relevant for the current study are discussed in greater detail below. Couples that completed the questionnaires were then asked to participate in a videotaped conflict interaction task that was followed by a post-interaction video-review task. At the end of their participation, the couples were fully debriefed.

Measures.

Relationship satisfaction. Relationship satisfaction was assessed with the Dyadic Adjustment Scale (DAS; Spanier, 1976; Dutch version by Buysse & Heene, 1997). The questionnaire consists of 32 items over 4 subscales (i.e. dyadic consensus, dyadic satisfaction, dyadic cohesion, and affective expression). The total scale score ranges from 0 to 151 and is obtained by summing the scores of all the items. Table 1 presents the relationship satisfaction scores. DAS norms (Spanier, 1976) indicate an average satisfaction score of 114/115 for a married sample, thereby suggesting that our sample is comparable to an average group of married couples in terms of relationship satisfaction.

The internal consistency in this sample was high for the DAS (Cronbach's $\alpha_{\text{Men}} = .89$; $\alpha_{\text{Women}} = .87$).

Conflict interaction task. The couples were invited to participate in a conflict interaction task that was similar to those used in previous studies of marital conflict (e.g., Fletcher & Thomas, 2000). The couples were escorted into a laboratory that was furnished as a living room and was equipped so that their interaction could be video-recorded. Both partners granted their permission for this recording by means of a written consent form. In advance of their conflict discussion, both partners rated the extent to which they had discussed a number of relationship problems or issues of which the source was either the partner or the relationship (e.g., childcare, household tasks), using a 5-point Likert scale. Accordingly, the partners selected the most salient problem (i.e., the one that received the highest frequency-of-discussion rating from either the man's or the woman's list). After this problem selection had occurred, the partners were randomly assigned to one of two conditions: *initiator* or *not initiator*. Operationally, this variable meant that the conflict issue which the designated initiator had selected was the one that the partners would discuss during their upcoming video-recorded interaction.³ The initiator in each dyad was instructed to introduce the issue to the other partner so that they could discuss this problem together, up to a maximum time limit of 30 minutes. Both partners were instructed to act as much as possible as they would do at home when discussing a similar problem with each other.

Video-review task. Immediately after the conflict interaction, both partners completed a video-review task similar to the one used in previous studies of empathic accuracy (e.g., Verhofstadt et al., 2005; 2016). The partners were seated in separate

³ The topic selected by the partner who was randomly designated as *not initiator* was not discussed during the couple's conflict interaction.

locations and asked to re-experience their interaction while they each viewed a video of their own interaction. At predetermined intervals during the videotaped interaction, the videotape paused automatically and the partners were instructed to (1) report their own thoughts/feelings during that point in the interaction, and (2) make inferences about their partner's thoughts/feelings at that point in the interaction. A computerized procedure (VIDANN, video annotation system, De Clercq et al., 2001) served the purpose of selecting a number of random time samples from the interaction to ensure that we would obtain a comparable number of time samples for each couple. However, for the aim of the present study we only used the data of the first 10 minutes of the interaction.

Empathic accuracy coding. Following the recommendations of Ickes and colleagues (1990), five independent raters coded the degree of similarity between the content of the actual reported thoughts/feelings and the perceiver's inferences using a 3-point scale on which 0 = *different content from the actual thought/feeling*; 1 = *similar, but not the same content as the actual thought/feeling*, and 2 = *essentially the same content as the actual thought/feeling*. Overall empathic accuracy scores were then computed as a simple percentage measure of the number of "accuracy points" earned, divided by the total number of "accuracy points" possible and multiplied by 100.⁴ The empathic accuracy measure showed a high interrater reliability in both cases ($ICC_{Men} = .83$; $ICC_{Women} = .88$).

Demand behavior coding. The behaviors observed in this study were rated and analyzed using the Conflict Interaction Rating System (CIRS; Heavey, Gill, & Christensen, 1998). These ratings resulted in scores on a 9-point Likert scale for two dimensions of demanding communication (see Appendix A for an example). Table 1 presents the descriptives of *blame* (i.e., accusations, criticism, and assignment of the partner as the

⁴ The theoretical range of this percent-correct accuracy measure was 0 (*none of the possible accuracy points was earned*) to 100 (*all of the possible accuracy points were earned*).

causal agent for the problem) and *pressure for change* (i.e., positive/negative and implicit/explicit pressure for change in the partner). A high interrater reliability was achieved for both blame ($ICC_{Men} = .96$; $ICC_{Women} = .96$) and pressure for change ($ICC_{Men} = .97$; $ICC_{Women} = .97$).

Table 1

Descriptive Statistics of the Study Variables

	Men			Women		
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range
Relationship satisfaction	115.31	13.05	87-140	117.50	14.27	83-142
Empathic accuracy	12.00	7.34	0-25	13.95	12.21	0-43
Blame	2.77	1.40	1-6.50	3.47	1.63	1-6.67
Pressure for change	3.20	1.62	1-7	4.03	2.22	1-8

Results

Our predictions were tested by means of a Linear Mixed-Effects Model as implemented in the R-package lme4 (<http://lme4.r-forge.r-project.org/>), with the perceiver's empathic accuracy score as the dependent variable. The partners' relationship satisfaction, their respective gender, each partner's status as the conflict initiator (yes vs. no), and his/her amount of blame and pressure for change behavior displayed during the videotaped conflict interaction were entered as fixed factors. Besides these "main effect" terms, two two-way interactions (conflict initiator x blame behavior, and conflict initiator x pressure for change behavior) were defined and included in the model. As a random factor, a dummy variable was created that indicated membership in a particular dyad. Prior to model fitting, all continuous variables were standardized. Effect coding was used for

categorical variables. Table 2 reports the parameter estimates, standard deviations, and confidence intervals of the resulting analyses.

Table 2

Results of the Linear Mixed-Effects Model Predicting Empathic Accuracy From Gender, Conflict Initiator, Blame and Pressure for Change and Controlled For Relationship Satisfaction

Predictor	β	<i>SD</i>	95% CI
Gender			
Man	0.04	0.12	[-0.20 – 0.28]
Woman	0 ^a	0 ^a	
Conflict Initiator			
No	-0.19	0.12	[-0.42 – 0.04]
Yes	0 ^a	0 ^a	
Relationship Satisfaction	0.30*	0.15	[0.00 – 0.60]
Blame	0.47**	0.13	[0.21 – 0.73]
Pressure for Change	0.07	0.13	[-0.19 – 0.33]
Conflict Initiator x Blame	-0.11	0.13	[-0.36 – 0.14]
Conflict Initiator x Pressure for Change	0.26*	0.13	[0.01 – 0.51]

Note. ^a This parameter is set to zero because it is redundant. CI = confidence interval.

* $p < .05$, ** $p < 0.01$.

After controlling for a significant effect of relationship satisfaction, $\chi^2(1) = 3.96$, $p = .05$, the results of this analysis revealed a significant and positive main effect of the perceiver's blame behavior on the perceiver's empathic accuracy, $\chi^2(1) = 12.70$, $p < .01$. Also, the two-way interaction of conflict initiator x perceiver's pressure for change was significant, $\chi^2(1) = 4.14$, $p < .05$. A closer inspection of the data indicated that partners who reported more relationship satisfaction were more empathically accurate during the conflict interaction. Also, partners who displayed more blame behavior during the videotaped

conflict interaction showed more empathic accuracy, independent of whether they initiated the conflict discussion or not.

The conflict initiator x perceiver's pressure for change interaction took the following form: When the perceiver participant was in the conflict-initiating role, the perceiver's higher levels of pressure for change were associated with lower levels of empathic accuracy. Although this finding was not predicted, it is intriguing in its implication that the task of applying a high level of pressure to the interaction partner might impair the perceiver's ability to achieve a high level of empathic accuracy. However, this observed negative relation between perceiver's pressure for change and empathic accuracy was reversed (i.e., was positive) when the perceiver was not the conflict initiator, suggesting that perceivers who react to the initiator's demand for change with strong counter-pressure for the *initiator* to change instead, may do so out of a clearer and more accurate understanding of why the initiator is pushing so hard for the change and why the initiator's request is inappropriate.

Discussion

The results of this study were more complicated than we predicted, but they revealed some intriguing findings that in retrospect make sense. The analysis included partners' relationship quality scores because this variable showed to be positively associated with empathic accuracy. The main effect of blame behavior suggests that partners who showed more blame behavior during the conflict interaction also were more empathically accurate, but this was regardless of them initiating the conflict or not. When a perceiver initiates a conflict discussion and puts a lot of pressure on the partner to change his or her behavior, this "heavy-handed" and confrontational perceiver appears to be less accurate in "reading" the partner's thoughts and feelings, presumably because of the extra

effort and attention that pressuring the partner requires. Interestingly, however, when the perceiver is the person who did *not* initiate the conflict discussion, but who reacts to the partner's request for change by putting more pressure on the initiator to change instead, he or she was found to make more accurate inferences about the initiator's thoughts and feelings. So, the pressure for change behavior of this assertive and non-intimidated perceiver seems to be associated with higher empathic accuracy scores.

However, Study 2 was conducted to address the major limitations of the present study. First, our sample was relatively small, therefore Study 2 was designed to determine whether the Study 1 findings were robust. Furthermore, by using a larger sample, Study 2 might be more likely to find interaction effects involving the perceiver's gender, because during the preliminary analyzes, the present sample did not have enough statistical power to detect relatively subtle effects of this type. A second limitation of Study 1 is that the variable duration of the couples' conflict interactions resulted in empathic accuracy scores based on a different numbers of thought/feeling inferences, a problem that the use of a percentage score of empathic accuracy does not completely correct. Study 2 rectified this shortcoming by using fixed points of inference during the video-review task, assuring that every participant makes the same number of inferences.

STUDY 2

Method

Participants. The sample consisted of the 310 members of 155 cohabiting/married heterosexual couples. The sample was recruited in the context of the "UGhent Family Lab Couple Study". The recruitment strategy enlisted couples to volunteer for the study through posters and social media notices on the one hand and by masters'-

level students in clinical psychology recruiting couples in their own vicinity on the other hand.

Couples who expressed an interest in participating were contacted, informed in general terms about the project, and evaluated to determine whether they met the inclusion criteria (i.e., being involved in their current intimate relationship for at least one year and being married/cohabiting for at least six months). Inadequate knowledge of the Dutch language and being member of a same-sex couple were used as exclusion criteria. Participants could withdraw from the investigation at any time and without giving any reason for their withdrawal.

The first set of measures on the online questionnaire were demographic items. The responses to these items revealed that the average reported relationship length was 12.15 years ($SD = 11.76$). The respondents' average age was 36.30 years for men ($SD = 14.05$) and 34.21 years for women ($SD = 13.60$), with a range of 19 to 76 years.

Procedure. After providing written informed consent, the partners in each couple independently completed an internet survey. Each partner was asked to fill out this questionnaire at home in advance of the second appointment and this at their own pace, as the questionnaire could be interrupted and resumed. The questions addressed both individual (e.g., attachment style, gender identity, general well-being) and relationship functioning (e.g., dyadic adjustment, communication patterns, dyadic coping). The questionnaires that are relevant to the current study are discussed in greater detail below. Couples who completed the questionnaires were then scheduled to attend a laboratory session in which they participated in an 11-minute videotaped conflict interaction task that was followed by a post-interaction video-review task.

Measures.

Relationship satisfaction. See Study 1 for a description of this measure. Table 3 presents the relationship satisfaction scores.

Conflict interaction task. In the observational part of the study, the couples were invited to participate in a conflict interaction task that was similar to the interaction task used in Study 1. In advance of their conflict discussion, the partners were separately asked to select a problem or issue from a list of common conflict topics in intimate relationships of which the source was either the partner or the relationship, and which caused relationship distress or recurring disagreement. The topics (e.g., trust, intimacy, finances) were derived from previous work on sources of conflict within intimate relationships (Kurdek, 1994). After this problem selection had occurred, partners were again randomly assigned to one of two conditions: *initiator* or *not initiator*. Operationally, this variable meant that the conflict issue which the designated initiator had selected was the one that the partners would discuss during their upcoming video-recorded interaction. The initiator in each dyad was instructed to introduce the issue to the other partner so that they could discuss this problem together for 11 minutes. Both partners were instructed to act as much as possible as they would at home when discussing a similar problem with each other.

Video-review task. Immediately after the 11-minute conflict interaction, both partners completed a video-review task similar to that used in Study 1. Again, the partners were seated in separate locations and asked to re-experience their interaction while they each viewed a video of their interaction on a laptop. The video presentation was controlled by an interactive software package specifically developed for the current study in order to facilitate the data collection (Hinneken & Kimpe, 2014). Every 90 seconds, the video was paused and the same set of instructions appeared on the screen. Each partner was asked to (1) type the specific thought and feeling that s/he had at that point in the interaction in a

blank box that appeared in the context of an online questionnaire (this questionnaire included additional multiple choice items that are not relevant to the current study), and (2) to infer the specific content of each of their partner's thoughts and feelings, and to type each of these inferences in the blank boxes that appeared on the online questionnaire (followed by parallel multiple choice items). The instructions for all of these questions emphasized that the answer should be based on the 10-second interaction interval that immediately preceded the tape stop. To help ensure that both partners based their answers on the same 10-second time interval, our custom software program gave the participants the option to re-observe the 10-second interval that occurred right before the tape stop.

Empathic accuracy coding. Four independent judges rated the degree of similarity between the content of each actual thought or feeling that one partner recorded and the content of the corresponding inferred thought or feeling that the other partner recorded, similar to the coding procedure used in Study 1. However, in the current study the empathic accuracy scores were computed separately for the set of inferred feelings and for the set of inferred thoughts, so that each partner received an empathic accuracy score for feelings and for thoughts separately. The average empathic accuracy scores for the inferred feelings and the inferred thoughts are shown in Table 3. The empathic accuracy measure showed a good interrater reliability for both feelings ($ICC_{Men} = .70$; $ICC_{Women} = .74$), and thoughts ($ICC_{Men} = .67$; $ICC_{Women} = .67$).

Demand behavior coding. The behaviors observed in this study were rated and analyzed using the Conflict Interaction Rating System (CIRS; Heavey et al., 1998). There was a pool of six trained coders and each subsample of the dataset was rated by three of them. They rated the same two dimensions of demand behavior as in Study 1. High interrater reliabilities were achieved for the coders' ratings of both scale dimensions (see

Table 3). High levels of interrater reliability for both blame ($ICC_{Men} = .75$; $ICC_{Women} = .71$) and pressure for change ($ICC_{Men} = .77$; $ICC_{Women} = .77$) were achieved.

Table 3

Descriptive Statistics of the Study Variables

	Men			Women		
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range
Relationship satisfaction	119.50	12.93	86-149	118.11	13.45	69-148
EA feelings	21.29	12.15	0-68	21.56	12.23	0-52
EA thoughts	20.33	11.70	0-55	19.27	11.66	0-48
Blame	2.17	1.42	1-8.67	2.52	1.73	1-7.67
Pressure for change	3.15	1.65	1-8.67	4.04	2.08	1-9

Results

Our predictions were tested by means of a Linear Mixed-Effects Model as implemented in the R-package lme4 (<http://lme4.r-forge.r-project.org/>), with the perceiver's empathic accuracy for feelings (Model 1) and a person's empathic accuracy for thoughts (Model 2) as dependent variables. In both models, the partners' relationship satisfaction, their respective gender, each partner's status as the conflict initiator (yes vs. no), and his/her amount of blame and pressure for change behavior displayed during the videotaped conflict interaction were entered as fixed factors. Besides these "main effect" terms, two two-way interactions (conflict initiator x blame behavior, and conflict initiator x pressure for change behavior) and two three-way interactions (gender x conflict initiator x blame behavior, and gender x conflict initiator x pressure for change behavior) were defined and included in the model. As a random factor, a variable was entered, indicating membership in a particular dyad. Prior to model fitting, all continuous variables were

standardized. Dummy coding was used for categorical variables. Table 4 reports the parameter estimates, standard deviations, and confidence intervals of the resulting analyses.

After controlling for relationship satisfaction, the analysis of the models revealed no significant effects at the .05 significance level. For the second model, the effect of the two-way interaction between agent of change and blame was marginally significant, $\chi^2(1) = 2.80, p = .09$. This interaction suggests that the more blame behavior is showed by the partner that is not in the role of agent of change, the more – on average – empathically accurate he/she is. The observed positive relation between blame and accuracy seems to be reversed when the person is the agent of change.

Table 4

Results of the Linear Mixed-Effects: Model 1 Predicting Empathic Accuracy for Feelings and Model 2 Predicting Empathic Accuracy for Thoughts from Gender, Conflict Initiator, Blame and Pressure for Change and Controlled for Relationship Satisfaction

Predictors	Model 1			Model 2		
	β	SD	95% CI	β	SD	95% CI
Gender						
Man	0 ^a			0 ^a		
Woman	0.005	0.020	[-0.03-0.04]	-0.028	0.019	[-0.07-0.01]
Conflict Initiator						
No	0 ^a			0 ^a		
Yes	0.050	0.040	[-0.03-0.13]	0.004	0.038	[-0.07-0.08]
Relationship Satisfaction	0.001*	0.001	[0.00-0.00]	0.001	0.001	[0.00-0.00]
Blame	0.002	0.009	[-0.02-0.02]	0.002	0.008	[-0.01-0.02]
Pressure for Change	0.002	0.008	[-0.01-0.02]	0.000	0.007	[-0.01-0.01]
Gender x Conflict Initiator	-0.055	0.055	[-0.16-0.05]	0.051	0.050	[-0.05-0.15]
Conflict Initiator x Blame	0.012	0.016	[-0.02-0.04]	-0.025 ⁺	0.015	[-0.05-0.00]
Conflict Initiator x Pressure for Change	-0.021	0.014	[-0.05-0.01]	0.015	0.014	[-0.01-0.04]
Gender x Initiator x Blame	-0.017	0.017	[-0.05-0.02]	0.013	0.016	[-0.02-0.04]
Gender x Initiator x Pressure for Change	0.023	0.015	[-0.01-0.05]	-0.010	0.014	[-0.04-0.02]

Note. ^a This parameter is set to zero because it is redundant. CI = confidence interval. ⁺ $p < .10$, * $p < .05$, ** $p < .01$

Discussion

Although Ickes (2011) proved to explain the role of motivation in the process of empathic accuracy, and as we assumed that agents of change would be particularly motivated to initiate a certain change in the status quo of the relationship or in the behavior of the partner, Study 2 was not able to convincingly demonstrate the motivational intentions of partners initiating a discussion. After controlling for relationship satisfaction, the dimensions of demand behavior were no significant predictors of empathic accuracy for feelings. However, the results of the second model for empathic accuracy for thoughts showed a two-way interaction that approached statistical significance between the role as agent of change and blame behavior. This interaction suggested that the more blame behavior is showed by the participant that is in the role of agent of change, the less empathically accurate he/she is for the thoughts of his/her partner. The observed negative association between blame and accuracy for thoughts seems to be reversed when the participant is *not* the agent of change. So, a parallel interpretation can be made as in Study 1, but as our finding was only marginal significant, we should be very cautious in drawing conclusions.

Conclusively, we found some indications that when a perceiver initiates a conflict discussion and uses a lot of blaming behavior towards their partner, this accusing and confrontational perceiver appears to be less accurate in “reading” their partner’s thoughts, presumably because of the non-sympathizing or the more self-centered conflict style that blaming the partner requires. Interestingly, however, when the perceiver is the person who did *not* initiate the conflict interaction, but who reacts to the partner’s accusations by a “counter-attack”, he or she was found to make more accurate inferences about the initiator’s thoughts, as reflected in this non-intimidated perceiver’s higher empathic accuracy scores.

GENERAL DISCUSSION

This pattern of results illustrates the potential risk of starting a conflict in which the initiator starts pressuring the partner too much. As the conflict initiator applies more demanding behavior to the partner, the initiator may find it more difficult to devote attention to inferring the target's thoughts and feelings, and his or her empathic accuracy might therefore decline. Interestingly, the conflict initiator's high-demanding approach might not only undermine his or her own empathic accuracy; it also has the potential to elicit a strong counter-response (i.e., strong counter-pressure or blame) from a partner who "reads" the conflict initiator's feelings and motives accurately and thinks that the conflict initiator should be blamed or pressured to change instead. The irony, then, is that a conflict initiator who applies undue pressure to an interaction partner often winds up at an empathic disadvantage. According to our results, the more pressure the initiator applies to the partner, the more impaired the initiator's empathic accuracy is likely to be. And, ironically, our results further suggested that the more the initiator pressures the partner to change, the more accurately the partner tends to understand the thoughts, feelings, and motives that are driving the initiator's high-pressure offensive, and the more counter-influence the partner tends to exert on the initiator. In other words, conflict initiators who try to impose their will on others tend to be less sensitive to their interaction partners' thoughts and feelings, whereas partners who accurately perceive the initiator's actual thoughts and feelings seems to be more likely to resist their influence and may apply a strong counter-influence instead of succumbing to the initiator's pressure. Nonetheless, some caution should be used when interpreting these results since the robustness of this finding could not be fully demonstrated. Although Study 2 showed a similar trend between empathic accuracy, the role of conflict initiator, and blame behavior (another dimension of demand behavior), we could not replicate the association with pressure for change (cf. Study 1).

The potential dynamics of this process should have important implications not only for marital conflict discussions but for negotiation discussions more generally (e.g., Druckman, 1977; Finnegan & Hackley, 2008; Hüffmeier & Hertel, 2012; Lewicki, Weiss, & Lewin, 1992). When partners (or parties) negotiate with each other to maximize their respective outcomes, they have to be careful to stop short of applying too much pressure to induce the other partner (or party) to change. Doing so not only may reduce one's own ability to accurately "read" the thoughts and feelings of the other partner (or party), but may also motivate a self-assertive counter-response in the other party that is driven by a more accurate assessment of the initiator's actual thoughts, feelings, and motives.

A possible explanation for the fact that conflict initiators seem to achieve lower levels of accuracy might be due to a reduction of the available cognitive resources, given the fact that a conflict interaction seem to be a very demanding interpersonal process with some specific communicative features (Sillars, Roberts, Leonard, & Dun, 2000). These authors stated that communication during conflict is characterized by selective attention, continuous interpretation of intentions that give meaning to communication, routine and automatic inferences to keep up with the pace of interaction, a disorderly nature of communication, and (distressing) emotions. Taken together, if a conflict initiator is preoccupied with achieving his/her personally desired conflict outcome during this demanding communication process, then it is very likely that the cognitive resources get exhausted, and consequently little to no resources remain available to engage in accurate perspective-taking.

These are fascinating effects, and although they are more complex than we initially expected, they have the potential to open up a new and promising line of research. We strongly encourage additional research on this topic, in the context of both couples' conflict and negotiation discussions.

Limitations and Directions for Future Research

First, in the current studies we used samples that included generally satisfied couples but relatively few dissatisfied/distressed couples, thereby limiting the generalizability of the results. Future research should use samples that are more diverse in terms of relationship satisfaction. Second, the usual recommended caution should be exercised in inferring causality from our results, because the hypothesized temporal ordering of the variables could not be established due to the cross-sectional design. Future research needs to resolve this causality issue as well. Finally, the hypothesized positive association between empathic accuracy, and demand behavior is mainly based on the common underlying aspect of motivation, assumed when partners initiate a conflict. However, this motivation could be questioned given the fact that partners were randomly designated as conflict initiator (in contrast to spontaneously initiating a conflict), and the presence and/or amount of motivation was not explicitly measured. Future research should take this limitation into account, and include an explicit measure to operationalize this underlying motivation.

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APPENDIX A

Examples of Demanding Behavior

Blame. The husband (who had been designated as the conflict initiator) thinks that his wife takes too much time to complete her household tasks during the day and that this is due to the fact that she is sleeping too much. The husband starts the discussion with a remark on his wife's sleeping habits. This example is an excerpt that has been translated from a Dutch conflict interaction.

H: "You don't have to react like that, [yet] **you always react this way.**"

W: "My reaction is normal."

H: "No, your reaction isn't normal – **you're pissed off**"

W: "But you started it; your reaction was a sarcastic one. You said "You were lucky you were already awake."

H: "I just said that. **You always get immediately pissed off when I say something. You always argue.** It is always a fight. I'm sick of all this."

Pressure for Change. The wife (who had been designated as the conflict initiator) starts a conversation about the car driving behavior of her husband. She is upset because they got lost when driving to the building for their research appointment. He responds with frustration because in his opinion she always distracts him by starting a conversation and asking him questions while he is driving. The wife starts the conflict discussion with a question about his driving behavior. This example is an excerpt that has been translated from a Dutch conflict interaction.

W: “You know you had to drive straight ahead and yet you turned left. Why?”

H: “We aren’t talking about this again, are we?”

W: “But you always get lost...”

H: “**You shouldn’t distract me.**”

W: “Not distract you? **You shouldn’t get distracted then...**”

H: “You start this conversation, and yet you already know what you should do... **You should be quiet in the car.** Just let me, just let me drive...”

W: “But I didn’t start it! You started the conversation this time! You started by asking me what we were going to do this afternoon – you started to chat!”

M: “Yes, **but you cannot do that; hey, you know you shouldn’t distract me.**”

W: “Ah, I shouldn’t respond then?”

H: “Indeed.”

3

CHAPTER

“I think you understand me.”

**STUDYING THE ASSOCIATIONS BETWEEN ACTUAL, ASSUMED, AND
PERCEIVED UNDERSTANDING WITHIN COUPLES.¹**

¹ Based on Hinnekens, C., & Verhofstadt, L. L. (2016). “I think you understand me.” Studying the associations between actual, assumed, and perceived understanding within couples. *Manuscript submitted for publication*.

ABSTRACT

The current study examined the associations between actual, assumed, and perceived understanding and partners' levels of dyadic adjustment. One hundred fifty two couples provided questionnaire data (assumed and perceived understanding), participated in a video-taped conflict interaction, and in a video-review task to assess actual understanding (empathic accuracy). The data were analyzed by means of the Actor-Partner Interdependence Model (APIM). The results showed that perceivers' assumed understanding and targets' perceived understanding (both situation-specific measures) were not associated with perceivers' actual understanding scores, suggesting that someone's perception of understanding is not based on their own or their partner's actual understanding performance during a preceding conflict interaction. Furthermore, our findings indicate that perceived understanding is uniquely associated with dyadic adjustment for both men and women. Additionally, a partner-effect was found for women indicating that it is important for women's relationship well-being that their male partner feels understood.

INTRODUCTION

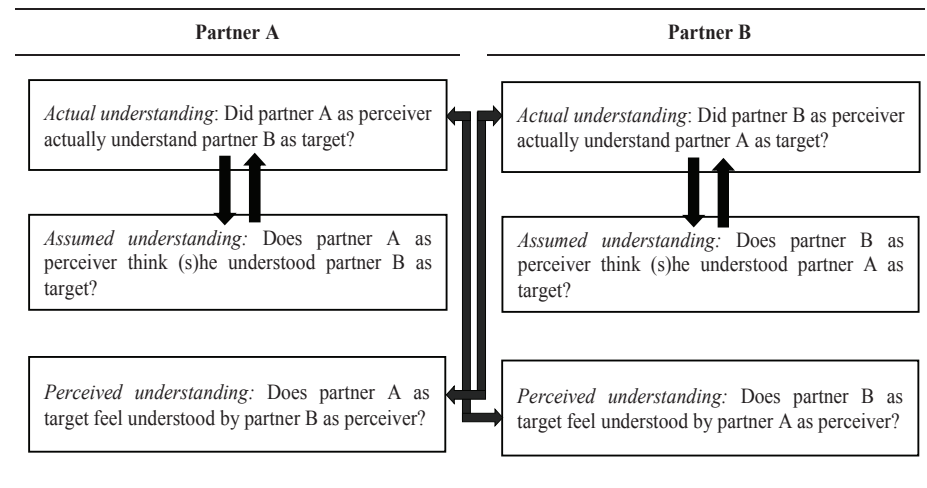
Theory and research suggest that partners in an intimate relationship must be relatively accurate when inferring the specific content of each other's thoughts and feelings if they want to effectively coordinate their individual and shared actions – a coordination that is needed to maintain a satisfying and stable relationship (Ickes & Hodges, 2013). Understanding the other partner refers to the ability to take the partner's perspective, and to hold knowledge of the partner's dispositions, thoughts, and feelings (Finkenauer & Righetti, 2009). Previous research supports the intuitive belief that mutual understanding plays a crucial role in intimate relationships, more specifically in relationship well-being (e.g., Neff & Karney, 2005; Pollmann & Finkenauer, 2009) and adjustment (e.g., Laurenceau, Barrett, & Pietromonaco, 1998; Lemay, Clark, & Feeney, 2007; Noller & Ruzzene, 1991; Swann, 1984).

Not all studies support this conclusion, however. The results of some studies have revealed no significant association between understanding and relationship quality (e.g., Ickes & Simpson, 2001; Murray, Holmes, & Griffin, 1996; Pollmann & Finkenauer, 2009; Thomas & Fletcher, 2003). What accounts for these apparently contradictory results? First, as has been suggested by Pollmann and Finkenauer (2009), combining the results of these studies overlooks the important distinction between *feeling understood* and actually *being understood* by one's partner. More specifically, some studies have measured mutual understanding within couples by documenting partners' subjective self-reports whereas other researchers have relied on objective performance measures of actual understanding (e.g., empathic accuracy; Ickes, Stinson, Bissonette, & Garcia, 1990). Second, an additional but related issue concerns the fact that some studies analyzed understanding from the *perceiver's* point of view, whereas others focused on the *target's* point of view. Third, some studies focused on the *global* level of understanding within the relationship, whereas others

focused on *situation-specific* and interaction-based understanding based upon actual couple interactions.

Taking this complexity into account, one can differentiate (see Figure 1) between (a) the *perceiver’s actual understanding*, referring to the perceiver’s accuracy in inferring the specific content of their partner’s (i.e., target’s) thoughts and feelings, (b) the *perceiver’s assumed understanding*, referring to the perceiver’s subjective report on how well they assume they have understood their partner (i.e., target), and (c) the *target’s perceived understanding*, referring to the target’s subjective rating of the degree to which they feel understood by their partner (i.e., perceiver).

Figure 1



The present study sought to extend existing research on understanding in couples by examining (a) the interrelations between these three distinct dimensions of understanding, and (b) their association with dyadic adjustment. In the sections that follow, we provide some background on the major features of the current study.

The Target's Level of Perceived Understanding

The concept of perceived understanding in the context of intimate relationships refers to one's feeling of being understood by the partner and can be defined as the *perception* that one's partner has an accurate understanding of one's own subjective experience (i.e., thoughts and feelings). Perceived understanding has been documented in the literature as a form of cognition that lies at the heart of relationships (see Finkenauer & Righetti, 2009). For instance, according to Reis, Clark, and Holmes (2004) the feeling of being understood by one's partner is one component of the partner's *perceived responsiveness*. In their formulation, perceived responsiveness refers to the belief that one's partner both understands and validates the thoughts, feelings, and perspectives of the other partner in a particular situation. Furthermore, perceived understanding has itself been identified as a key characteristic of perceived emotional support (Cramer, 1986; Rogers, 1959), and perceived emotional support in turn has been found to be one of the strongest correlates of relationship satisfaction (Cramer 2003; Cramer, 2006; Cutrona 1996). Furthermore, a recent study by Gordon and Chen (2015) showed that conflict in couples is particularly harmful to the relationship when the members believe that their partners have failed to understand their thoughts, feelings, and perspectives. Feeling understood can operate as a buffer against these harmful effects because it supports the belief that a partner is devoted, and it is also positively associated with conflict resolution.

Although these research results consistently demonstrate the importance of feeling understood by one's intimate partner, there are very few studies examining the *source* of perceived understanding. Indirect evidence can be derived from studies on perceived support and perceived responsiveness, which demonstrate that partners' perceptions are at least partially anchored in reality, i.e., these perceptions can be traced to behavioral exchanges and are not merely social constructions (e.g., Collins & Feeney, 2000; Cutrona,

Hessling, & Suhr, 1997; Reis et al., 2004). Applying this finding to perceived understanding leads us to assume that feeling understood, or one's level of perceived understanding, should be fostered by the actual efforts made to understand and corresponding accurate insights of the other partner.

The Perceiver's Level of Actual Understanding

Over the last three decades, empirical research on actual understanding has been developing exponentially. More and more insight has been acquired into the complexity of the empathy process and empathic accuracy can be considered as the cognitive part of this process or, in other words, "the accuracy with which one can understand someone's episodic thoughts and feelings as they spontaneously occur during the course of natural interactions" (Ickes, 1993, p.588). Ickes and colleagues (1990) introduced the *dyadic empathic accuracy paradigm* as an objective and reliable design to measure empathic accuracy in a controlled but naturalistic environment. The empathic accuracy percentage, the outcome of this paradigm, can be seen as a performance measure that reflects the objective level of understanding. Understanding (and thus also the empathic accuracy score) is affected by situational influences (e.g., perceived threat of the interaction; Simpson, Oriña, & Ickes, 2003) and additionally also by relationship (e.g., acquaintanceship effect; Ickes & Hodges, 2013) and target characteristics (e.g., readability of someone's (non)verbal cues; Marangoni, Garcia, Ickes, & Teng, 1995).

So, although the perceiver's level of actual understanding should presumably be related to the target's level of perceived understanding, research linking interaction-based "mind-reading" abilities to a perceiver's interaction-based feelings of being understood is – to our knowledge – nonexistent.

The Perceiver's Level of Assumed Understanding

But to what extent are partners aware of their own empathic performance? Previous studies have shown that people are not very proficient at estimating their own general capacity for perspective-taking, reflected in a lack of significant associations between perceivers' levels of actual understanding (i.e., empathic accuracy) and questionnaires assessing the perception of their *general* empathy capacity (e.g., Interpersonal Reactivity Index; Davis, 1980; Laurent & Hodges, 2009). These findings raise the question of whether people are equally bad at estimating how well they understand the *situational* thoughts and feelings of people with whom they interact, including their partners. The latter should be distinguished from measures of general and dispositional perspective-taking capacities used in previous research, which are more broadly based.

The question of whether assumed understanding between partners who are interacting with each other – as opposed to perspective-taking towards others in general – is related to their actual abilities to mind-read has remained largely unanswered to date, as few or no studies have assessed partners' meta-knowledge about the outcomes of their own perspective-taking efforts during a preceding interaction.

(Perceived) Understanding and Dyadic Adjustment

Previous research has shown that perceived understanding is related to beneficial relationship outcomes such as adjustment, intimacy, and trust (e.g., Pollmann & Finkenauer, 2009; Reid et al., 2004) and even is predictive of long-term relationship well-being (Pollman & Finkenauer, 2009).

Additionally, the level of actual understanding also seems important for various crucial relationship processes. Verhofstadt, Buysse, Ickes, Davis, and Devoldre (2008) found that an accurate understanding of one's partner's distress and needs, and an ability

to accurately judge which behaviors are helpful and appropriate given the situation leads to better instrumental support provision. Furthermore, the conflict literature suggests that an accurate interpretation of a partner's thoughts and feelings during conflict leads to recognition that destructive reactions will evoke an escalating conflict (Bissonette, Rusbult, & Kilpatrick, 1997). Therefore, empathic accuracy is predictive of more accommodative behavior during conflicts as partners yield less hostile reactions and react more compassionately and responsively.

Consequently, complaints about a lack of mutual understanding and misreading by the partner are frequently noted in research on empathy. It may also play an important role in a lot of failing dyadic processes (e.g., support provision, conflict resolution, relationship commitment, intimacy) in distressed couples, as a lack of understanding is often mentioned as a reason for pursuing consultation by couples seeking couple therapy (Doss, Simpson, & Christensen, 2004).

Recently, the assumption that general perceived understanding is more important for relationship well-being than objective knowledge was tested in a study that measured understanding by using several questionnaires (Pollmann & Finkenauer, 2009). The results showed that feeling understood is indeed a feature present in well-functioning relationships; however, actual knowledge about each other in different domains was not. It is possible that an individual's own perception or interpretation of a certain behavior or situation is more predictive for future behavior and outcomes than the actual behavior or situation. However, there is no corroborating research exploring this assumption that simultaneously examines the role of actual and perceived understanding in dyadic adjustment. The limited amount of studies that examined a similar association focused on the concept of social support and demonstrated that partners' perceptions of received support are more predictive

of stress reduction than the actor's actual support behavior (Abbey & Halman, 1995; Dunkel-Schetter & Bennett, 1990).

The theoretical and empirical precedents described above suggest that both accurate understanding of one's partner and perceived understanding are necessary for fundamental relationship processes such as support provision and conflict resolution; furthermore, perceived understanding predicts relationship well-being directly and indirectly by buffering the harmful effects of conflict. However, as no previous studies have simultaneously included all of these distinct aspects of interaction-based understanding within a single investigation, the relative importance of actual and perceived understanding during interactions for couples' relationship well-being is unknown.

The Present Study

In sum, the above-mentioned findings support the importance of (perceived) understanding in intimate relationships. However, no clear conclusions can be drawn due to a lack of conceptual and methodological differentiation between the different dimensions of understanding in existing research on this matter. This has resulted in a gap in our current knowledge about how a person's actual understanding relates to their partner's perceptions of being understood, and about how accurately people can estimate their degree of actual understanding. Further insight into these processes is needed in order to clarify whether people are aware of their own and their partner's capacities for perspective-taking and to specify the relative importance of both forms of understanding for dyadic adjustment.

Therefore, the aim of the present study was to complement and extend previous studies on understanding in intimate relationships by (a) distinguishing between the target's level of perceived understanding, the perceiver's level of actual understanding, and the perceiver's level of assumed understanding; (b) studying their interrelations, and (c)

examining their associations with dyadic adjustment. We chose to test our hypotheses (see below) in the context of relationship conflict interactions because previous research suggests that both forms of understanding may have a greater impact in conflict situations, where the stakes (both individual and relational) are perceived to be higher than in routine, non-conflict situations (Gordon & Chen, 2015). In other words, we sought to test our hypotheses in a setting where the variables we are studying are likely to play a more significant role.

We collected data from a large sample of couples that provided questionnaire data and participated in a videotaped conflict interaction and video review task. More specifically, we collected (1) *a post-interaction self-report measure of perceived understanding* (i.e., each participant's subjective report on how well understood they felt by their partner during the conflict interaction), (2) *an interaction-based measure of actual understanding* (i.e., participants' objective scores of how well they accurately inferred the content of each other's thoughts and feelings during the conflict interaction), (3) *a post-interaction self-report measure of assumed understanding* (i.e., participants' subjective reports on how well they assumed they had understood their partner during the conflict interaction), and (4) *a global self-report measure of dyadic adjustment* (i.e., participants' subjective reports on their general level of dyadic adjustment). Data were collected from both partners within the interaction in order to assess our variables of interest from both the perceiver and target's perspectives within each dyad. The interdependence of their reports was taken into account statistically by using the Actor-partner Interdependence Model (APIM).

General hypotheses. First, we expected a mutual influence between the perceiver's actual understanding and assumed understanding, such that the perceiver's subjective score of assumed understanding would be positively associated with their own

objective score of actual understanding (i.e., empathic accuracy) (*Hypothesis 1*). Second, we also expected to find a significant association between the perceiver's actual understanding and the target's perceived understanding. As previous studies have found that the perception of partners' responsiveness is based at least in part on the actual amount of responsiveness of their partner, the same tendency was expected for understanding as a part of the process of responsiveness, such that the perceiver's objective actual understanding score would be positively associated with the target's subjective perceived understanding score (*Hypothesis 2*). Third, we tested the hypothesis that both partners' levels of actual understanding and the levels of perceived understanding would be related to relationship functioning and satisfaction, such that their objective actual understanding score and their subjective perceived understanding score would be positively associated with the general level of dyadic adjustment (*Hypothesis 3*). Finally, we wanted to explore potential gender differences in the predicted associations. When analyzing the previous literature, we found no evidence that allowed us to make specific predictions, but we nevertheless planned to examine the data for whether or not the processes under study are different for men and women (*Research Question 1*).

METHOD

The present data were collected within a broader observational study on conflict in couples; some results of this study – unrelated to the present research questions – already have been published (Hinnekens, Ickes, De Schryver, & Verhofstadt, 2016; Hinnekens, Vanhee, De Schryver, Ickes, & Verhofstadt, 2016).

Participants

The sample consisted of the 310 members of 155 cohabiting/married heterosexual couples. This sample was recruited in the context of a large observational study called the “UGent Family Lab Couple Study”. The recruitment strategy enlisted couples to volunteer for the study in two ways: (1) through posters and social media notices, and (2) by asking a group of 16 master’s-level clinical psychology students to recruit couples with whom they were acquainted.

Couples who expressed interest in participating were contacted by the research assistants, informed in general terms about the project, and evaluated to determine whether they met the inclusion criteria, which required them to have been together in a heterosexual relationship for at least one year and to have been married/cohabiting for at least six months. Inadequate knowledge of the Dutch language was used as exclusion criterion. The data of three couples that were included in the original sample were later excluded from the analyses because for one couple a participant had left too many data fields blank on the self-report questionnaires and for the two other couples it was discovered upon analysis of the questionnaires that they had been together for less than a year.

The first set of measures on the online questionnaire included demographic items. The responses to these items revealed that the average reported relationship length was 12.06 years ($SD = 1.16$). The respondents’ average age was 36.20 years for the men ($SD = 14.06$) and 34.26 years for the women ($SD = 13.63$) with a range of 19 to 76 years. By occupational category, the sample consisted of 37 laborers (11.9%), 138 office workers (44.5%), 17 executives (5.5%), 16 self-employed individuals (5.2%), 60 students (19.14%), 3 stay-at-home moms or dads (1.0%), 10 individuals who were unemployed (3.2%), 16 who were retired (5.2%), and 7 who were currently unable to work (2.3%).

Procedure

Couples who expressed an interest in participating were visited at home by one of the research assistants, informed in general terms about the project, and evaluated to determine whether they met the inclusion criteria. The partners in each couple received instructions to independently complete an online set of questionnaires that assessed both individual and relationship variables. The questionnaires used in this study are discussed in more detail below.

After both partners had completed these questionnaires, they were contacted by telephone to schedule an appointment to either come to the laboratory or to have an observation session at home. The couples were asked to participate in a task in which they engaged in a video-recorded conflict interaction and a subsequent video-review task. Each couple received monetary compensation of €20 for completing the questionnaire session and an additional €20 for participating in the observational study. Participants could withdraw from the investigation at any time. The study was approved by the ethical committee of the Faculty of Psychology and Educational Sciences at the Ghent University.

Measures

Dyadic adjustment. Relationship functioning and well-being were assessed with the Dutch version (Buysse & Heene, 1997) of the Dyadic Adjustment Scale (DAS; Spanier, 1976). This questionnaire contains 32 items that are divided into four subscales. *Dyadic consensus* reflects the degree to which the partners perceive that they (dis)agree about important aspects of the relationship; this subscale consists of 13 items such as "To what extent do you and your partner agree or disagree on the handling of family finances?" (0 = *always disagree* to 5 = *always agree*). *Dyadic satisfaction* assesses the degree to which the partners are satisfied with their relationship; it consists of ten items such as "In general,

how much of the time do you think that things between you and your partner are going well?" (0 = *never* to 5 = *all the time*). *Dyadic cohesion* assesses the degree to which the partners report engaging in common activities and experiencing closeness; it consists of five items such as "How often do you and your partner have a stimulating exchange of ideas?" (0 = *never* to 5 = *more often than once a day*). Finally, *affectional expression* assesses the extent to which the partners report that they express affection towards each other; it consists of four items such as "How often do you kiss your partner?" (0 = *never* to 5 = *every day*).

Total DAS scale scores were obtained by summing the scores of the 32 scaled items. Theoretically, these global dyadic adjustment scores can range from 0 to 151. In the present sample, men and women reported average marital satisfaction scores of 119.33 ($SD = 12.91$) and 117.90 ($SD = 13.47$), respectively. DAS norms (Spanier, 1976) indicate an average satisfaction score of 114-115 for a typical sample of married couples, a normative benchmark that suggests that our sample is comparable to an average sample of North-American married couples with respect to their typical levels of relationship satisfaction. The internal consistency of the DAS in our Dutch-speaking sample was high (Cronbach's $\alpha = .90$ for both men and women).

The conflict interaction task. In the observational part of the study, the couples were asked to participate in a conflict discussion task that was similar to those used in previous laboratory studies on marital conflict (e.g., Fletcher & Thomas, 2000; Simpson et al., 2003). Each couple was escorted into a laboratory that was furnished to look like a living room although it was equipped so that the couple's interaction could be video-recorded with their prior knowledge ($n = 114$). In those cases in which the interaction task was conducted at the couples' home, the partners were seated in a quiet room where we

installed a small portable camera ($n = 41$). Both partners gave permission for this recording by means of a written consent form.

Before commencing their conflict discussion, both partners were separately asked to identify a problem or issue (from a list of common conflict topics in intimate relationships), of which the source was either the partner or the relationship and which they recognized as causing them relationship distress or recurring disagreement. After this problem selection had occurred, the partners were assigned randomly to be either the initiator or not the initiator. Operationally, this variable meant that the conflict issue the designated initiator had selected would be the one that the partners would discuss during their subsequent video-recorded interaction. The initiator in each dyad was instructed to introduce the issue to the other partner so that they could discuss this problem together for a period of eleven minutes. Both partners were instructed to act, as far as possible, as they would do when discussing a similar problem with each other at home.

The post-interaction task. Immediately after the conflict interaction had been recorded, both partners completed post-interaction questionnaires.

Reporting assumed understanding. A new post-interaction self-report measure was created to assess the dyad members' perceptions of their own understanding during the preceding interaction. The five items on this measure were based on the literature about understanding and responsiveness (e.g., Maisel, Gable, & Strachman, 2008; Reis et al., 2004), adapted to the purpose of this study. Participants were asked to respond on 7-point Likert scales (1 = *not at all* to 7 = *completely*) about how well they believed they managed to understand their partner's thoughts and feelings (e.g., "To what extent do you think you accurately understood your partner's thoughts and feelings during the interaction?"). The internal consistency of the self-reported understanding measure was moderate to high in this sample (Cronbach's $\alpha_{\text{Men}} = .85$; $\alpha_{\text{Women}} = .75$).

Reporting perceived understanding. Analogous to the previous questionnaire, five items were developed to measure the extent to which the respondents felt understood by their partner during the preceding interaction. These five items had parallel content to the post-interaction questionnaire about self-reported understanding except that they were formulated from the partner's perspective (e.g., "To what extent do you think your partner understood the ways in which this interaction was distressing for you?"). The internal consistency of the perceived understanding measure was high in this sample (Cronbach's $\alpha_{\text{Men}} = .87$; $\alpha_{\text{Women}} = .88$).

The video-review task. Immediately after the post-interaction task both partners individually completed a video review task similar to that used in previous studies of empathic accuracy (e.g., Ickes et al., 1990; Verhofstadt et al., 2016). The partners were separated and asked to re-experience and re-live their interaction while they viewed a video of the interaction they had just completed on a laptop. The video presentation was controlled by an interactive software package (Hinneken & Kimpe, 2014) specifically developed to facilitate the data collection for the purpose of the current study. Every 90 seconds, the video was paused and the same set of instructions appeared on the screen. First, each partner was asked to type the specific thoughts and feelings that he or she had at that point in the interaction into a blank box on an online questionnaire. Next, each member of the couple was asked to infer the specific content of each of their partner's thoughts and feelings, and to type each inference into a blank box that appeared on the interactive online survey form.² The instructions emphasized that the reported thoughts and feelings should be based on the 10-second segment of interaction that immediately preceded the pause in the video. To help ensure that both partners based their reports on

² The questionnaire of the video-review task included additional multiple choice items that are not relevant to, nor represented in, the current study.

the same 10-second segment of the interaction, our custom software program gave the participants the option to re-observe the 10-seconds of tape that occurred immediately before the pause before providing their requested answers.

Actual understanding. Four independent judges rated the degree of similarity between the content of each actual thought or feeling that one partner recorded and the content of the corresponding inferred thought or feeling that the other partner recorded. Following the recommendations of Ickes and colleagues (1990), the degree of similarity was rated in each case using a 3-point scale on which 0 = *different content from the actual thought or feeling*, 1 = *similar, but not the same content as the actual thought or feeling*, and 2 = *essentially the same content as the actual thought or feeling*. Overall actual understanding (i.e., empathic accuracy) scores were then computed as a simple percentage measure of the number of “accuracy points” earned, divided by the total number of “accuracy points” available and multiplied by 100.³ The empathic accuracy coding was acceptably reliable for both men (ICC = .69) and women (ICC = .71) in the sample. Therefore the scores of the four raters were averaged.

Observational measures.

Readability. The four independent judges also rated the degree of difficulty of inferring a target’s thoughts and feelings based on the information available in his or her words and actions (inferential difficulty measure; Marangoni et al, 1995). The raters watched each tape twice, once observing the male partner and once observing the female partner. They were instructed to make inferences about the target’s thoughts and feelings at each pause in the video review task. The raters were provided with copies of the target’s reported thoughts and feelings, to which they could refer after making these inferences.

³ The theoretical range of this percentage-correct accuracy measure was 0 (*none of the possible accuracy points was earned*) to 100 (*all of the possible accuracy points were earned*).

They could then compare their own inferences with the target's actual reported thoughts or feelings and rate how transparent or readable they thought each of the target's thoughts and feelings were at each tape stop. These readability ratings were made for each of the target's individual thoughts and feelings separately on a 3-point scale ranging from 1 = *very difficult to infer given the immediate context*, 2 = *somewhat difficult to infer given the immediate context*, to 3 = *easy to infer given the immediate context*. The readability measure was acceptably reliable for both men (ICC = .64) and women (ICC = .65) in the sample. Therefore, the readability ratings were averaged across the four raters.

RESULTS

Descriptive Statistics

The sample-based means, standard deviations, observed ranges, and paired sample *t*-tests for all study variables are presented in Table 1. According to the paired sample *t*-tests, the men in the sample reported higher scores for assumed and perceived understanding. The analyses did not reveal gender differences in either actual understanding or in dyadic adjustment. The independent raters found it was slightly easier to infer thoughts/feelings from the (non)verbal cues of the female participants than it was for the men.

Table 1*Descriptive Statistics for the Study Variables*

	Men		Women		<i>Diff</i>
	<i>M</i> (<i>SD</i>)	<i>Range</i>	<i>M</i> (<i>SD</i>)	<i>Range</i>	
Dyadic adjustment	119.33 (12.91)	86-149	117.89 (13.47)	69-148	1.43
Dyadic consensus	51.74 (6.40)	31-65	50.93 (7.46)	14-64	1.34
Dyadic satisfaction	41.66 (4.26)	28-49	41.03 (4.49)	24-49	1.94
Affective expression	9.22 (1.86)	2-12	9.01 (2.13)	1-12	1.19
Dyadic cohesion	16.71 (3.45)	7-23	16.93 (3.40)	8-24	-0.68
Assumed understanding	27.77 (4.45)	10-35	26.76 (4.00)	10-35	2.72**
Perceived understanding	27.39 (4.62)	14-35	26.16 (5.00)	10-35	3.00**
Actual understanding	18.02 (8.95)	0.00-39.29	17.68 (8.79)	0.00-39.29	0.40
Readability	1.72 (0.26)	1.07-2.57	1.78 (0.29)	1.19-2.67	-2.58*

Note. * $p \leq .05$, ** $p \leq .01$; $N = 152$.

In Table 2, the correlations between the predictor variables are presented, both for men and women. Overall, the positive correlations between the scales of dyadic adjustment are high for men (ranging from .34 to .89), and women (ranging from .31 to .85). Furthermore, the assumed and perceived understanding scores are positively correlated to the scales of dyadic adjustment, both for men (ranging from .20 to .54) and women (ranging from .17 to .43). Men's actual understanding scores are not associated with any of the scales of dyadic adjustment, however, women's actual understanding scores are positively

correlated with the scales of dyadic adjustment (ranging from .14 to .24), except for dyadic consensus. The readability score of the target is found to be positively correlated to the actual understanding (i.e., empathic accuracy) of the perceiver. When men are the target, then their readability score is correlated with a magnitude of .24 with their women's actual understanding score, and vice versa, when women are the target, their readability score is correlated with a magnitude of .22 to their men's actual understanding score. This finding indicates that the higher the target's readability score (i.e., easier to infer), the higher the perceiver's actual understanding score. Finally, we find significant positive correlations between the scores on all variables of men and women (ranging from .31 to .58).

Table 2

Correlations between the Variables

	1	2	3	4	5	6	7	8	9
1. Dyadic adjustment total	.56**	.85**	.77**	.76**	.61**	.28**	.41**	.20*	-.05
2. Dyadic consensus	.89**	.43**	.40**	.64**	.24**	.19*	.30**	.10	.00
3. Dyadic satisfaction	.86**	.65**	.58**	.51**	.52**	.28**	.43**	.19*	-.14 ⁺
4. Affectional expression	.67**	.50**	.55**	.41**	.31**	.25**	.30**	.14 ⁺	-.05
5. Dyadic cohesion	.67**	.40**	.47**	.34**	.34**	.17*	.20*	.24**	.02
6. Assumed understanding	.43**	.41**	.44**	.22**	.20*	.41**	.75**	.15 ⁺	-.09
7. Perceived understanding	.54**	.49**	.52**	.34**	.28**	.77**	.45**	.14 ⁺	-.08
8. Actual understanding	.06	.08	.04	-.06	.06	.08	.03	.31**	.05/.22**
9. Readability	.10	.02	.06	.06	.25**	.12	.08	.06/.24**	.41**

Note. ⁺ ≤ .10, * $p \leq .05$, ** $p \leq .01$; Correlation coefficients between the men's score on the predictor variables (regular), correlation coefficients between the women's score on the predictor variables (*italic*), and correlation coefficients between the men and women's scores on the predictor variables (**bold**).

Data-analytic Strategy

In the current study, the dyad members were partners within an intimate relationship. This means that the partners' scores on a given variable are statistically interdependent, i.e., they should correlate to some degree. The APIM analyses estimated the degree to which dyad members' responses were associated with factors attributable to the actor and to their partner. In other words, the APIM estimates both actor effects (the effect that partner A's predictor score has on his or her own outcome score) and partner effects (the effect that partner A's predictor score has on partner B's outcome score and vice versa), while controlling for the statistical interdependence that exists between the partners.

To test our first three hypotheses, we used the recently written interactive tool for Actor-Partner Interdependent Models using Multilevel Modeling (Kenny, 2015; available from https://davidakenny.shinyapps.io/API_MMM/). In each of the three APIM analyses, the dyad members were treated as being distinguishable by gender, so the dummy-coded variables men and women were recoded to -1 and 1 for the current study. The predictor variables were grand-mean centered and the dependent variable was unstandardized. Because targets' thoughts and feelings differed in how difficult they were to infer, the aggregated index of readability was entered as a covariate in each analysis.

Test of the Research Hypotheses

Is the perceiver's assumed understanding based on their own actual understanding (*Hypothesis 1*)? Our first analysis examined whether the perceiver's post-interaction self-rating of having understood their partner during the interaction was positively related to their actual understanding performance, as measured by the perceiver's

actual understanding score (an actor effect). The dependent variable in this analysis was each perceiver's self-reported assumed understanding score. The predictor variable was the perceiver's actual understanding score, and the covariate was the relevant target's readability score. The correlation between the partners' scores on the assumed understanding measure was .41. Readability was not a significant covariate in this model for either the men, $\beta = .05, p = .51$, or the women, $\beta = .00, p = .98$, and was therefore excluded from the final model. Surprisingly, the results of the final APIM showed that the perceiver's actual understanding was not associated with his or her self-reported level of assumed understanding for either the men, $\beta = .07, p = .41$, or the women, $\beta = .12, p = .17$. These findings suggest that perceivers' perceptions of how well they understood their partner during a recent conflict interaction are not associated with the accuracy of the perceivers' actual empathic inferences.

Is the target's perceived understanding based on the perceiver's actual understanding (*Hypothesis 2*)? The second analysis was similar to the first, but instead of focusing on the perceiver's level of assumed understanding, it examined whether the target's perceived understanding was positively associated with the perceiver's level of actual understanding (a partner effect). In this analysis, the dependent variable was each target's perceived understanding score. The predictor variable was the perceiver's actual understanding score and the covariate was each target's readability score. The correlation between the partners' scores on the perceived understanding measure was .45. Again, readability was not a significant covariate in this model for either the men, $\beta = .04, p = .57$, or the women, $\beta = .00, p = .99$, and was therefore excluded from the final model. The results of the final APIM showed that the perceiver's actual understanding was not a significant predictor of the target's level of perceived understanding for either the men, $\beta = .04, p = .68$, or the women, $\beta = .07, p = .44$. Contrary to our hypothesis, this finding indicates that

a perceiver’s level of actual understanding is not related to their target’s impression of being understood.

Are partners’ actual understanding and perceived understanding both important for their dyadic adjustment (*Hypothesis 3*)? To address this question, an APIM analysis was conducted to test the hypothesis that both partners’ scores on the measures of perceived understanding and their level of actual understanding would be positively associated with (i.e., would “postdict”) their scores on the Dyadic Adjustment Scale that was administered prior to the observational part of this study (looking at both actor and partner effects). The partners’ scores on the DAS questionnaire served as the outcome variable. Both partners’ scores on perceived understanding and their levels of actual understanding were entered as predictors (testing both actor and partner effects). Besides these main effect terms, two two-way interactions (perceivers’ x targets’ perceived understanding, and perceivers’ x targets’ actual understanding) were defined and included in the model. Table 3 shows the separate effect estimates for men and women.

Table 3
Actor and Partner Effects of Perceived Understanding and Actual Understanding Predicting Dyadic Adjustment

	Men		Women	
	<i>Estimate</i>	95% CI	<i>Estimate</i>	95% CI
Intercept	118.64**	[116.85-120.44]	118.04**	[116.07-120.01]
Perceived understanding				
Actor	1.36**	[0.94-1.79]	0.79**	[0.37-1.22]
Partner	0.27	[-0.12-0.67]	0.61**	[0.21-1.01]
Actual understanding				
Actor	5.69	[-14.89-26.27]	22.40 ⁺	[1.82-42.98]
Partner	-2.86	[-23.90-18.19]	2.65	[-18.40-23.70]

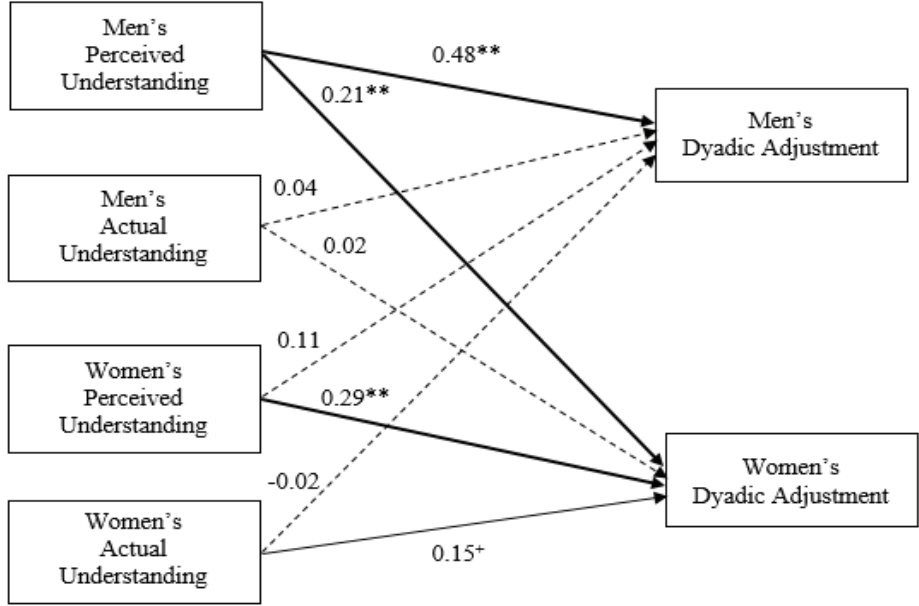
Note.⁺ $p \leq .10$, * $p \leq .05$, ** $p \leq .01$

The correlation between the partners' scores on the Dyadic Adjustment Scale was .56. None of the interaction terms were significant in this model, and they were therefore excluded from the final model. The final APIM explained 37.97% of the total non-independence. The results showed a significant actor effect, indicating that a participant's own level of perceived understanding was significantly associated with his or her own self-reported dyadic adjustment for both the men, $\beta = .48, p < .01$, and the women, $\beta = .29, p < .01$. Furthermore, the partner effect was significant for the women, $\beta = .21, p = .01$, indicating that for female participant's, their partner's perceived understanding is positively associated with their own dyadic adjustment, suggesting that it is important for women's levels of relationship well-being that their male partner feels understood.

These findings indicate that an individual's level of perceived understanding is associated with their own self-reported dyadic adjustment. Additionally, male partners' levels of perceived understanding are significantly associated with their female partners' levels of self-reported dyadic adjustment. Neither men's nor women's actual understanding scores were associated with their own or their partners' self-reported dyadic adjustment. However, the results did reveal a correlation that approached statistical significance between women's levels of actual understanding and their own levels of dyadic adjustment. A visual representation including the standardized parameter estimates can be found in Figure 2.

Figure 2

A Visual Representation of the APIM including Perceived Understanding and Actual Understanding as Predictors for Dyadic Adjustment



Note. + $p \leq .10$, * $p \leq .05$, ** $p \leq .01$

The overall test of distinguishability of the dyad members in terms of gender was not statistically significant, $\chi^2(6) = 7.54, p = .27$. Alternative models – including a similar model that treated the dyad members as indistinguishable and a model that treated dyads as indistinguishable but included gender as a predictor – were tested but did not change the findings as the first model showed the same associations and the second model was not significant, $\chi^2(5) = 7.20, p = .27$. So, for the subsequent exploration of the associations between perceived understanding and dyadic adjustment, the decision was made to exclude gender as predictor.

For which aspect(s) of dyadic adjustment is perceived understanding a predictor? To gain a more detailed understanding of the role of both partners' perceived understanding in postdicting dyadic adjustment, the four subscales of the Dyadic Adjustment Scale were examined. Two Multivariate Generalized Linear Models (GLM) were tested with each partner's score on the subscales of the DAS as the dependent variables. Each participant's own and their partner's levels of perceived understanding were entered as predictors. Besides these main effect terms, a two-way interaction between both partners' perceived understanding was included in the model. Although gender was not significant in the previous model, the analyses were conducted for men and women separately considering the interdependence.

Using Pillai's trace, a significant association between the participant's own perceived understanding, for the men: $F(4, 146) = 10.59, p < .01$, and the women: $F(4, 146) = 4.92, p < .01$, and their partner's perceived understanding, for the men: $F(4, 146) = 2.56, p < .05$, and the women: $F(4, 146) = 2.82, p < .05$ with the subscales of the DAS emerged. However, because the two-way interaction between both partners' perceived understanding was not significant, for the men: $F(4, 145) = 1.78, p = .14$, and the women: $F(4, 145) = 1.33, p = .26$, this term was omitted from the final model. Table 4 reports the parameter estimates, standard errors, and the effect sizes for men and women.

Table 4

Univariate Parameter Estimates of the Multivariate GLM including Actors' and Partners' Perceived Understanding as Predictors for the Subscales of Dyadic Adjustment

		Men			Women		
Predictor	Outcome variables	β	$SE(\beta)$	η^2	β	$SE(\beta)$	η^2
Actor							
	Dyadic consensus	0.41**	0.08	.15	0.20*	0.09	.04
	Dyadic satisfaction	0.47**	0.08	.19	0.35**	0.08	.11
	Affective expression	0.37**	0.09	.11	0.22**	0.09	.04
	Dyadic cohesion	0.30**	0.09	.07	0.21*	0.09	.04
Partner							
	Dyadic consensus	0.17*	0.08	.03	0.23**	0.09	.05
	Dyadic satisfaction	0.12	0.08	.02	0.17*	0.08	.03
	Affective expression	-0.05	0.09	.00	0.18*	0.09	.03
	Dyadic cohesion	-0.04	0.09	.00	-0.02	0.09	.00

Note. * $p \leq .05$, ** $p \leq .01$

The results show that each participant's own perceived understanding score correlated with all the aspects of dyadic adjustment, both for men and women. These findings indicate that it might be important to feel understood by one's partner in order to experience higher levels of relationship well-being (i.e., dyadic adjustment). Specifically, each participant's level of perceived understanding was positively associated with (1) their own level of perceived consensus within the relationship, (2) their own perception of expressing affection towards each other, (3) their own feelings of connectedness, and (4) their own level of overall relationship satisfaction. Their partner's perceived understanding was also positively associated with some of the subscales of the own dyadic adjustment. For men, their female partner's perceived understanding was positively associated with their own level of dyadic consensus and thus their experience of a high level of consensus on daily topics. For women, we found the same result and additionally, their male partner's

perceived understanding was also positively associated with their own level of overall relationship satisfaction, and their own perception of expressing affection towards each other. Although the above discussed findings are all significant, we observe rather small effect sizes.

DISCUSSION

Summary of Results

The present study sought to answer an empirically and clinically relevant question about how partners' objective abilities to understand each other during a conflict and their subsequent feelings of assumed as well as perceived understanding are related, and whether their actual and/or perceived understanding are related to their levels of dyadic adjustment.

Assumed, perceived, and actual understanding. Surprisingly, we did not find a significant association between perceivers' actual understanding (i.e., objective empathic accuracy score) and their assumed understanding (i.e., self-reported level of understanding), which means that the perceivers' perceptions of how well they understood their partner were not based on their actual empathic performances. Furthermore, and also contrary to our hypothesis, we found that the perceiver's actual understanding was not associated with their partner's level of perceived understanding. This finding indicates that a target's perception of being understood is not based on the actual empathic performance of his or her partner. These findings applied equally to the men and the women who took part in this study.

These findings are somewhat surprising, considering that the measures of assumed understanding and perceived understanding were filled out immediately after the

interaction task and concerned the dyad members' perceptions of their own and their partner's level of understanding as experienced in the preceding interaction. On the other hand, previous studies have reported evidence showing that people are not good at judging their own empathic abilities on self-report measures. Several studies have explored the association between participants' actual understanding scores and their scores on the perspective-taking subscales of the Interpersonal Reactivity Index (IRI; Davis, 1980), but these have failed to find any positive association (Ickes et al., 1990; Laurent & Hodges, 2009; Stinson & Ickes, 1992). In addition, an unpublished master's thesis study by Mortimer (1996) found evidence that most perceivers are also unable to track variation in their level of empathic accuracy across the set of inferences that they make.

If an individual's own score on the self-report measure of how well he or she feels understood by the partner is not based on the actual performance of that partner, then what does affect his or her perceived understanding score? One possibility is that partners base these post-interaction ratings on their general feeling of (dis)satisfaction with the level of mutual understanding within their relationship, irrespective of the actual level of understanding in the specific conflict discussion. This general feeling of being understood is probably based on many other previous conflict discussions on the same and other topics. This explanation is based on the concept of sentiment override during interactions, which refers to the observation that partners' behavior during interactions is determined to a greater extent by a global sentiment about the relationship than by the valence of the immediately preceding stimulus, which in this case is the behavior displayed by a participant's intimate partner (e.g., Fincham, Garnier, Gano-Phillips, & Osborne, 1995; Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005; Weiss, 1980). One lab-based interaction might not affect a cognitive schema that has developed over time; indeed there is abundant empirical evidence confirming that these relational schemas are relatively

stable over time and situations (Fiske & Taylor, 2013). This evidence suggests that attention is generally drawn to schema-consistent information whereas schema-inconsistent information might receive less attention or might even be neglected. Regarding our results, the partners might have based their perceived understanding ratings on the schema-confirming clues present in the observed interaction (verbal or nonverbal behavioral cues such as the partner's verbal acknowledgments or nonverbal head nods), even though these clues were not necessarily indicative of the partner's accurate understanding.

Actual understanding and dyadic adjustment. The results did not confirm the first part of our main hypothesis as no general association was found between actual understanding and relationship well-being as measured with the Dyadic Adjustment Scale. However, the results showed a positive trend between women's actual understanding and their dyadic adjustment scores. This suggests that as women reach higher levels of actual understanding they tend to report higher levels of dyadic adjustment or, alternatively, if women are satisfied with their relationship they report higher levels of dyadic adjustment and also reach higher levels of actual understanding. Caution is necessary when interpreting the current findings as there is no clear evidence for causation as this is a correlation study.

It is possible that we overlooked an association between actual understanding and relationship satisfaction as there was no distinction made between inferred thoughts and feelings that had little or no potential to threaten the partners' relationship and thoughts and feelings that did have this potential. A study by Cohen, Schulz, Weiss, & Waldinger (2012) did take this distinction into account – distinguishing between empathic accuracy for positive emotions, which have no potential to threaten the perceiver, and empathic accuracy for negative emotions, which may be relationship threatening, in line with the Ickes and Simpson's model (1997) – but they also found that empathic accuracy was not a very strong predictor of relationship satisfaction. Perceived empathic effort by the partner was found

to be a much stronger predictor of relationship satisfaction, however, especially for women. This indicates that women may place greater value on their partners' willingness and investment of energy to understand them, reflected in their empathic effort.

Perceived understanding and dyadic adjustment. The second part of the main analysis revealed that an actor's perceived understanding is associated with his or her relationship well-being as measured with the Dyadic Adjustment Scale, and that this is true for both men and women. The partner effect was also significant for women: When men reported higher levels of perceived understanding, women reported higher levels of dyadic adjustment. The additional explanatory analysis revealed that each participant's own level of perceived understanding is associated with all aspects of their own dyadic adjustment: dyadic consensus, dyadic satisfaction, affectional expression, and dyadic cohesion. Furthermore, male partner's perceived understanding was also associated with one aspect of their own dyadic adjustment: dyadic consensus, and female partner's perceived understanding was associated with three aspects of their own dyadic adjustment: dyadic consensus, satisfaction, and affectional expression.

These findings are in line with previous work by Pollmann and Finkenauer (2009) who found that partners' general feelings of understanding each other are predictive of several indicators of relationship well-being (dyadic adjustment, intimacy, and trust) but that accurate knowledge about a partner was not.

This finding may also confirm the clinical experience of many couple therapists – that perceived understanding plays a major role in relationship well-being and satisfaction. A common complaint of partners seeking marital help is a lack of (mutual) understanding in their relationship (Laing, Phillipson, & Lee, 1966). The results of both the current and previous studies suggest that a combination of strengthening empathic efforts and

encouraging responsive behavior might help to enhance the feeling of perceived understanding.

Strengths and Limitations of the Present Study

The use of an observational design allowed us to collect an overall measure of empathic accuracy (one that was aggregated across all of the perceiver's inferences) along with post-interaction measures of assumed and perceived understanding. This enabled us to compare an objective measure of understanding (i.e., empathic accuracy) with the perception of each participant's own and their partners' understanding, a comparison that had not been conducted in research so far. In addition, a dyadic approach was used that included data from both the actor and partner in the process of understanding in couples; this enabled us to assess the influence of both actor and partner effects on relationship outcomes. Finally, given the time-consuming and labor-intensive realities of observational research, the large sample size is definitely an advantage of this study.

With regard to the study's limitations, the generalizability of the results may be limited because the sample consisted of white, middle-class couples that were generally satisfied with their relationships. It would be useful to examine a sample that is more heterogeneous and consists of at least a subsample of couples who are currently experiencing high levels of relationship distress. Furthermore, the self-reports of dyadic adjustment levels were measured before the interaction task and thus reflected a general perception of the relationship whereas actual understanding and perceived understanding were measured during and after a conflict and thus reflected situation-specific understanding, which can be considered as a weakness in our operationalization. Future research should include a post-interaction measure of relationship well-being and satisfaction and should also consider the role of empathy communication as possible

moderator between actual understanding and relationship outcomes. Finally, the usual recommended caution should be exercised in inferring causality from our results, as the cross-sectional design means that the hypothesized temporal ordering of the variables could not be established conclusively.

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4

CHAPTER

EMPATHIC ACCURACY AND COGNITIONS DURING CONFLICT: AN IN-DEPTH ANALYSIS OF UNDERSTANDING SCORES¹

¹ Based on Hinnekens, C., Sillars, A., Verhofstadt, L. L., & Ickes, W. (2016). Empathic accuracy and cognitions during conflict: An in-depth analysis of understanding scores. *Manuscript submitted for publication*.

ABSTRACT

Empathic accuracy research indicates that partners achieve only poor to moderate success at reading each other's thoughts during couple communication. The current study identifies specific patterns of online thought that potentially contribute to empathic inaccuracy during conflict interactions. Married/cohabiting partners completed a conflict interaction and, afterwards, reported their own thoughts during video-assisted recall of the interaction, while also inferring the thoughts of the other partner. Reported and inferred thoughts were analyzed for thematic content (i.e., focus on content issues, interaction process, or personal characteristics) and affective tone (positive, negative, or neutral thoughts). Men had more positive than negative thoughts; however, women showed a tendency to overlook these thoughts and overestimate negative thinking by their male partners. Specific misunderstandings linked to both the thematic content and affective tone of online thought predicted lower empathic accuracy scores.

INTRODUCTION

She thought...

...I don't understand his point of view.

... he ignores everything I say by talking about something else.

...my partner is exaggerating again.

He thinks she thought...

...about how she still feels not understood.

...Why should I keep talking if he isn't listening anyway?

...we are not talking about the heart of the matter.

These quotes of partners' spontaneous thoughts reflect a crucial aspect of relationships, namely the aspect of understanding. But how well are partners able to understand each other? Previous research has tried to answer this question through the investigation of understanding as a function of specific relationship characteristics (e.g., duration, satisfaction; Thomas, Fletcher, & Lange, 1997) and in several relational contexts (e.g., support interactions; Verhofstadt et al., 2016). These studies indicate that partners achieve only poor to moderate success at inferring each other's thoughts and feelings. According to Ickes (2011), empathic accuracy generally averages no higher than 30-35% for married partners. Other research finds even lower empathic accuracy among partners, averaging around 20% (Hinneken, Vanhee, De Schryver, Ickes, Verhofstadt, 2016; Verhofstadt, Buysse, Ickes, Davis, & Devoldre, 2008). Logically, this means that partners are 65-80% incorrect when inferring each other's thoughts and feelings. Therefore, some evident next questions are: How do these misunderstandings occur? Why are partners "misreading" each other this much? These questions remain largely unanswered to date.

The current article explores these questions through an in-depth analysis of partners' online cognitions (i.e., spontaneous thoughts during a discussion). Specifically,

this research examines participants' own thoughts (i.e., *direct perspectives*) and their inferences about their partner's thoughts (i.e., *meta-perspectives*), as reported during a post-conflict interaction recall task. We compare direct and meta-perspectives in terms of their thematic content and affective tone, and we aim to identify specific forms of incongruence and misunderstanding. Further, we consider how these types of specific misunderstandings relate to overall empathic accuracy. We test to see whether certain types of misunderstandings occur more frequently than others, and whether these misunderstandings can explain the rather low scores previously observed in studies of couples' empathic accuracy.

Online Thought during Couple Conflict

Disagreements and conflicts inevitably occur in intimate relationships, and although conflict can be threatening, it might also be perceived as an opportunity to reconcile partners' different goals, opinions, or concerns (Hinneken et al., 2016). To effectively discuss and potentially reconcile such differences, we assume that partners must, first, adopt a shared focus and congruent definition of the issues contributing to conflict, and second, be able to take the other's perspective in order to understand his or her reasoning about these issues.

Because these processes unfold "in the moment" during couple communication, a method that can capture the *in vivo* stream (i.e., online stream) of the partners' thought is essential to research on understanding during relationship conflict. One method involves the use of a video review task in which participants complete an interaction and afterwards report their thoughts and feelings during the interaction while observing a video of the discussion (Halford & Sanders, 1988; Ickes, Stinson, Bissonnette, & Garcia, 1990). The empathic accuracy paradigm, developed by Ickes and colleagues (1990), also requires

participants to infer their partner's thoughts and feelings, thereby simulating perspective-taking during communication. Video-assisted recall helps participants to retrieve their memory of the events that occurred during the interaction, and re-experience thoughts and feelings as they occurred spontaneously (Waldron & Cegala, 1992). Some evidence suggests that people experience the same physiological reactions during video review as they do during the actual interaction (Gottman & Levenson, 1988).

Studies by Sillars and colleagues extend research on online cognition and empathic accuracy by analyzing the content of thoughts and feelings during family conflict (Sillars, Roberts, Leonard, & Dun, 2000; Sillars, Smith, & Koerner, 2010). The Interaction Cognition Coding System (ICCS) developed from this research translates the complexity of online thoughts into meaningful hierarchical content categories. Previous research with the ICCS has identified important characteristics inherent in online thoughts during conflict interactions and has revealed gender differences that are described below (Sillars et al., 2000).

Our comments thus far highlight two goals for further research on online cognition during couple conflict. First, research should identify the congruence (shared focus) and incongruence (non-shared focus) of partners' direct perspectives, reflecting the issues they each think about and how they evaluate these issues. Second, partners' meta-perspectives should be explored to determine if partners are able to infer each other's thoughts accurately, irrespective of their own direct perspectives, and to reveal specific misunderstandings that underlie empathic *in*accuracy. We now turn to each of these research goals.

(In)Congruence of Partners' Cognitions

Of the two processes noted above (shared focus and perspective-taking), adopting a shared focus on conflict issues would seem to be a less demanding cognitive task. Nonetheless, research suggests that this process can prove challenging during couple conflict. Thomas et al. (1997) found that married partners maintained a shared focus in their online thoughts just over half the time during conflict interactions. Sillars et al. (2000) observed that couples were often, even routinely, thinking about different things during conflict (e.g., past events versus the immediate conversation) and/or thinking about these things in qualitatively different ways (e.g., *what* was said versus *how* it was said). In other words, partners can experience the same interaction quite differently, allocating their selective attention to different issues, background events, and aspects of ongoing communication (Sillars, 2009). We discuss these differences in perspective in terms of differences in the *thematic content* and *affective tone* of online thought.

Thematic content. Because a primary goal during couple conflict is to reconcile the partners' perspectives, the most obvious thoughts to examine are about the topic of disagreement itself. These thoughts address issues such as: "What is the conflict about? What is my opinion about it? What are my arguments pro and con?" However, as noted by Hocker and Wilmot (1991), the ostensible topic is often a cover for an underlying implicit relationship issue. A basic axiom of communication is that all communication has both *content meaning* and *relationship meaning* (Watzlawick, Beavin-Bavelas, & Jackson, 1967), with the former referring to declarative content and the latter to relational states (e.g., respect, distance, antagonism) implied by that act of communication. This basic axiom suggests that partners will not only think about the explicit topic of disagreement (e.g., cleaning, work commitments, sex), or what Watzlawick and colleagues called the *content*

level of communication, they will also think about the process of interaction and what it implies about the relationship.

A common difference in partners' perspectives during couple conflict, referred to as *content-process confusion* (Sillars et al., 2000), occurs when one partner interprets the interaction in terms of the ostensible content or topic while the other partner thinks about the process of interaction and associated relational meanings. Sillars and colleagues (2000) found that content-process confusion was tied to gender, with men focusing more on content issues in the discussion and women more on the communication process and other, more relational cognitions. A possible explanation for this pattern is suggested by the concept of *relationship awareness* (Acitelli, 1992). She found that women engaged in more relationship-level thinking, and that this focus was tied to their satisfaction to a greater extent than it is for men. It is important to note, however, that Vangelisti, Middleton, and Ebersole (2013) found few gender differences in online thought, despite using the same coding methods as Sillars et al. (2000).

In addition to content or relationship aspects of communication, partners' online thoughts could engage more abstract attributions that describe partner traits, evaluate the relationship, or identify causes of behavior (Vangelisti, Corbin, Lucchetti, & Sprague, 1999; Vangelisti, et al., 2013). The study of these processes suggests that much online thinking during conflict involves observing, interpreting, and evaluating intentions and behaviors, while also searching for causes of conflict. As noted in the next section, relationship satisfaction is one of the greatest influences on attributions, such that dissatisfied individuals tend to make distress-maintaining attributions about the partner's negative behavior, whereas satisfied individuals make relationship-enhancing attributions (Fincham & Bradbury, 1989; Fletcher & Fincham, 1991; Grigg, Fletcher, & Fitness, 1989; Vangelisti et al., 1999).

Affective tone. As mentioned earlier, conflict can be perceived as threatening or distressing but also as an opportunity to find a new balance. These perceptions reflect the overall affective tone of online thought. Sentiment override theory suggests that the general feeling of relationship (dis)satisfaction has a significant impact on situational perceptions and emotions (e.g., Fincham, Garnier, Gano-Phillips, & Osborne, 1995; Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005; Weiss, 1980). More specifically, a general perception of the relationship develops over time and establishes a cognitive relationship schema, which in turn influences thoughts and feelings during interaction in a self-confirming fashion (e.g., Fincham, 2001; Holtzworth-Munroe & Jacobson, 1985).

Supporting the assumption of sentiment override, studies of online cognition have found that relationship dissatisfaction is associated with angry, frustrated, and blaming thoughts, and also with pessimistic thoughts about the course and resolution of conflict (e.g., Sillars et al., 2000; Vangelisti et al., 2013). Conflict severity is associated with similar negative thoughts. In contrast, satisfaction is more likely to be associated with “issue-oriented” thoughts concerning the topic of disagreement, suggesting that satisfied partners maintain a more neutral and objective tone during conflict (Sillars et al., 2000; Vangelisti et al., 2013). Further, satisfied partners also report more thoughts expressing positive expectations to resolve the disagreement (e.g., belief that the partner is understanding, suggestions about solutions; Fletcher & Thomas, 2000; Sillars et al., 2000; Verhofstadt, Buysse, Rosseel, & Peene, 2006).

Sillars and colleagues (2000) observed parallels between the affective tone of online thought and the familiar actor-observer bias in attributions. That is, individuals reported more positive thoughts about their own communication (i.e., seeing it as constructive engagement), but more often attributed avoidant and confrontational acts to their partner. These results suggest that self-serving cognitive tendencies can influence how ambiguous

cues or behaviors are interpreted as positive or negative communication (Sillars et al., 2000).

Empathic Accuracy

Empathic accuracy in couples can be defined as "...the extent to which [partners] understand each other's unspoken thoughts or feelings as they spontaneously occur during the course of their everyday interactions" (Ickes, 1993, p. 588). Studies reveal low-to-moderate overall accuracy in couple interactions (e.g., Ickes et al., 1990; Simpson et al., 2011; Verhofstadt, et al., 2008) and scores can drop even further during threatening interactions, such as disagreements (Simpson, Oriña, & Ickes, 2003). To reach a certain level of accuracy, interaction partners need to adopt comparable *interpretive frames* (Ickes, 2003). However, frame incompatibilities are a common feature of conflict (e.g., Putnam & Holmer, 1992; Sillars, 2009; Sillars, et al., 2010). Anticipating and adjusting for such incompatibilities can require significant cognitive effort. Yet, research on online cognition during couple conflict finds that people do not often make a conscious effort to understand the partner's perspective without being prompted to do so by the researcher (Sillars et al., 2000).

Sillars and colleagues (2000) suggested that basic features of communication during conflict inhibit conscious perspective-taking and contribute to differences in interpretive frames. Specifically, they proposed that: (1) *selective attention* is an inherent feature of communication and is necessary to conserve cognitive resources within a complex and ambiguous stimulus field; (2) participation in interaction requires *continuous interpretation* of intentions that give meaning to communication; (3) such *inferences are made routinely and automatically* to keep up with the pace of interaction and thus, are mostly snap judgments that go unquestioned; (4) selective attention and inference is further encouraged

by the *disorderly nature of communication* during serious relationship conflict (e.g., the presence of multiple issues, and the tendency to lose focus and engage past disagreements); and (5) *emotions* related to conflict and the general *affective atmosphere* influence the availability of executive functions and bias online cognitions.

Given the low-to-moderate scores for empathic accuracy observed in past studies and the complex factors influencing these scores, there is a need for further research on factors affecting empathic inaccuracy during couple conflict.

The Present Study

The first goal of the current study is to examine descriptive characteristics of online thoughts and replicate associations with gender, relationship satisfaction, and conflict intensity that have been found in previous research. The second goal is to identify specific misunderstandings, reflected in discrepancies between direct and meta-perspectives, that relate to empathic accuracy.

Content of one's own thoughts (direct perspectives). First, we offer predictions about the occurrence of certain types of online thoughts. In research by Sillars et al. (2000) and Vangelisti et al. (2013), partners showed considerable mindfulness about the process of interaction, reflected in their thinking about the immediate interaction, including inferences about communicative acts or intentions and evaluations of communication. These process thoughts constituted the most frequently-used coding category in previous studies. Thus, our first hypothesis predicts that both partners will report more process thoughts relative to thoughts pertaining to other categories (*HI*). Further, the research of Sillars and colleagues (2000) found a tendency in online thought to attribute positive conflict acts to the self and negative conflict acts/intentions to the partner. Thus, our second hypothesis predicts that individuals will report more thoughts attributing

constructive communication to self than to their partner (*H2a*), and more thoughts about confrontation and avoidance to the partner versus self (*H2b*). Regarding potential gender differences, we expect that men will report more thoughts concerning content issues in conflict than women (*H3a*), whereas women will report more thoughts about the communication process and other relational states (i.e., person and process appraisal) than men (*H3b*).

Following past studies (Sillars et al., 2000; Vangelisti et al., 2013), we expect the affective tone of online thoughts to be associated with conflict severity (as reflected in ratings of relationship threat) and relationship satisfaction. Thus, we predict that partners who report more positive thoughts will perceive the interaction as less threatening and that partners who report more negative thoughts will perceive the interaction as more threatening (*H4a*). Further, from attribution research and the construct of sentiment override, we assume that the affective tone of thoughts reflects relationship satisfaction, such that partners who score higher on relationship satisfaction will report more positive thoughts, whereas partners who score lower will report more negative thoughts (*H4b*).

Comparison of own versus inferred thoughts. In line with predictions concerning direct perspectives, the fifth hypothesis predicts that men will overestimate the incidence of content-focused thoughts (called *issue appraisal*; *H5a*) and underestimate the incidence of relationship-focused thoughts (called *person appraisal* and *process appraisal*; *H5b*) by women. Conversely, we expect women to underestimate the incidence of content-focused thoughts (*H5c*) and overestimate the incidence of relationship-focused thoughts by men (*H5d*).

Mind-reading errors and empathic accuracy. Last, we offer predictions about the discrepancy between the participants' actual thoughts and the thoughts that are inferred by their partner. Generally, we expect specific mind-reading errors by the perceiver

to be reflected in their overall understanding, such that the larger the discrepancy between the target's direct thoughts (with respect to thematic content and affective tone) and the perceiver's inferred thoughts, the lower the perceiver's empathic accuracy (*H6*).

METHOD

The present data were collected within a broader observational study on conflict in couples; some results of this study – unrelated to the present research questions – already have been published (Hinneken, Ickes, De Schryver, & Verhofstadt, 2016; Hinneken et al., 2016).

Participants

A sample of 158 cohabiting/married heterosexual couples (316 individuals) was recruited as part of an observational study called the “UGent Family Lab Couple Study”. Couples were recruited for the study through posters and social media notices, and through the acquaintance networks of master's level clinical psychology students. Participation was limited to Dutch-speaking couples who had been together in a heterosexual relationship for at least one year and married or cohabiting for at least six months. Three couples in the original sample were later excluded due to missing questionnaire responses or questionnaire responses that revealed failure to meet the inclusion criteria.

The couples had been together at the time of the study for an average of 12.15 years ($SD = 11.76$). The men averaged 36.29 years of age ($SD = 14.05$) and the women averaged 34.21 years ($SD = 13.60$) (age range = 19 to 76 years). The sample included 37 laborers (11.9%), 140 office workers (45.5%), 17 executives (5.7%), 16 self-employed individuals (5.2%), 61 students (19.7%), 3 stay-at-home mothers or fathers (1.0%), 11 individuals who

were unemployed (3.5%), 16 who were retired (5.2%), 7 who were currently unable to work (2.3%), and 2 individuals whose profession is unknown.

Procedure

Couples who expressed an interest in participating were visited at home, where they were provided an orientation and evaluated to determine if they met inclusion criteria. The partners received instructions to independently complete online questionnaires that measured relationship satisfaction and other variables not relevant to the current report.

After both partners completed the questionnaires, they were contacted by telephone to schedule an appointment to either come to a research laboratory or have an observation session at home. The couples were asked to participate in a task in which they engaged in a video-recorded discussion and subsequent video-review task. Each couple received monetary compensation of €20 for completing the questionnaire and an additional €20 for completing the observational session. Participants were informed they could withdraw from the investigation at any time; however, all couples completed both phases of the research. The study was approved by the ethical committee of the Faculty of Psychology and Educational Sciences at the Ghent University.

Relationship satisfaction. Relationship satisfaction was assessed with the Dyadic Adjustment Scale (DAS, Spanier, 1976; Dutch version by Buysse & Heene, 1997). The questionnaire consists of 32 items over 4 subscales (dyadic consensus, dyadic satisfaction, dyadic cohesion, and affective expression). The total scale scores, summed across subscales, averaged 119.31 ($SD = 12.87$) for men and 117.91 ($SD = 13.34$) for women. DAS norms (Spanier, 1976) indicate an average satisfaction score of 114/115 for a married sample, suggesting that our sample was comparable to an average group of

married couples. The DAS demonstrated strong internal consistency in this sample (Cronbach's $\alpha_{\text{Men}} = .91$; $\alpha_{\text{Women}} = .90$).

Interaction task. In the observation session, the couples completed a discussion task similar to those used in previous studies of marital conflict (e.g., Fletcher & Thomas, 2000; Simpson et al., 2003). Couples who chose to come to the university were escorted to a laboratory that was furnished to resemble a living room but equipped to allow video-recording of the conflict discussion ($n = 114$). In those cases in which the interaction task was conducted at the couples' home, the partners were seated in a quiet room where we installed a small portable camera ($n = 41$). In both settings, the recording took place with the couple's knowledge and written consent.

Prior to the discussion, the partners were separately asked to identify, from a list of common conflict topics, an issue they recognized as a source of recurring disagreement in their relationship. The conflict issue selected by one partner was then randomly chosen as the topic for subsequent discussion. The partner who selected the issue introduced it to the other partner and the couple discussed it together for eleven minutes. The partners were encouraged to act as they would do when discussing similar problems without a camera present.

Video-review task. Immediately after the interaction task, the partners individually completed a video-review task similar to that used in other studies (e.g., Ickes et al., 1990; Verhofstadt et al., 2016). The partners were separated and asked to re-experience their interaction while they viewed the recorded discussion on a laptop. The video presentation was controlled by interactive software developed for the research (Hinnekens & Kimpe, 2014). Every 90 seconds, the video paused and instructions appeared on the screen. Each partner was asked to type the specific thought and feeling that he or she had at that point in the interaction, and also rate how threatening the thought and feeling

was to themselves, their partner, and the relationship. The ratings of threat potential were recorded on Likert-type scales that ranged from 0 = *not threatening* to 7 = *very threatening*. The instructions emphasized that the reported thoughts and feelings should be based on the 10-second segment of interaction that immediately preceded the pause in the video. The software gave participants the option to re-observe the ten seconds of interaction that occurred before each pause.

Coding

Empathic accuracy. Four independent judges rated the degree of similarity between the actual thoughts that one partner recorded (their direct perspective) and the corresponding inferred thoughts that the other partner recorded (the partner's meta-perspective). Following Ickes and colleagues (1990), similarity was rated using a 3-point scale on which 0 = *different content from the actual thought or feeling*, 1 = *similar but not the same content as the actual thought or feeling*, and 2 = *essentially the same content as the actual thought or feeling*. Overall empathic accuracy scores were then computed as a percentage score that was computed as the number of "accuracy points" earned, divided by the total "accuracy points" available and multiplied by 100.² The empathic accuracy coding had acceptable reliability for both the men ($ICC = .69$) and the women ($ICC = .71$) in the sample. Therefore, the scores of the four raters were averaged.

Thought content. Thoughts reported during the video review session were coded using the ICCS, a system that was inductively derived from recall sessions with married partners watching their own conflict interactions (Sillars et al., 2000). We used a revised version of the coding system developed for research on parent-adolescent interaction

² The theoretical range of this percentage-correct accuracy measure was 0 (*none of the possible accuracy points was earned*) to 100 (*all of the possible accuracy points were earned*).

(Sillars & Smith, 2014). This version of the ICCS was simplified and adapted to enable the comparison of direct (own thoughts) and meta-perspectives (inferred partner thoughts), making it ideally suited to gain further insight into the process of empathic accuracy.

The ICCS coding system classifies thoughts into 26 specific categories nested within five main categories (see Appendix A for examples). The main categories are as follows: (1) *Emotion* includes thoughts that contain a direct reference to an emotional state; (2) *Issue appraisal* includes thoughts referring to the literal topic of discussion, that is, facts, ideas, or opinions concerning the ostensible issue being discussed and therefore reflects the “content” level of interaction; (3) *Process appraisal* includes thoughts about communicative acts or intentions within the immediate interaction, along with evaluations of the communication process; (4) *Person appraisal* includes thoughts conveying abstract evaluations about the self or the partner, often through trait attributions and attribution of responsibility for the conflict; (5) *Uncodable/off topic* thoughts include thoughts that are unintelligible, not relevant to the conflict, or do not fit within other categories. In addition, some specific codes are followed by an actor code: (a) *self*, (b) *partner*, or (c) *dyad*, indicating the object of the thought (e.g., “I understand” is coded as *self*; “She is getting frustrated” is coded as *partner*; “We are a strong couple” is coded as *dyad*). For purposes unrelated to the current report, the partners were prompted to report thoughts and feelings separately during the video review. Because of the current study’s focus on thoughts, the emotion codes are excluded from analyses to which they are not relevant.

The coding procedure followed three steps. First, each thought entry was divided into thought units, referring to a segment expressing a single thought that is understandable independent of adjoining comments (e.g., “I understand why he wants to talk about this,/however, I don’t want to talk about it again,” would be two thought units). Second, each thought unit was assigned to one of the five main categories according to the thematic

content of that unit. Third, a specific code with an additional actor code (if called for by the coding scheme) was assigned. All data were coded by a team of three coders. Two coders each coded half of the data. The third coder, designated as the “expert coder,” coded all of the data independently as a reliability check. Afterwards, the independent coders’ judgments were compared and any disagreements were resolved through discussion.

RESULTS

Descriptives

Direct perspectives. The first aim of the study was to explore the characteristics of online thoughts during a conflict interaction within a Dutch-speaking sample. The percentages of specific codes and main categories are reported for men and women in Table 1. Although the data were coded according to five main categories, the category of *emotions* is excluded from Table 1. As noted above, our procedure required the participants to report emotions separately from their thoughts; therefore, only a minimal percentage of spontaneously reported thoughts referenced emotions (1.5%).

The results show that the category of process appraisal, reflecting mindfulness about the communication process, represented almost half of the online thoughts. By comparison about one-third of thoughts were coded as issue appraisal, representing thoughts about content issues in the discussion, and 13-14% were person appraisals, representing personal evaluations and attributions. These results confirm the first hypothesis (*H1*), as process thoughts indeed represented the largest percentage of thoughts reported relative to those in other content categories.

Second, we expected individuals to attribute more favorable conflict strategies to the self and more negative conflict strategies to the partner (*H2*). Because there were more

self-directed thoughts than partner-directed thoughts overall, we calculated percentages for each strategy code separately for self-directed versus partner-directed thoughts. The results supported *H2*: When individuals thought about their own communication, they were more likely to see the interaction as constructive engagement than when thinking about the partner's communication (men: 62.62% vs. 12.75%; women: 44.93% vs. 23.49%; *H2a*). Logically, as the percentages sum to 100%, when individuals thought about their partner's communication, they were more likely to see the interaction as confrontation or avoidance/detachment than when thinking about their own communication (men: 87.25% vs. 37.38%; women: 76.51% vs. 55.08%; *H2b*).

Gender differences. Our second hypothesis predicted that men would have a greater content-focus and women a greater relationship-focus. The paired *t*-tests reported in Table 1 could not confirm this hypothesis, as there was no overall gender difference in the percentage of issue appraisal thoughts (*H3a*), or in person and process appraisal thoughts (*H3b*). The overall similarity of men and women was notable, and only a few statistical significant ($p \leq .05$) gender differences emerged from the paired *t*-tests.

Table 1
Descriptive Statistics for Direct Perspectives

	<i>M</i> _{Men} (<i>SD</i>)	<i>M</i> _{Women} (<i>SD</i>)	<i>t</i> (154)
Person Appraisal	12.95 (17.44)	14.28 (16.63)	0.74
Positive Appraisal			
<i>Self</i>	0.68 (3.27)	0.27 (1.70)	1.38
<i>Partner</i>	0.83 (3.78)	1.01 (3.50)	-0.44
<i>Dyad</i>	0.77 (3.44)	0.93 (3.41)	-0.44
Benign Attribution	0.73 (4.25)	0.91 (3.60)	-0.40
Admission	4.64 (10.56)	2.36 (5.54)	2.61**
Denial & Justification	1.82 (5.34)	2.67 (7.36)	-1.17
Complaint	2.13 (7.09)	3.78 (9.70)	-1.80 ⁺
Imperative	1.35 (4.58)	2.37 (6.00)	-1.75 ⁺

Issue Appraisal	31.73 (22.64)	32.29 (21.81)	0.24
Elaboration	12.85 (15.26)	10.98 (13.30)	1.15
Likes	0.47 (2.38)	0.50 (2.53)	-0.14
Dislikes	1.23 (4.56)	2.71 (7.08)	-2.60**
Agreement	7.07 (11.37)	6.58 (9.38)	0.41
Disagreement	4.17 (8.30)	5.08 (9.28)	-0.96
Solution	5.78 (9.46)	6.34 (11.26)	-0.55
Process Appraisal	49.10 (26.18)	47.24 (24.46)	0.65
Constructive Engagement			
<i>Self</i>	10.92 (15.40)	6.06 (10.92)	3.30**
<i>Partner</i>	0.45 (2.47)	1.11 (4.26)	-1.64 ⁺
<i>Dyad</i>	2.13 (6.25)	1.62 (6.31)	0.70
Avoidance & Detachment			
<i>Self</i>	2.14 (5.96)	3.04 (7.00)	-1.27
<i>Partner</i>	0.73 (3.17)	1.80 (5.89)	-1.93 ⁺
<i>Dyad</i>	0.28 (1.97)	0.18 (1.62)	0.45
Confrontation			
<i>Self</i>	3.52 (8.57)	3.65 (7.79)	-0.13
<i>Partner</i>	3.10 (8.53)	2.33 (6.72)	0.91
<i>Dyad</i>	0.96 (5.06)	0.79 (3.19)	0.44
Understanding			
<i>Self</i>	2.29 (7.72)	1.74 (4.46)	0.76
<i>Partner</i>	1.63 (5.38)	2.21 (6.03)	-0.91
<i>Dyad</i>	0.95 (4.18)	0.70 (3.43)	0.60
Misunderstanding & Confusion			
<i>Self</i>	2.69 (6.37)	4.40 (10.40)	-1.77 ⁺
<i>Partner</i>	1.33 (4.43)	2.75 (7.79)	-2.04*
<i>Dyad</i>	0.00 (0.00)	0.00 (0.00)	
Foreboding & Impasse	2.72 (6.48)	3.35 (7.64)	-0.79
Resolution	5.60 (11.04)	4.31 (9.33)	1.22
General Process	7.82 (13.62)	7.31 (14.31)	0.36
Other/Uncodable	4.65 (13.52)	4.70 (15.62)	-0.03

Don't Know	0.08 (1.00)	0.09 (1.15)	-0.09
Thinking Same as What was Said	0.09 (1.15)	0.17 (1.52)	-0.53
Uncodable	4.48 (13.49)	4.43 (15.45)	0.03

Note. ⁺ $p \leq .10$, * $p \leq .05$, ** $p \leq .01$; direct perspectives = 'I thought...'. Percentages do not sum to 100% because the category "emotions" and the corresponding specific codes are excluded.

However, the men seemed to think more about their own responsibility in the conflict, as they had more thoughts within the *admission* category than women. Men also seemed more *constructively engaged* (or at least had the intention) than the women did. Yet, women still felt more misunderstood than men, as they reported more thoughts concerning *misunderstanding and confusion* by their male partner. There was also a trend approaching significance ($p < .10$) for women to report more thoughts about their own *misunderstanding and confusion*. With regard to the topic-related thoughts, the results show only a gender difference of women reporting more thoughts of *dislike* than men.

The affective tone represented in the definitions of specific codes allows collapsing codes into affective categories instead of categories based on the thematic-content (see Appendix A). An unexpected gender difference emerged regarding affective tone. Men reported far more positive thoughts (44.93%, $SD = 25.71$) than negative ones (28.18%, $SD = 25.09$). For women, the difference in positive (38.89%, $SD = 28.52$) versus negative thoughts (36.64%, $SD = 24.27$) was less pronounced. The number of thoughts without a clear positive or negative tone (i.e., neutral category) was similar for men (20.68%, $SD = 18.49$) and women (18.29%, $SD = 19.12$).

Table 2 reports results concerning the fourth hypothesis. The first part of the hypothesis (*H4a*) was confirmed, as perceived threat was negatively correlated with positive thoughts and positively correlated with negative thoughts for both men and women. Additionally, the number of neutral thoughts negatively correlated with perceived

threat for women. The second part of the fourth hypothesis (*H4b*) was also confirmed, as the affective tone of the thoughts of both partners correlated with general relationship satisfaction. Table 2 shows an obvious pattern, in that positive thoughts correlated positively with relationship satisfaction, and negative thoughts correlated negatively with satisfaction.

Table 2

Pearson Correlations between Affective Tone, Relationship Satisfaction, and Perceived Threat

	Perceived threat		Relationship satisfaction	
	Men	Women	Men	Women
Positive affect	-.28**	-.37**	.35**	.24**
Neutral affect	-.05	-.22**	.03	.12
Negative affect	.32**	.55**	-.35**	-.29**

Note. ⁺ $p \leq .10$, * $p \leq .05$, ** $p \leq .01$

Comparisons of Direct and Meta-Perspectives

The second aim of the current study was to uncover specific types of misunderstanding reflected in perceivers' under- or overestimation of the target's actual thoughts. The fifth hypothesis predicted gender-based discrepancies between the thematic content of meta-perspectives versus direct perspectives. The results did not confirm these predictions. Men did not overestimate issue appraisal thoughts by women, $t(154) = .03$, *ns*, as anticipated (*H5a*), nor did men underestimate their female partners' person appraisal, $t(154) = .09$, *ns*, or process appraisal, $t(154) = -1.05$, *ns* (*H5b*). Further, women did not underestimate issue appraisal by men as anticipated, $t(154) = .79$, *ns*, (*H5c*). One gender difference did approach significance in the hypothesized direction (*H5d*), with women overestimating the incidence of men's person appraisal thoughts, $t(154) = 1.69$, $p < .10$.

However, *H5d* also predicted that women would overestimate men's process appraisal thoughts. Instead, women *underestimated* process appraisal by men, $t(154) = -2.17, p < .05$.

Although we did not offer predictions, we also examined differences in the affective tone of direct and meta-perspectives. The results showed a pattern of errors by women when they inferred the direct perspectives of their male partners. Specifically, the women underestimated their partner's positive thoughts, $t(154) = -4.12, p < .01$, and overestimated the men's negative thoughts, $t(154) = 3.66, p < .01$. The incidence of neutral thoughts inferred by women did not differ from their male partner's actual neutral thoughts, $t(154) = .09, ns$. In terms of specific codes, women seemed to anticipate men denying responsibility more than male direct perspectives suggested. That is, the women overestimated the men's *denial and justification* thoughts, $t(154) = 3.45, p < .01$, and underestimated men's *admission* thoughts, $t(154) = -2.35, p < .05$. The women also perceived the men to be thinking about the interaction in a more negative way than was actually reflected in the men's direct perspectives. The women overestimated the men's thoughts about their own withdrawal (i.e., *avoidance and detachment*), $t(154) = 2.20, p < .05$, and underestimated male thoughts about their own cooperative intentions in the interaction (i.e., *constructive engagement*), $t(154) = -3.62, p < .01$. In addition, the women underestimated how much the men saw the interaction as moving toward *resolution*, $t(154) = -3.44, p < .01$. Curiously though, the women also underestimated the men's thoughts of *foreboding and impasse* within the discussion, $t(154) = -2.24, p < .05$. Finally, the women perceived the men as feeling *misunderstood* more than the men's direct perspectives suggested. Finally, the women underestimated how much the men thought that the two, as a dyad, were achieving *understanding*, $t(154) = -2.56, p < .01$, and they over-perceived the men as having thoughts about feeling misunderstood (i.e., the men's thoughts about the partner's *misunderstanding and confusion*).

Of note, men did not make comparable errors when inferring the thoughts of women. There were no significant differences between male meta-perspectives and female direct perspectives when comparing positive thoughts, $t(154) = -1.54$, *ns*, negative thoughts, $t(154) = -1.27$, *ns*, or neutral thoughts, $t(154) = 1.76$, $p < .10$. There were differences at the level of specific codes; however, these effects did not trend in a consistent direction. Men seemed to misread their female partner's positive thoughts about them, since the men underestimated *positive appraisal* of the partner by the women, $t(154) = -2.05$, $p < .05$, along with *benign attribution* by the women, $t(154) = -1.99$, $p < .05$. Men also overestimated female thoughts about their own competitive intentions in the interaction (i.e., *confrontation*), $t(154) = 2.07$, $p < .05$. On the other hand, men underestimated women's thoughts about mutual *confrontation* (i.e., confrontation by the dyad), $t(154) = -2.14$, $p < .05$. Men also underestimated how much women thought about *dislikes*, $t(154) = -2.01$, $p < .05$, and about *foreboding and impasse* in the interaction $t(154) = -2.18$, $p < .05$.

Overall, these results suggest that men had an accurate perception of the overall affective tone of women's thoughts during a conflict discussion; whereas women imputed a more negative and defensive outlook to their male partners than was suggested by the men's actual thoughts.

Mind-reading Errors and Empathic Accuracy

H6 predicted an inverse association between specific mind-reading errors and empathic accuracy. To test *H6*, we computed scores based on the absolute difference between the meta-perspectives within a given category by one person versus the direct perspectives within the same category by the partner. Difference scores were calculated using summary codes for affective tone (percentage of positive, neutral, and negative thoughts) and thematic content (percentage of issue, person, and process appraisal

thoughts). For example, a female partner's error in reading her male partner's positivity was calculated as the difference between positive thoughts she assigned to him versus positive thoughts he reported for himself.

Multi-level modeling, performed with mixed-model ANOVA, was used to test associations between mind reading errors by the perceiver and the perceiver's empathic accuracy. The analysis treated male and female scores as separate observations but screened for gender differences and controlled for interdependence within dyads by treating the dyad as a random effect (Kenny, Kashy, & Cook, 2006). Initially, we screened for gender differences by conducting separate MLM analyses for difference scores on each summary code, with gender and the interaction of gender with mind-reading errors included in these analyses. These models revealed significant main effects for all mind-reading errors, with the exception of difference scores for issue appraisal. Gender accounted for no significant main effects or interactions (all effects $p > .10$) and was therefore dropped from subsequent analyses.

Two models assessed the combined effects of mind reading errors in affective tone and thematic content, respectively, on empathic accuracy (see Tables 3, 4). An initial check for multicollinearity showed only small-to-moderate correlations (.30 or below) among the three difference scores in each model. Both models supported *H6*. The first model revealed significant effects for mind reading errors in positivity and neutrality on empathic accuracy ($p < .05$) and a nonsignificant trend for negativity error ($p < .10$). The three mind reading errors for affective tone had a moderate combined relationship to empathic accuracy (quasi $R^2 = .05$; see Kenny et al., 2006). The second model revealed a significant effect for mind reading errors in process appraisal ($p < .01$), a borderline effect for person appraisal error ($p = .05$), and a nonsignificant trend for issue appraisal error ($p < .10$). The three mind reading errors for thought content had a small-to-moderate combined relationship to

empathic accuracy (quasi $R^2 = .04$). Collectively, these results indicate that empathic accuracy suffers either when individuals misread the partner's affective tone or the content focus of the partner's thoughts.

Table 3

Fixed Effects of Multi-level Model Predicting Empathic Accuracy from Absolute Value Discrepancies in Affective Tone

Fixed Effects	<i>B</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
Intercept	19.80	.74	152.70	26.6	.00
Positive affect discrepancy	-.06	.03	293.25	-1.83	.03
Neutral affect discrepancy	-.11	.04	303.88	-2.98	.00
Negative affect discrepancy	-.05	.03	300.52	-1.39	.08

Note. One-tailed *p*-values are reported to reflect the directional hypothesis (*H6*)

Table 4

Fixed Effects of Multi-level Model Predicting Empathic Accuracy from Absolute Value Discrepancies in Thought Content

Fixed Effects	<i>B</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
Intercept	20.26	.77	164.53	26.23	.00
Issue appraisal discrepancy	-.05	.04	300.83	-1.39	.08
Person appraisal discrepancy	-.07	.04	303.45	-1.63	.05
Process appraisal discrepancy	-.07	.03	301.55	-2.42	.00

Note. One-tailed *p*-values are reported to reflect the directional hypothesis (*H6*)

DISCUSSION

Empathic accuracy is both a key process during couple conflict and an especially challenging one. To effectively discuss relationship conflicts and thereby reconcile or better manage differences, partners presumably must focus on common issues, understand how the other person reasons about these issues, and do so on a moment-to-moment basis as the interaction unfolds. Yet, empathic accuracy research shows that partners are often unable to decipher what the other is thinking during couple communication. The present study probes the sources of empathic inaccuracy by examining the thematic content and affective tone of partners' spontaneous online thoughts and how these characteristics are related to their success at mind-reading. The results describe basic features of online thought during couple conflict and identify certain types of misunderstandings that are related to overall empathic inaccuracy.

Characteristics of Direct Perspectives Reflected in Online Thought

The thematic focus of online thought reflects selective attention to different issues, background knowledge, and aspects of ongoing communication. Our initial hypothesis suggested that partners show a high degree of mindfulness about the process of communication during conflict interactions. The results confirmed this hypothesis, as partners indeed reported more thoughts about the process of communication versus other categories. This finding supports the claim that natural speech is multilayered in nature and communicates both content and relationship meaning (e.g., Watzlawick et al., 1967; Sillars et al., 2000). Although conflict is often triggered by a partner's opinion or behavioral act, disagreements over the ostensible topic of conflict can be a cover for underlying implicit relationship issues that are evoked by the process of communication. Combined, process

and person appraisal were nearly double in frequency compared to issue appraisal thoughts; this finding is consistent with the observation that relational, identity, and process issues in interpersonal conflicts often supersede content issues in importance (Hocker & Wilmot, 1991). However, the methodology used could have played a role in the results. Specifically, the video-review task asked participants to observe their own and partner's (non-)verbal behavior in order to report about and infer unspoken thoughts and feelings. Thus, we cannot discount the possibility that the methods contributed to mindfulness toward communication and relationship issues generally.

The findings also confirmed the second hypothesis, indicating a self-serving bias in the way partners think about their own communication versus their partner's communication during couple conflict. Both men and women attributed constructive engagement more often to self than to their partner and attributed negative conflict strategies more often to their partner than to self. These findings align with previous research findings which suggest that partners' perceptions of conflict are consistent with a positive self-schema, maintained through positively evaluating the self and degrading or accusing the partner (Fletcher & Fincham, 1991). However, the present findings also suggest that self-serving bias extends beyond the realm of attributions in the conventional sense (i.e., explanations for behavior) and, in fact, color how particular speech events are read as acts of collaboration, confrontation, or avoidance.

We further assumed that the thoughts of men would be directed more toward issue appraisal, whereas women would think more about the conflict process and personal evaluations and attributions. However, these previously observed gender patterns were not confirmed in the current study, nor were they replicated by Vangelisti et al. (2013). Differences between the samples provide one potential explanation, since the Dutch-speaking couples in the current study are from a different culture and represent a more

recent cohort than the one studied in the earlier research (Sillars et al., 2000). In addition, some couples were recruited for the current study through the networks of university graduate students, a recruitment method that could have yielded a less “traditional” sex-typed sample than the couples in Sillars et al. (2000). Finally, some details of the video-review task varied between the studies. Unlike the earlier study, the present study assessed empathic accuracy (vs. spontaneous thoughts only) and showed a video image in which both partners appeared (as opposed to a video that showed only the partner paired with the audio of both partners talking). These study features might have reduced gender differences by directing greater attention to the other partner’s experience.

As expected, partners who were more satisfied and felt less threatened by the interaction reported more positive thoughts and fewer negative ones. These findings support the premise of sentiment override theory that general perceptions of the relationship affect and guide situational information processing in a schema-consistent manner. Translated to the current study, this means that satisfied partners tend to think about positive aspects of the conflict, partner, and interaction, whereas dissatisfied partners and those who feel threatened by conflict, report negative thoughts that can reinforce dissatisfaction.

Mind-reading Errors Related to Empathic Inaccuracy

In line with hypothesized gender differences in content-focused versus relationship-focused thoughts, we expected that the men would overestimate issue appraisal and underestimate process and person appraisal by the women, whereas the women would do the opposite when inferring the thoughts of the men. The results did not confirm these expected gender differences; however, they did reveal mind-reading errors that were made by women when they inferred the affective tone of their male partners’ thoughts. The women in this study underestimated positive thinking and overestimated negativity by men,

both overall and in several specific areas. The women perceived the men as denying responsibility for the conflict, feeling misunderstood, and wanting to withdraw versus engage during the discussion, with these inferred thoughts exceeding the actual thoughts of denial, misunderstanding, and withdrawal by men.

To summarize, the women saw the men as adopting a rather defensive outlook toward the discussion, whereas the actual thoughts of the men were distinctly more positive than negative. This finding is broadly consistent with the results of previous studies that point to a similar gender difference in partners' demand-withdraw behavior during conflict, such that women tend to be demanding and men tend to withdraw (Eldridge & Christensen, 2002). Some of the observational ratings collected in the current sample but not used in the present study, indeed confirm the suggested gender difference in demand-withdraw behavior (Vanhee, Lemmens, & Verhofstadt, 2016). This finding acknowledges the fact that women's reasoning about their male partner being less engaged in the conflict interaction and more avoidant or defensive is (partially) anchored in reality because men actually showed more withdrawal behavior. On the other hand, women might increase demand behavior and reinforce withdrawal by men if they overestimate men's negative and defensive thinking and overlook their cooperative and positive thoughts.

Generally, we expected specific mind-reading errors by the perceivers to be reflected in their overall empathic accuracy. The results mostly supported this core premise of the research. Misreading of positivity and neutrality were associated with lower empathic accuracy, and negativity error showed a parallel, nonsignificant trend. With respect to thematic content, misreading of process appraisal was also associated with lower empathic accuracy, person appraisal error had a borderline association, and issue appraisal error showed a parallel, nonsignificant trend. These results suggest that empathic accuracy is impaired either when individuals misread the partner's affective tone or the content focus

of the partner's thoughts. Because spontaneous feedback about the accuracy of a partner's inferred thoughts or feelings is rarely given during daily interactions, it seems likely that partners' thematic and affective misunderstandings will seldom be unmasked or corrected. Nonetheless, previous research has demonstrated that accuracy increases when the perceiver does receive immediate, veridical feedback. A finding that has opened up a promising direction for future research and clinical practice (Marangoni, Garcia, Ickes, & Teng, 1995; Barone, et al., 2005).

Study Limitations

A few limitations of the study should be acknowledged. First, the sample included mainly middle-class, heterosexual, non-clinical, and satisfied couples; therefore, no conclusions can be drawn about significantly dissatisfied or distressed couples. Future research should attempt to replicate these findings with more heterogeneous samples. Second, because the design was cross-sectional, the usual caution should be exercised about attempting to draw any causal inferences from the results. The temporal order of the processes under investigation could not be tested with the present data. In order to resolve the issue of causal ordering, future research should therefore use longitudinal or experimental designs. Third, the protocol used for reporting and inferring thoughts required a certain reflective and verbal ability of the participants, given that they had to report their own thoughts, infer the partners' thoughts, and translate these reflections into written verbal reports. Fourth, the categorical coding systems we used required subjective judgments to be made by the raters. Although rater differences were all resolved through discussion, there were occasional forced assignments of thought units to only one appropriate category in spite of ambiguity or possible double meaning.

Conclusion

The results point to factors underlying empathic inaccuracy during couple conflict. First, partners can misread the other partner's thoughts because they focus on qualitatively different aspects of interactions. In particular, empathic accuracy suffers when one partner (male or female) thinks about content issues in the discussion (i.e., where to go on holiday, getting chores done) while the partner analyzes the discussion (e.g., "s/he doesn't listen") or makes personal evaluations and attributions ("s/he has to do everything alone") and they fail to anticipate or correct for this difference. Second, partners can misread the affective tone of the other partner's thoughts, as seen in the tendency of women to read a more negative, defensive, and avoidant outlook in men than shown in men's thoughts. In part, this could reflect the fact that partners do not experience their interactions in quite the same way – both partners typically view their own communication as more constructive and less avoidant or confrontational than they see the partner's communication. Thus, men might *act* avoidant while thinking of themselves as doing something else. Finally, sentiment override could play a role, in that partners who are dissatisfied or feel threatened tend to think about their interactions in a self-confirming, negative way. Potentially, this could lead some to read the partner in a more negative way than warranted and overlook when the partner is accepting responsibility or thinking about the interaction constructively. These trends in online thought suggest important complexities of couple communication; however, further research is needed to show the precise impact on couples' ability to discuss and resolve conflicts.

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Appendix A

Examples [English translation of Dutch input]

	Affect	Direct “I thought...”	Meta “My partner thought...”
Person Appraisal			
Positive Appraisal			
<i>Self</i>	+	...I’ve changed a lot too.	...about how she addresses the situation a lot better.
<i>Partner</i>	+	...the bad habits of my girlfriend have been decreased	...that I was working hard to make things better
<i>Dyad</i>	+	...We can do this. We have already been through a lot more than this	...we are so close, we can’t live without each other
Benign Attribution	+	...It will be hard for her to change, but I can live with it.	...that he knows we have his best interests at heart.
Admission	+	...Indeed, sometimes I react too harsh.	...I have to solve the problem at the source.
Denial & Justification	-	...I work more hours than my boyfriend, so I have the right to do less household chores.	...You see, she is seeking excuses again.
Complaint	-	...She says she does the dishes, but I don’t agree. She only rinses the plates.	...he has to do everything alone
Imperative	-	...Do the effort to show me you can!	...Stop nagging!
Issue Appraisal			
Elaboration	0	...to spend our holidays useful, on several areas.	... of the difficulties that await him
Likes	+	...I like to spend time with you.	...I’m satisfied with the positive changes.

Dislikes	-	...the moment is not right for it	...this problem really bothers her
Agreement	+	...my partner is right.	...She agrees.
Disagreement	-	...I disagree with his thoughts on this.	...about the differences in our perspectives at this point.
Solution	+	...about other alternative possibilities.	...perhaps we can work on this too?
Process Appraisal			
Constructive Engagement			
<i>Self</i>	+	...that I expressed myself well.	...How can I introduce this problem properly?
<i>Partner</i>	+	...he tries to comfort me	...that it was good I expressed my thoughts and feelings clearly.
<i>Dyad</i>	+	...that it is a good thing that we can discuss this topic here.	...that we can solve the problem together, they are negotiable.
Avoidance & Detachment			
<i>Self</i>	-	...Why should we discuss this problem? We already talked about this.	...that the topic is not important at all
<i>Partner</i>	-	...that he ignores everything I say by talking about something else.	...he isn't listening.
<i>Dyad</i>	-	...What should we say more?	...Why should I keep talking if he isn't listening anyway.
Confrontation			
<i>Self</i>	-	...I will confront him with the topic again!	...I'll show him the facts again [Dutch expression:

			met de neus op de feiten drukken]
<i>Partner</i>	-	...that my partner is exaggerating again.	...that I attacked her to protect myself.
<i>Dyad</i>	-	...here we go again.	...same old story.
Understanding			
<i>Self</i>	+	Okay, I understand what he wants to bring about.	...I understand what is bothering you.
<i>Partner</i>	+	...that my partner understands what I'm talking about.	...that I understood her position
<i>Dyad</i>	+	...We're on the same wavelength	...that she was feeling that we're understanding.
Misunderstanding & Confusion			
<i>Self</i>	-	...about why my partner is reacting like this.	...I don't understand what he wants to say.
<i>Partner</i>	-	...that she misunderstands me.	...about how e still feels not understood by me.
<i>Dyad</i>	-	...that we both have to be more understanding.	...we never understand one another.
Foreboding & Impasse	-	...we are not talking about the heart of the matter.	...he is not discussing the matter by saying it is my topic, but that doesn't mean he should make no effort.
Resolution	+	...that we reached a good solution.	...we are progressing.
General Process	0	...to recap briefly	...how will we fill the remaining minutes with talking about the subject?
Other/Uncodable			
Don't Know	0	...nothing, I guess.	...not much, I think.
Thinking Same as What was Said	0	...about the things that I said.	...the same as she said.
Uncodable	0	...good.	...negatively.

5 CHAPTER

THE MANAGEABILITY OF EMAPTHIC (IN)ACCURACY DURING COUPLES' CONFLICT: RELATIONSHIP-PROTECTION OR SELF-PROTECTION?¹

¹ Based on Hinnekens, C., Loeys, T., De Schryver, M., & Verhofstadt, L. L. (2016). The manageability of empathic (in)accuracy during couples' conflict: Relationship-protection or self-protection? *Manuscript submitted for publication*.

ABSTRACT

The current study sought to expand upon research on motivated empathic (in)accuracy by testing three assumptions that underlie the motivated empathic accuracy model, namely if a perceiver's level of empathic accuracy is manageable, if perceived threat can trigger a shift in a perceiver's accuracy motive to an inaccuracy motive, and finally if empathic accuracy can both improve and harm a perceiver's situational well-being depending on his or her level of perceived threat. These assumptions were tested in a laboratory-based study in which partners completed a conflict interaction and, afterwards, reported on their thought processes during a video-assisted recall task, while also inferring the thoughts of the other partner. All participants also completed a similar standard stimulus interaction task. The results showed mixed evidence for the three assumptions. A shift in the perceiver from motivation to be accurate to motivation to be inaccurate in response to perceived threat could not be detected, but some evidence for an acquaintance-effect was found (i.e., the effect of familiarity with the target). The results also indicated that higher levels of empathic accuracy for non-threatening feelings are predictive of a pre-to-post-test increase in perceived closeness for men and improvement in mood for women. However, a harmful effect of empathic accuracy for threatening thoughts/feelings on situational well-being was not found.

INTRODUCTION

A dominant prescriptive narrative concerning communication strategies in intimate relationships emerged in the early 1980s, emphasizing the importance of self-disclosure to reduce the number of misconceptions and thus, to facilitate mutual understanding between partners (Birchler, 1979). To date, the assumption that understanding is crucial in intimate relationships has largely been empirically supported and interventions fostering mutual understanding between partners are frequently used within couple therapy. However, not all researchers and practitioners agree on this assumption as studies have also found associations between understanding and raised levels of conflict (Sillars, 1985) on the one hand, and lower levels of autonomy, privacy (Gilbert, 1976; Olson, Sprenkle, & Russell, 1979), and relationship satisfaction (Sillars, Pike, Jones & Redmond, 1983; Sillars & Scott, 1983; Simpson, Ickes, & Blackstone, 1995) on the other. In summary, systematic research integrating these contrasting findings on multiple aspects of understanding is not available, which impedes us from taking a clear position in this debate.

The aim of the present study was therefore to clarify the conflicting assumptions concerning understanding by investigating empathic accuracy (i.e., an objective measure of understanding) during conflict interactions in the context of intimate relationships. Empathic accuracy is defined as “the extent to which individuals can accurately infer another person's unspoken thoughts and feelings as they spontaneously occur during the course of natural interactions” (Ickes, 1993, p. 588). Stemming from the contradicting assumptions concerning understanding introduced above, Ickes and Simpson (1997) designed a theoretical framework regarding empathic accuracy with the central aim of answering three principal questions: (1) Is the level of empathic accuracy manageable (e.g., dialing it up or down)?; (2) If so, which factors will influence an individual's level of empathic accuracy?; and (3) What is the effect of an individual's level of empathic accuracy

on his/her situational well-being? Although these questions are intuitively interesting, very little systematic research has been conducted, and certainly not within the context of intimate relationships. In the paragraphs that follow, we will attempt to answer these principal questions based on the limited research that has been conducted to date. Afterwards, the research questions of the current study will be introduced.

Empathic Accuracy Is Manageable

Whether or not an individual's level of empathic accuracy is manageable seems to have been probed by research aimed at identifying characteristics of "good" versus "bad" perceivers (where the *perceiver* is a person who infers a *target's* thoughts/feelings). The latter appeared to be extremely difficult as no personality or other stable individual variables have been discovered that were able to predict which perceivers would achieve high versus low levels of empathic accuracy (Ickes et al, 2000). Yet, some relationship and target variables have been found to be more promising in indicating when perceivers were *motivated* to be empathically (in)accurate and this has been found to be positively associated with their accuracy level (see Hodges, Lewis, & Ickes, 2015 for an overview). These findings have led to the model's first general assumption that empathic accuracy is manageable (and thus not a fixed ability) depending on proximal and distal factors.

Indeed, several studies have actually provided evidence for some of these factors operating as "motives" that foster an enhancement of perceivers' levels of empathic accuracy. For instance, monetary incentives have been found to be situational motives for empathic accuracy for verbal cues (Klein & Hodges, 2001). Also, when both men and women were encouraged to be accurate – because they believe this is an aspect of a socially desirable gender role – their empathic accuracy has been found to increase (Thomas & Maio, 2008). Likewise, characteristics inherent to the perceiver that are triggered during

interactions with others have been found to stimulate empathic accuracy, for example a perceiver's need to belong (Pickett, Gardner, & Knowles, 2004) or their tendency to be securely attached to others in contrast to an avoidant attachment tendency (Simpson et al., 2011).

These findings have led to the conclusion that empathic accuracy can be defined as a *situation-dependent phenomenon*² rather than a fixed ability. However, this does not imply that motivated perceivers will show perfect empathic accuracy because each individual differs in their ability to perceive and to interpret (non) verbal signals conveyed by a target. Furthermore, each target also differs in how clearly (s)he emits these signals, or in other words, how expressive (s)he is. These restrictions are what Ickes has defined as “individual-level distal factors [...] that set the range – the upper and the lower boundaries – of empathic accuracy in a given interaction” (Ickes & Simpson, 1997, p. 235). These individual factors determine the levels between which empathic accuracy can vary, and thus, when situational factors will play a more prominent role in stimulating or downgrading empathic accuracy.

² This term has been used instead of *motivation-based* empathic accuracy as some caution is recommended when using the term motivation. Although, the factors described in the model that affect the level of accuracy are defined as ‘motives’ (Ickes, 2011), the assumptions stemming from the model are predominantly intuitive (because to date there has been little empirical verification of the full model) and the designated underlying motives only allow for implicit measurement. Furthermore, motivation is not merely a quantitative construct as some authors have stated that the quality or type of motivation is also important when drawing conclusions about the influence of motivation (Ryan & Deci, 2000; Vansteenkiste, Ryan, & Deci, 2006), but these aspects of motivation are not included in the present study.

Partners' Levels of Empathic Accuracy

In addition to the assumption that empathic accuracy is manageable, the model of empathic accuracy focuses on the question of which factors stimulate a perceiver's level of empathic accuracy (i.e., dial it up) and which factors downgrade the level of empathic accuracy (i.e., dial it down). Some factors have already been described in answering the previous question, but we will now focus on the model's specific predictions about intimate *partners'* levels of empathic accuracy.

Dialing up empathic accuracy. In line with the accepted belief that higher levels of empathic accuracy are beneficial for intimate relationships, the general assumption of the empathic accuracy model states that intimate partners should be guided by an *accuracy motive* (i.e., a motive to reach accurate inferences; Kunda, 1990) in everyday, routine interactions as this generally results in enhanced relationship stability and closeness. More specifically, the model predicts that in so-called “non-threatening” situations, a moderate to high level of empathic accuracy will lead to relationship stability and even to relationship growth, where “non-threatening” versus “threatening” situations are defined by “the degree to which the perceiver feels [not threatened versus] highly threatened by the consequences that would likely result from accurately inferring the partner's thoughts/feelings” (Ickes & Simpson, 1997, p. 235).

Indirect evidence for this assumption can be derived from research documenting that partners who are dating or partners in new relationships show increased levels of empathic accuracy (Thomas & Fletcher, 2003; Thomas, Fletcher, & Lange, 1997), thereby suggesting that partners within these kind of relationships are motivated by getting to know each other, and the process of estimation of the target partner's commitment to the relationship and beliefs about the future of the relationship. It should be noted, however,

that besides the studies cited above, no other research directly testing this assumption has been conducted.

Dialing down empathic accuracy. Other studies have revealed that certain factors operate as motives for partners to downgrade the level of empathic accuracy (i.e., move towards empathic *inaccuracy*). More specifically, there are situations in which an *esteem-regulatory motive* (i.e., a motive to make desirable/esteem-enhancing inferences) can occur instead of an accuracy motive, and consequently, someone can shift from one motivational mindset to another, according to their needs and concerns given the current situation. This model specifies particular situations in which such an esteem-regulatory motive may be triggered. More specifically, every couple has certain areas or topics of conflict (i.e., “danger zones”) that should not be approached or discussed for the sake of the relationship. Nevertheless, a partner may introduce such a topic, and initiate a potentially *threatening* interaction. In such a situation, Ickes and Simpson (1997) assume that the non-initiator has two options, either the topic may be rejected and the non-initiator may try to escape from the situation, or, when escaping is impossible or inappropriate, this partner may try to minimize potential harm by avoiding or ignoring the threatening discussion. The empathic (in)accuracy model proposes that someone may engage in cognitive avoidance or empathic *inaccuracy*, when their partner’s or their own thoughts/feelings are perceived as likely to cause distress. Hence, cognitive avoidance can be considered to involve shifting away from an *accuracy motive* to a motive to inaccurately interpret thoughts/feelings that are considered as threatening (*esteem-regulatory motive*) because this defense strategy may be efficient in preserving a low level of personal and relational distress in the short-term (Ickes & Simpson, 1997).

Evidence for this assumption comes from a study by Simpson and colleagues (1995) that showed an association between high levels of perceived threat and lower levels of

empathic accuracy. More specifically, partners who were dating who were confronted with attractive opposite-sex alternatives perceived these as threats to their relatively new relationships and consequently showed lower levels of empathic accuracy. This finding suggests that the participants felt the need to protect their relationship from accurate inference of their partner's thoughts about the attractive alternatives. Again, however, it should be noted that research directly targeting this assumption is scarce.

Empathic Accuracy and Partners' Situational Well-being

The main key in unraveling the discussion about whether empathic accuracy has a positive or negative role to play in intimate relationships can be found in the final assumption of the EA-model. Both empirical and clinical observations indicate that empathic accuracy has the potential to either harmonize or harm intimate relationships. However, combining the results of these observations overlooks the important distinction between the effect of empathic accuracy on long-term outcomes versus short-term outcomes, whilst also denying the existence of *benevolent* misunderstandings.

Long-term versus short-term outcomes. Previous work on social support (Verhofstadt, Buysse, Ickes, Davis, & Devoldre, 2008; Verhofstadt et al., 2016) has found that empathic accuracy is predictive of better support provision as individuals who are more able to recognize their partner's needs can provide more welcome support to their partner in distress. Empathic accuracy can also prevent interactions from escalating into threatening conflicts by stimulating accommodative behavior (Kilpatrick, Bissonnette, & Rusbult, 2002) or by reminding someone that their partner is devoted (Gordon & Chen, 2015) – as reflected by an accurate understanding of the target's feelings and perspectives – during disagreements. Taken together, empathic accuracy can be considered to be beneficial to relationships.

However, some nuance is necessary, as an important study (Simpson, Oriña, & Ickes, 2003) based on the assumptions underlying the empathic accuracy model has convincingly demonstrated that the effect of empathic accuracy on short-term outcomes can differ depending on the situation. The findings indicated that when the perceiving partner reached higher levels of empathic accuracy with regard to the target partner's thoughts/feelings and these were rated as relationship-threatening, then his or her post-interaction feelings of closeness diminished in comparison to perceivers who dialed down their accuracy, therefore not experiencing such a decrease. These findings demonstrate that the short-term consequences of empathic accuracy depend on a perceiver's subjective experiences of threat (i.e., *perceived threat*) given the situation. When taking a closer look at the association between perceived threat and the consequences of partners' levels of empathic accuracy, it is noticeable that these consequences are already inherent to the definition of perceived threat. More specifically, a situation can only be perceived as threatening when the consequences resulting from accurately inferring the partner's thoughts/feelings are assessed as negative. The former suggests that a context cannot be characterized as threatening as such, but depends on the perceptions and assessment of the perceiving partner.

Benevolent misunderstandings. A study by Sillars (1985) suggested three cases in which the consequences of empathic accuracy might be assessed as negative, namely by revealing (1) *irreconcilable differences* (differences or disagreements that cannot be resolved), (2) *benevolent misconceptions* (assumptions about the partner or relationship that are not based on reality but have the intention of improving or maintaining relationship satisfaction and stability), and (3) *unpleasant truths* (distressing interpretations or assumptions held or formed by the target about the perceiving partner's behavior or character). Disclosing this kind of information might have an impact on either the

relationship, by increasing conflict or relationship insecurity, on the *perceiver's self*, by undermining a consistent self-view or belief, or on both. How partners cope with these disclosures will differ from individual to individual, and therefore they will not always have a negative impact on the perceiver's relationship or self-esteem in the long-term. However, these disclosures generally have a short-term destabilizing effect, reflected in a post-interaction drop in relationship well-being or/and personal well-being. So, in addition to the statement that empathic accuracy can be beneficial to relationships, it should be noted that greater understanding can also increase distress and frustration within the relationship.

Relationship versus self-protection. These findings lead us to the hypothesis that it might not just be relationship-protection, as specified by the model, that can be a motive to be empathically *inaccurate* during potentially threatening situations, but that there is also a role for *self-protection* serving as a similar motive. Implicit evidence for self-threat as an underlying motive for empathic inaccuracy has been found in research investigating the content of partners' thoughts (Hinneken, Sillars, Verhofstadt, & Ickes, submitted; Sillars, Roberts, Leonard, & Dun, 2000). These studies suggest that an individual's thoughts during conflict often concern their partner's behavior or personality, and can be labeled as *personal appraisals* (i.e., thoughts including "personal evaluations and perceived characteristics of the partner, or the self"; Sillars et al., 2000, p. 487). This implies that although a thought can be perceived as possessing no potential threat to a relationship, the same thought can be perceived as very threatening to the perceiver's self-esteem or self-image. The latter may trigger inaccuracy as a way of preserving an individual's dignity and pride, regardless of how they are perceived by their partner (i.e., self-verification theory; Swann, 1983; the relationship dissolution model; Fine & Harvey, 2013).

The Present Study

The main focus of this study was to examine the assumptions held by the empathic accuracy model. Taken together, if these assumptions are correct, then (a) a partner's level of empathic accuracy is manageable within the boundaries of his or her ability, (b) a partner's level of empathic accuracy should be negatively associated with perceived relationship-threat, and (c) the association between empathic accuracy and short-term (relationship/personal) well-being should be moderated by perceived (relationship/self) threat.

Manageability. To test the first assumption, partners' *baseline levels of empathic accuracy* will be determined as this sets the lower boundary of their empathic accuracy ability. Therefore, the level of empathic accuracy when confronted with an unknown target was measured in addition to the participant's level of empathic accuracy for the own partner. This baseline accuracy was measured by means of the *standard stimulus paradigm* in which each partner observes an interacting stimulus couple (SS-paradigm; Kagan, 1977). A feature of the SS-paradigm necessary to determine a reliable baseline score is that every individual infers the same target "stranger" which (1) ensures that there is no shared history or relationship between the target and the perceiver, and (2) allows us to compare the accuracy scores of the different perceivers. The absence of a shared history between the perceiver and target is necessary to make sure that each perceiver's inferences are entirely based on his or her ability to detect and interpret their target's situational cues (whilst the obviousness of the target's cues, i.e., readability, is controlled and invariable; Marangoni, Garcia, Ickes, & Teng, 1995). Furthermore this interaction should be perceived as non-threatening because the perceiver is not personally involved in the interaction.

Taken together, the first part of our assumption predicted that empathic accuracy is manageable and thus partners' accuracy scores should fluctuate across the seven points of measurement during the interaction (*H1*). Furthermore, following the reasoning of the empathic accuracy model, our second hypothesis predicted that a perceiving partner's level of empathic accuracy for their own target partner's non-threatening thoughts/feelings should be higher than the perceiver's level of empathic accuracy for the unknown target's thoughts/feelings (*H2a*), due to an underlying *accuracy motive* which will be present when inferring detail from one's own partner but not when inferring from an unknown partner (in addition to the shared knowledge on which partners can rely when making inferences).

Perceived threat. In contrast to this accuracy motive for predicting moderate to high levels of empathic accuracy for non-threatening thoughts/feelings, is the assumption of an *esteem-regulatory motive* to predict low levels of empathic accuracy (i.e., inaccuracy) for threatening thoughts/feelings. This esteem-regulatory motive is considered as a defensive mechanism that protects short-term well-being. Thus, the second part of the first hypothesis predicted that the perceiving partner's level of empathic accuracy for the target partner's threatening thoughts/feelings would be lower than the perceiving partner's level of empathic accuracy for the target partner's non-threatening thoughts/feelings, and may even drop below their baseline level of empathic accuracy (i.e., the lower boundary of empathic ability measured in the SS-paradigm; *H2b*).

Additionally, previous research has found indications that accuracy for thoughts/feelings can be distinguished at an empirical and conceptual level (e.g., Barone et al., 2005; Ickes & Cheng, 2011), therefore, empathic accuracy was split into empathic accuracy for thoughts and empathic accuracy for feelings. However, no specific predictions on the differential impact of perceived threat on accuracy for thoughts versus feelings can be derived from the existing empathic accuracy literature.

Situational well-being. Finally, we offer predictions about the association between empathic accuracy for thoughts/feelings and short-term well-being as moderated by perceived threat. As our previous hypothesis predicted a drop in empathic accuracy when threat is perceived, the subsequent hypothesis tested whether the assumption of an underlying protection mechanism is a valid one by taking the consequences of empathic (in)accuracy into account. Therefore, we compared the association between a perceiving partner's level of empathic accuracy for the target partner's *non-threatening* thoughts/feelings and short-term well-being (i.e., post-interaction measures of well-being) with the association between a perceiving partner's level of empathic accuracy for the target partner's *threatening* thoughts/feelings and short-term well-being. As already introduced above, the empathic accuracy model assumes that an underlying protection mechanism is activated to protect relationship well-being in the short term, however, the current study assumed that this mechanism is also activated to protect the perceiver's personal well-being. More specifically, the second hypothesis predicted a positive association between empathic accuracy for thoughts/feelings rated as not threatening to the relationship and the perceiving partner's level of relationship closeness (i.e., a situational measure of relationship well-being; *H3a*) and a positive association between empathic accuracy for thoughts/feelings rated as not threatening to the perceiving partner's self and his/her mood (i.e., a situational measure of personal well-being; *H3b*). Furthermore, our third hypothesis predicted a negative association between empathic accuracy for thoughts/feelings rated as threatening to the relationship and the perceiving partner's reported level of relationship closeness (*H4a*) and a negative association between empathic accuracy for thoughts/feelings rated as threatening to the perceiving partner's self and his/her mood (*H4b*).

Expansion of the initial model. Although Ickes and Simpson (1997) remarked that the relationship-protection motive might only be clearly evident for perceivers who are highly committed to their relationship, this moderating variable was not included in the final model. However, we assumed that the predicted negative association between empathic accuracy for relationship-threatening thoughts/feelings on relationship closeness would be moderated by a perceiver's level of commitment (*H5a*). Similarly, as the current study also focused on perceived self-threat, we assume that the value that each partner reported placing on the goal of holding a consistent view of them self (i.e., their strength of self) would moderate the predicted negative association between empathic accuracy for thoughts/feelings rated as threatening to the perceiver's self and the perceiver's mood (*H5b*). Finally, we took into account that women might respond more to perceived threat to their relationship as reflected in their empathic accuracy levels and reported well-being because women are described to be more relationship-oriented in their thinking about relationships and in their self-presentations than men (e.g., Cross & Madson, 1997), whereas men might react more to perceived threat to themselves (e.g., Vanhee, Lemmens, Stas, Loeys, & Verhofstadt, 2016). Therefore, potential gender differences were explored.

METHOD

The present data were collected within a broader observational study on conflict in couples; some results of this study – unrelated to the present research questions – already have been published (Hinneken, Ickes, De Schryver, & Verhofstadt, 2016; Hinneken, Vanhee, De Schryver, Ickes, & Verhofstadt, 2016).

Participants

The sample consisted of the 310 members of 155 cohabiting/married heterosexual couples recruited in the context of a large observational study called the “UGent Family Lab Couple Study”. The recruitment strategy enlisted couples to volunteer for the study through a general call (via posters and social media), and through the contacts of a group of 16 Master’s level clinical psychology students who recruited couples in their networks including family, friends, and neighbors. Participation was limited to Dutch-speaking couples who had been together in a heterosexual relationship for at least one year and married or cohabiting for at least six months. The data of three couples that were included in the original sample were later excluded from the analyses due to missing questionnaire responses or questionnaire responses that revealed failure to meet the inclusion criteria.

The couples had been together at the time of the study for an average of 12.15 years ($SD = 11.76$; range = 1 to 47 years). The men averaged 36.29 years of age ($SD = 14.05$) and the women averaged 34.21 years ($SD = 13.60$) (age range = 19 to 76 years). The sample represented several levels of education: the highest level of education was primary education for 6 individuals (1.9%), lower secondary school for 29 individuals (9.4%), higher secondary school for 101 individuals (32.6%), short courses of higher education for 96 people (31.0%), and long courses of higher education for 75 individuals (24.2%), while 1 individual had completed a PhD program (0.3%), and 2 individuals had an unknown level of education due to missing data.

Procedure

Couples who expressed interest in taking part were visited at home, where they were provided with information about the study and evaluated to determine if they met the

inclusion criteria. The partners received instructions to independently complete online questionnaires that measured relationship satisfaction and other variables not relevant to the current report. After both partners had completed the questionnaires, they were contacted by telephone to schedule an appointment for the observational part of the study, which could take place either at the university or at the couple's home. The observational part of the study consisted of a conflict interaction and a post-interaction video-review task. Each couple received monetary compensation of €20 for completing the questionnaire session and an additional €20 for completing the observational session. Participants were informed that they could withdraw from the investigation at any time; however, all couples completed both phases of the research. The study was approved by the ethical committee of the Faculty of Psychology and Educational Sciences at the Ghent University.

Commitment. Partners' level of commitment to the relationship was assessed with a subscale of the Investment Model Scale (IMS; Rusbult, Martz, & Agnew, 1998; Dutch translation of Van Lange et al., 1997). The questionnaire consists of four subscales (*satisfaction*, *alternatives*, *commitment*, and *investment*), but for the purpose of the current study, we only used the commitment scale to gauge how engaged a partner was in the relationship and how dependent they were willing to be. The items were scored on a 9 point-Likert scale ranging from 1 = *totally disagree* to 9 = *totally agree*, and were summed to make a total score. This scale has been found to be the strongest predictor of longevity in a relationship beyond the other subscales (e.g., Drigotas & Rusbult, 1992; Rusbult, Johnson, & Morrow, 1986). The internal consistency of the scale was acceptable (Cronbach's $\alpha_{\text{men}} = .75$, and $\alpha_{\text{women}} = .68$).

Strength of identity. The Sense of Self Scale (SOS; Flury & Ickes, 2007) was developed to measure the strength of an individual's identity. The questionnaire consists of twelve items that measure four aspects of identity: (1) difficulty in keeping one's own

identity separate from that of others, (2) a lack of knowledge about one's own interests, opinions, and personality, (3) sudden shifts in feelings, values, and preferences, and (4) the feeling of a tenuous existence. The items are scored on a 4 point-Likert scale (ranging from 1 = *not at all typical for me* to 4 = *very typical for me*). Individuals who have a weak sense of self will have a high total score indicating that they feel unsure about who they are, what they think or what their own opinions are. Individuals who have a strong sense of self can be described as being certain about who they are, having firm personal preferences, and having a clearly defined personality. The internal consistency of the scale was good (Cronbach's $\alpha_{\text{men}} = .83$, and $\alpha_{\text{women}} = .83$).

Conflict interaction task. In the observational part of the study, the couples were asked to participate in a conflict discussion task that was similar to those used in previous studies on marital conflict (e.g., Fletcher & Thomas, 2000; Simpson et al., 2003). Couples who chose to come to the university were escorted to a laboratory that was furnished to resemble a living room but equipped to allow video-recording of the conflict discussion ($n = 114$). In cases in which the interaction task was conducted at the couples' home, the partners were seated in a quiet room where we installed a small portable camera ($n = 41$). In both settings, the recording took place with the couple's knowledge and written consent.

Prior to the conflict discussion, the partners were separately asked to select a problem or issue from a list of common topics of conflict in intimate relationships of which the source was either their partner or the relationship and which caused relationship distress or recurring disagreement. The issues (e.g., trust, intimacy, finances) were derived from previous work on sources of conflict within intimate relationships (Kurdek, 1994). One of the conflict issues selected by the partners was then randomly chosen as the topic for the subsequent discussion. The partner who selected the issue introduced it to the other partner

and the couple was asked to discuss it together for eleven minutes. Both partners were instructed to try to act as they would do when discussing a similar problem with each other at home.

Relationship closeness. During the course of the observational session, partners' self-reported level of relationship closeness was assessed twice (once before and once after the conflict interaction task) using the Inclusion of the Other in the Self Scale (IOS; Aron, Aron, & Smollan, 1992). This scale consists of a single pictorial item in the form of Venn diagrams of which partners have to select the diagram that accurately represents their impression of relationship closeness at that moment in time.

Mood. Similar to the IOS, partners' levels of personal well-being were also rated twice using the Self-Assessment Manikin (SAM; Bradley & Lang, 1994). This pictorial three-item questionnaire measures three different components of a person's affective or emotional reaction (pleasure or mood, arousal, and dominance), yet, for the purpose of the current study, only the first item was used. Participants rated their mood on a 9-point Likert scale ranging from an unhappy, sad figure to a happy, smiling figure.

Video-review task.

Dyadic interaction paradigm. Immediately after the post-interaction task both partners individually completed a video-review task similar to that used in other studies (e.g., Ickes, Stinson, Bissonnette, & Garcia, 1990; Verhofstadt et al., 2016). The partners were separated and asked to re-experience and re-live their interaction while they viewed a video of it on a laptop. The video presentation was controlled by an interactive software package (Hinneken & Kimpe, 2014) developed to facilitate the video-review task. Every 90 seconds, the video paused and the same set of instructions appeared on the screen. First, each partner was asked to (a) type the specific thoughts/feelings that he or she had at that

point in the interaction into a blank box in an online questionnaire, (b) rate how obviously (i.e., how transparently) they believed their expression of these thoughts/feelings was in their behavior at the time, and (3) rate how threatening they perceived the content of their thoughts/feelings to be to *themselves*, *their partner*, and *their relationship*. Next, each member of the couple was asked to (a) infer the specific content of each of their partner's thoughts/feelings, and to type each inference into a blank box, (b) rate how obviously they believed their partner expressed each thought or feeling in his or her behavior at the time, and (3) rate how threatening each of their partner's inferred thoughts/feelings were to *themselves*, *their partner*, and *their relationship*. The ratings of transparency were recorded on a Likert scale that ranged from 0 = *not at all obvious* to 4 = *totally obvious*, and the ratings of perceived threat were recorded on a Likert scale that ranged from 0 = *not threatening* to 7 = *very threatening*. The instructions emphasized that the reported thoughts/feelings should be based on the 10-second segment of interaction that immediately preceded the pause in the video. The software gave participants the option to re-observe the 10-seconds of interaction that occurred before each pause.

Standard stimulus task. Similar to the dyadic interaction paradigm, participants were asked to observe a video of an unknown couple engaging in a conflict-interaction (in which the stimulus couple had agreed to display their videotaped conflict interaction). After confirming that they did not know or recognize the stimulus couple, each participant was asked to imagine experiencing the couple's interaction themselves, and to observe the partner of the opposite gender. Similar to the review task of the dyadic interaction paradigm, the video was paused at regular intervals and analogously, the participants were asked (a) to make inferences about the thoughts/feelings of the partner of the opposite gender, and (b) to score how obviously this partner had expressed these thoughts/feelings during the interaction on a 5-point Likert scale.

Empathic accuracy. Four independent judges rated the degree of similarity between the actual thought or feeling that each (stimulus/own) partner recorded and the content of the corresponding inferred thoughts or feelings that the other (stimulus/own) partner recorded. Following the recommendations of Ickes and colleagues (1990), the degree of similarity was rated in each case using a 3-point scale on which 0 = *different content from the actual thought or feeling*; 1 = *similar, but not the same content as the actual thought or feeling*, and 2 = *essentially the same content as the actual thought or feeling*. Overall empathic accuracy scores were then computed as a simple percentage measure of the number of “accuracy points” earned, divided by the total number of “accuracy points” available and multiplied by one hundred.³ Generally, the empathic accuracy coding had acceptable reliability. For the dyadic interaction paradigm, ICC scores of EA_{feelings} were .70 and .74, and EA_{thoughts} were .67 and .67, both for men and women, respectively. In the standard stimulus task, ICC scores of EA_{feelings} were .83 and .75, and EA_{thoughts} were .67 and .67, both for men and women, respectively.

RESULTS

Descriptive Statistics

The sample-based means, standard deviations, ranges, and paired sample *t*-tests for all study variables are presented in Table 1. According to the paired sample *t*-tests, men and women generally scored very similarly on the study variables. A few significant gender differences emerged. Partners seemed to differ in their empathic accuracy score for the

³ The theoretical range of this percentage-correct accuracy measure was 0 (*none of the possible accuracy points was earned*) to 100 (*all of the possible accuracy points were earned*).

standard stimulus task, as men seemed to reach higher levels of empathic accuracy both for thoughts/feelings. Furthermore, partners differed on the measures of perceived threat for the relationship, both in response to the partner's thoughts/feelings, with men seeming to experience more potential threat from the thoughts/feelings of his female partner, reflected in higher mean scores. Additionally, men and women also seemed to differ in their scores on the sense of self scale as women scored slightly higher, indicating a weaker sense of self.

Table 1

Descriptive Statistics for the Study Variables

Variable	Males			Females			Difference		Paired sample <i>t</i> -test
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	
Empathic accuracy DP for									
feelings	21.29%	12.15	0.00-68.00	21.56%	12.23	0.00-52.00	-0.30	15.16	<i>t</i> (154) = -0.22, <i>ns</i>
thoughts	20.33%	11.70	0.00-55.00	19.27%	11.66	0.00-48.00	1.06	13.85	<i>t</i> (154) = 0.95, <i>ns</i>
Empathic accuracy SS for									
feelings	19.19%	11.54	2.00-50.00	15.70%	10.29	2.00-59.00	3.49	14.46	<i>t</i> (153) = 3.00, <i>p</i> < .05
thoughts	17.12%	10.49	0.00-50.00	14.94%	7.87	0.00-41.00	2.18	11.70	<i>t</i> (153) = 2.31, <i>p</i> < .05
Perceived threat of feelings									
to the relationship	1.88	1.17	1.00-6.29	1.67	0.89	1.00-5.14	0.21	1.13	<i>t</i> (154) = 2.26, <i>p</i> < .05
to one's self	2.01	1.11	1.00-5.43	1.96	1.04	1.00-5.43	0.05	1.26	<i>t</i> (154) = 0.51, <i>ns</i>
Perceived threat of thoughts									
to the relationship	1.91	1.14	1.00-5.57	1.67	0.90	1.00-4.57	0.24	1.16	<i>t</i> (154) = 2.53, <i>p</i> < .05
to one's self	1.97	1.04	1.00-5.57	1.90	1.06	1.00-5.14	0.07	1.25	<i>t</i> (154) = 0.66, <i>ns</i>
Pre-discussion closeness	5.67	1.11	2.00-7.00	5.79	1.26	1.00-7.00	-0.11	1.21	<i>t</i> (153) = -1.07, <i>ns</i>
Post-discussion closeness	5.79	1.10	2.00-7.00	5.75	1.20	1.00-7.00	0.03	1.12	<i>t</i> (151) = 0.36, <i>ns</i>
Pre-discussion mood	7.20	1.14	1.00-9.00	7.03	1.22	3.00-9.00	0.18	1.74	<i>t</i> (153) = 1.25, <i>ns</i>
Post-discussion mood	6.99	1.37	1.00-9.00	7.01	1.51	1.00-9.00	-0.01	2.11	<i>t</i> (148) = -0.80, <i>ns</i>
Commitment	51.82	6.04	24.00-56.00	52.53	5.06	24.00-56.00	-0.71	7.15	<i>t</i> (152) = -1.22, <i>ns</i>
Sense of self	23.68	6.08	12.00-40.00	25.48	6.27	14.00-44.00	-1.81	8.19	<i>t</i> (150) = -2.71, <i>p</i> < .01

Note. * *p* < .05, ** *p* < .01; Perceived threat of thoughts/feelings as rated by the target (= men's score is threat rated by the female partner and vice versa).

Test of the Research Hypotheses

Manageability. We analyzed the data using a Multilevel model for dyadic data with repeated measures (i.e., data collected at seven time points during video-review) that treats the three levels of distinguishable dyadic data (time points nested within persons nested within couples) as two levels of random variation. The lower level represents variability due to within-person repeated measures for male and female partners separately, and the upper level represents between-person variability across male and female partners.

Table 2

Results of the Multilevel Model Analyzing Variability on the Within-Person and Between-Person Level

	Empathic accuracy		Threat			
	Feelings	Thoughts	Relationship		Self	
			Feelings	Thoughts	Feelings	Thoughts
σ^2_M	0.32	0.2	0.91	0.95	1.32	1.23
σ^2_V	0.32	0.27	0.87	0.96	1.25	1.13
$\rho\sigma_M\sigma_V$	.07	0.08	-.31	-.33	-.30	-.31
τ_M	0.01	0.02	0.79	0.82	0.74	0.76
τ_V	0.01	0.02	0.79	0.70	0.80	0.74
$\rho\tau_M\tau_V$	.90	.74	.96	.97	.97	.95

Note. σ denotes variability due to within-person repeated measures; τ denotes variability due to between-person variability.

Table 2 shows that there is hardly any between-person variability in empathic accuracy for thoughts and feelings. But, there is a high degree of within-person variability for empathic accuracy suggesting that partners' level of empathic accuracy is not fixed, but indeed manageable (*HI*). However, these variability scores do not inform us about what accounts for this variability in partners' empathic accuracy scores. Furthermore, it is

noticeable that partners seem to have very similar overall levels of empathic accuracy, but their within-moment correlation is rather small.

Perceived threat. When taking a closer look to the variability of the hypothesized predictor of perceived threat, Table 2 shows that the between-person variability is a bit smaller than the within-person variability for threat. Remarkable is that partners' within-moment correlation is negative for threat. Regarding our second hypothesis, our model did not find a significant association between empathic accuracy and threat ($p > .05$). This null-finding suggests that the variability in a partner's empathic accuracy score for thoughts/feelings is not due to any form of perceived threat.

The same conclusion could be drawn from the analyses regarding the comparison between empathic accuracy during the DI-paradigm (for the participant's own partner) and the SS-paradigm (for the unknown target). Our hypotheses were tested by the means of one-sample t -tests that allowed us to control for the readability of the targets. For each individual, four scores of empathic accuracy were taken into account. The empathic accuracy score(s) for thoughts/feelings on the time point(s) rated by the target as least threatening during the interaction (i.e., those that involved empathic accuracy for not-threatening thoughts/feelings) and the empathic accuracy score(s) on the most threatening time point(s) during the interaction (i.e., those that involved empathic accuracy for threatening thoughts/feelings) were selected for the analyses. Prior to each t -test, a simple linear regression was fit to the data with each participant's level of empathic accuracy at the least/most threatening time point as the dependent variable and their partner's readability as the independent variable. Next, the estimated regression coefficients (b_0 and b_1) were used to predict the estimated mean (M_{pred}) and compute a value of the independent variable when their partner's readability score would be equal to that of the stimulus partner, that is, $M_{\text{pred}} = b_0 + b_1[\text{readability target SS}]$. We then compared, using a one-

sample *t*-test, whether the sample mean of partners' levels of empathic accuracy during the SS-paradigm significantly differed from the estimated mean (M_{pred}). Table 2 shows the results of the *t*-tests comparing each perceiver's expected mean level of empathic accuracy in the DI-paradigm when the readability of their own partner was equal to the readability of the stimulus partner and the same perceiver's level of empathic accuracy in the SS-paradigm. These comparisons were conducted twice, once for each perceiver's level of empathic accuracy for their own/the unknown partner's non-threatening thoughts/feelings and once for the perceiver's level of empathic accuracy for their own/the unknown partner's most threatening thoughts/feelings.

As predicted, perceivers' expected mean levels of empathic accuracy for their own partner's non-threatening thoughts/feelings was higher than those for the unknown partner's non-threatening thoughts/feelings (*H2a*; see Table 3). The second part of the hypothesis predicted that perceivers' levels of empathic accuracy for the partner's threatening thoughts/feelings would be lower than the perceivers' levels of empathic accuracy for the partner's non-threatening thoughts/feelings. Although Table 3 shows a tendency in the predicted direction for women, an inverse trend was observed for men in that men's empathic accuracy scores were higher when female partners had threatening thoughts/feelings. Additional paired *t*-tests indeed found our hypothesis to be disconfirmed (*H3b*) as no significant differences were found either between women's empathic accuracy for their male partner's non-threatening thoughts versus threatening thoughts, $t(154) = .88$, *ns*, or for empathic accuracy for their male partner's non-threatening feelings versus threatening feelings, $t(154) = 1.15$, *ns*, were found. Similarly, no significant differences were found between men's empathic accuracy for their female partner's non-threatening thoughts versus threatening thoughts, $t(154) = -1.16$, *ns*, or for empathic accuracy for their female partner's non-threatening feelings versus threatening feelings, $t(153) = .72$, *ns*.

Perceivers' levels of empathic accuracy for their own partner always remained higher than their baseline level of empathic accuracy (i.e., empathic accuracy for the unknown target), both for non-threatening and threatening thoughts/feelings.

Table 3

Results of the Comparison between the Expected Levels of Empathic Accuracy during the Dyadic Interaction Paradigm and the Observed Levels of Empathic Accuracy during the Standard Stimulus Paradigm

	Men			Women		
	M_{DP}	M_{SS} [95% CI]	t	M_{DP}	M_{SS} [95% CI]	t
EA for feelings						
Min. threat	22.67	19.19	-3.74**	32.25	15.70	-19.96**
Max. threat	24.58	[17.35-21.03]	-5.79**	25.20	[14.06-17.34]	-11.82**
EA for thoughts						
Min. threat	25.18	17.11	-9.54**	23.05	14.94	-12.81**
Max. threat	28.92	[15.44-18.79]	-13.96**	22.58	[13.68-16.19]	-12.06**

Note. ** $p < .01$; Min. threat = thoughts/feelings rated as least threatening on both scales; Max. threat = thoughts/feelings rated as most threatening on both scales.

Empathic accuracy and situational well-being. Despite the non-significant association between empathic accuracy and perceived threat, the latter could still moderate the association between accuracy and situational well-being. However, multi-level modeling could not be used to test these hypotheses as we only measured pre- to post-interaction differences of situational well-being instead of repeated measurements at each time point during the interaction. Therefore, the effects of empathic accuracy on the outcome variables were tested for the least threatening thoughts/feelings and for the most threatening thoughts/feelings. This strategy enabled us to test our hypotheses twice, once in the complete sample of the current data-set and once in a subsample. The latter made it possible to test the robustness of our findings as the subsample excluded couples where the

partners reported no variation in their perceived threat ratings. The rationale for the latter subset analysis is the maximization of the use of the variance of the perceived threat ratings, which is important given that this variation was often limited. To assess the effect of empathic accuracy on short-term well-being, path analysis models in the Structural Equation Modeling (SEM) framework were fitted for men and women simultaneously, thereby allowing for correlations in the outcomes between partners to be detected. This allowed us to explore whether empathic accuracy at low or high levels of threat, calculated as explained above, was associated with well-being in men and women.

Table 4 reports results concerning the third and fourth hypothesis. The first part of the third hypothesis (*H3a*) was partially confirmed for men, as a positive effect on their level of relationship closeness was found for empathic accuracy for the feelings they detected in their female partners rated as not threatening to their relationship. This effect was also significant for the subsample of participants selected from our dataset, demonstrating the robustness of this effect, $\beta = 0.55$, $p < .05$, $n = 77$. However, this was not found for empathic accuracy for non-threatening thoughts. The second part of the hypothesis (*H3b*) was partially confirmed for women, as a positive effect on their self-reported mood was found for empathic accuracy for feelings that they had detected in their male partners and rated as not threatening. The robustness of this effect was demonstrated, as this association was also significant in the sample subset, $\beta = .96$, $p < .01$, $n = 98$. As with the men, this effect was not found for empathic accuracy for non-threatening thoughts. Although not predicted, two other interesting findings emerged, as for women the results indicated a positive effect of empathic accuracy for feelings detected in their male partners and rated as not threatening to their relationships on their self-reported mood, and for men the results suggested a positive trend between empathic accuracy for their female partners' feelings rated as non-threatening to themselves and their levels of relationship closeness.

Table 4

Results of the Structural Equations Predicting Changes in Perceived Closeness and Changes in Mood from Empathic Accuracy for Feelings and Thoughts at Different Levels of Perceived Relationship- or Personal Threat

	Δ Closeness				Δ Mood			
	Men		Women		Men		Women	
	β	SE	β	SE	β	SE	β	SE
EA for feelings...								
Min. relationship-threat	.35*	.17	.20	.25	-.13	.33	.79*	.34
Max. relationship-threat	.01	.15	.24	.23	-.27	.27	-.05	.32
Min. self-threat	.28 ⁺	.17	-.03	.23	-.10	.32	1.00**	.32
Max. self-threat	-.40**	.14	-.08	.19	-.23	.26	-.10	.27
EA for thoughts...								
Min. relationship-threat	.00	.16	-.13	.28	-.32	.31	-.16	.40
Max. relationship-threat	-.23 ⁺	.13	.08	.23	-.15	.25	-.08	.33
Min. self-threat	.04	.19	-.32	.23	-.03	.37	-.19	.33
Max. self-threat	-.19	.12	.06	.20	-.27	.24	.02	.29

Note. ⁺ $p < .10$, * $p < .05$, ** $p < .01$; $N = 155$; Min. relationship-threat = thoughts/feelings rated as least threatening for the relationship; Max. relationship-threat = thoughts/feelings rated as most threatening for the relationship; Min. self-threat = thoughts/feelings rated as least threatening for the perceiver's self; Max. self-threat = thoughts/feelings rated as least threatening for the perceiver's self.

Regarding the fourth hypothesis, the results suggest a negative trend between men's empathic accuracy for thoughts that they detected in their female partners and rated as threatening to the relationship and their self-reported levels of relationship closeness (*H4a*). However, no other significant findings confirming our hypotheses were found, i.e., there was no further detectable negative impact of empathic accuracy for thoughts/feelings rated as relationship- or self-threatening on closeness or mood (*H4a&b*). Again, an effect that was not predicted was found for men, in that men's empathic accuracy for feelings that

they detected in their female partners and rated as being threatening to themselves was negatively associated with their self-reported levels of relationship closeness.

Moderating variables. To test our final hypothesis, the analyses concerning hypotheses 3 and 4 were conducted again, but now either including the perceiver's level of commitment or the perceiver's sense of self as moderator.

Commitment. The first set of analyses included the perceiver's level of empathic accuracy for the least threatening thoughts/feelings and for the most threatening thoughts/feelings, the perceiver's level of commitment, and their interaction term as the independent variables, and their relationship closeness or mood as the dependent variable. No significant results emerged from this set of analyses, suggesting that the level of commitment is not a moderator of the association between empathic accuracy and perceived threat on changes in relationship closeness or mood (*H5a*).

Sense of Self. The second set of analyses was similar, but now included the perceiver's self-reported sense of self score. Two models that were previously not significant, now reached significance due to the significant two-way interactions once sense of self was included as a moderator (*H5b*). A first significant finding indicated a positive effect of men's empathic accuracy for feelings detected in their female partners rated as not threatening to themselves on relationship closeness that is moderated by men's self-reported sense of self score, with the positive effect being smaller for men with a weaker sense of self, $\beta = -.06$, $p < .05$. A second significant finding indicated a negative effect of men's empathic accuracy for feelings detected in their female partners and rated as threatening to themselves on the perceiver's self-reported mood, which was moderated by men's self-reported sense of self score, in that this negative effect is, surprisingly, smaller for men with a weaker sense of self, $\beta = 0.12$, $p < .01$. A similar moderating trend was found in

women; however, it was not found to be statistically significant at the $\alpha < .05$ level, $\beta = .08$, $p = .08$.

DISCUSSION

The general aim of the current study was to examine the three principal questions concerning empathic accuracy in intimate relationships that form the basis for the core assumptions of the empathic accuracy model developed by Ickes and Simpson (1997). Although previous empathic accuracy research has offered some indications directly or indirectly supporting these assumptions, no published research has explicitly tested them. Because the model provides an important theoretical framework to gain further insight into the complex field of actual understanding, empirical research is essential to verify the model and to deduce valuable advice for clinical practice. The current study investigated each assumption separately, first of all by comparing perceivers' levels of empathic accuracy for their own partners and an unknown partner for different levels of threat, and testing the manageability of accuracy based on the assumption of underlying accuracy versus esteem-regulatory motives. Secondly, the impact of both relationship-threat and self-threat on the associations between empathic accuracy and short-term relationship and personal well-being were tested by means of an advanced statistical analysis strategy and finally, the potential moderation effects of commitment and sense of self were investigated.

In the sections that follow, the results and their implications for the empathic accuracy model are discussed, and some future directions are suggested, taking into account the limitations of the current study.

Manageability and Perceived Threat

As a first step, the assumption concerning the manageability of empathic accuracy was examined. We reasoned that if this assumption is a valid one, then a partner's level of empathic accuracy would vary within the boundaries of his or her ability. The second step investigated the assumption that a shift from an accuracy motive to an esteem-regulatory motive might be triggered by perceived threat and that this shift accounts for the variation in each individual's accuracy level. Here, we reasoned that if this assumption is valid, then partner's level of empathic accuracy should be negatively associated with their self-reported levels of perceived threat to both their relationship and themselves. The first hypothesis was confirmed as the variability scores indeed suggested that a partner's empathic accuracy scores fluctuated during the interaction.

The first part of the second hypothesis derived from these assumptions was confirmed, as perceivers showed higher levels of empathic accuracy for their partner's non-threatening thoughts/feelings in comparison to their empathic accuracy for the thoughts/feelings of an unknown target. This could be due to the effect of the accuracy-motive, which stimulates empathic accuracy as a means of reaching accurate inferences of the partner's thoughts/feelings. However, the assumption that underlying motives, more specifically perceived threat, is able to stimulate (dial up) or downgrade (dial down) the level of empathic accuracy was not confirmed as there was no significant association between both variables. Additionally, each perceiver's level of empathic accuracy for non-threatening thoughts/feelings was compared with their level of accuracy for threatening thoughts/feelings. And as expected, the prediction that the latter should be lower than the former, was not confirmed. Women's levels of empathic accuracy showed a tendency in the predicted direction, but surprisingly, men's levels of accuracy indicated a tendency in the opposite direction, as their empathic accuracy levels for their female partner's

threatening thoughts/feelings were higher than for not threatening thoughts/feelings. It should be noted, however, that none of the observed increases or decreases in the empathic accuracy level reached statistical significance.

Furthermore, the results showed that the perceiver's level of empathic accuracy for their own partner was higher than their level of empathic accuracy for the unknown target regardless of the level of threat. These results suggest that familiarity with the partner is a stronger predictor of accuracy than the potential impact of threat. Nonetheless, an important consideration regarding these findings is that the level of threat remained rather low in the interactions involved in this study; consequently, the underlying esteem-regulatory motive might not have been fully triggered.

Empathic Accuracy and Situational Well-being

In the third step, we investigated the role of perceived threat as a moderator of the association between empathic accuracy and partners' situational well-being. Here, we reasoned that the presence or absence of higher levels of perceived threat in a participant's partner's thoughts/feelings would determine whether empathic accuracy is desirable or beneficial for short-term relationship well-being (e.g., the relationship is perceived as stable, closeness increases) or if empathic accuracy might be harmful for short-term relationship well-being (e.g., as relationship distress and instability increases, closeness decreases). The second hypothesis tested the assumption that empathic accuracy for thoughts/feeling rated as not threatening to the relationship on the one hand, or not threatening to the perceiver's self on the other, would lead to an increase in relationship closeness or improved mood, respectively. Partial evidence was found for this hypothesis as higher levels of men's empathic accuracy for their female partner's feelings rated as not threatening to the relationship were associated with an increase in the men's perceived

relationship closeness. In the same vein, higher levels of women's empathic accuracy for their male partner's feelings rated as not threatening to themselves were associated with an improvement in their self-reported mood. Some findings that we had not predicted also confirmed the same logic, in that higher levels of women's empathic accuracy for feelings detected in their male partners that were not relationship-threatening were associated with an improvement in the women's self-reported mood, and for men the results suggested a positive trend between empathic accuracy for feelings detected in their female partners that were rated as not threatening to themselves and an increase in the men's perceived relationship closeness.

In conclusion, the results seem to indicate that, in the context of conflict interactions, higher levels of empathic accuracy for non-threatening feelings – either for the relationship or the self – are associated with a higher level of perceived closeness for men and an improvement in women's mood.

In contrast with the results concerning the association between empathic accuracy in non-threatening situations and short-term well-being, the results did not totally confirm our hypothesis predicting a harmful effect of empathic accuracy for threatening thoughts/feelings on relationship well-being. A tendency in the predicted direction emerged, in that men who showed higher levels of empathic accuracy for women's thoughts rated as being threatening for their relationship experienced a decrease in relationship closeness. Furthermore, in a result that we had not predicted, men who were more empathically accurate for feelings of their female partners that threatened themselves reported a decline in their perceived relationship closeness. These findings are only partially consistent with the results from a previous study (Simpson et al., 2003) that indicated that higher levels empathic accuracy for relationship-threatening

thoughts/feelings rated by both partners and trained observers were associated with a decline in perceivers' feelings of relationship closeness.

The consideration mentioned above also applies to the current results, as the level of self-reported threat remained rather low in the conflict interactions observed in this study. The absolute level of threat might have been rather moderate, and even though the thoughts/feelings were labeled as the 'most' threatening ones compared to the other thoughts/feelings during that interaction, empathic accuracy might not have been perceived as being harmful for the situational well-being of the interacting partners who participated.

The differentiation between empathic accuracy for thoughts/feelings may provide another explanation for our results, as previous research has not included this division. Although the empathic accuracy scores for thoughts/feelings are quite similar, there appeared to be a slight difference in the accuracy scores in favor of feelings. The varying difficulty between inferring thoughts versus feelings could explain why we found an association between perceived threat and empathic accuracy for feelings but not for thoughts. Several reasons supporting this explanation can be noted, namely (1) the *number* of thoughts is *endless* whereas the *number* of feelings is *limited*, (2) the flow of thoughts is also *continuously changing*, whereas feelings might reflect a more *generalized emotional state* and might even represent a general feeling of relationship (dis)satisfaction (i.e., sentiment override theory; Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005; Weiss, 1980), (3) thoughts can only be inferred from *verbal cues* – which might be totally unrelated to the target's thoughts – whereas feelings can be inferred from a lot of *non-verbal cues* (e.g., facial expression, intonation, body language), (4) thoughts are characterized by a *greater linguistic complexity* (e.g., a broader range of words, more functional words and verbs, more discrepancy, and tentative words; Ickes & Cheng, 2011) than feelings, (5) inferring the *valence* of thoughts is ambiguous and sometimes artificial, as thoughts are

frequently rated as neutral, whereas inferring the valence of feelings is more straightforward, and (6) empathic accuracy for feelings *benefits from training* in contrast to empathic accuracy for thoughts (Barone et al., 2005).

In summary, the impact of accurately inferring a partner's feelings might be more obvious as feelings are limited, less complex, and more straight-forward in their threat-potential, whereas the impact of accurately inferring thoughts – which are more complex, ambiguous, and often neutral – might be harder to detect on a short-term basis. Hence, a different underlying association between perceived threat and empathic accuracy for feelings on the one hand, and empathic accuracy for thoughts on the other might have been disclosed.

Moderating Variables

Another possibility for why we did not find an association between empathic accuracy for thoughts and perceived threat could be found in the fact that perceivers' levels of commitment and strength of self were not included in the analyses. The negative association between empathic accuracy for relationship-threatening thoughts and relationship closeness for perceivers highly committed to their relationship might be masked by data from perceivers who did not experience a decline in relationship closeness because they are less committed to their relationship. These less committed perceivers might not experience such a decline as their initial level of closeness might have been lower compared to the initial level of closeness rated by highly committed perceivers – additional analyses did confirm this explanation as lower commitment was indeed associated with lower initial ratings of closeness – and therefore the post-interaction closeness ratings of low commitment perceivers could not drop any further (i.e., there was a floor effect). Alternatively, as these perceivers seem to not be so committed, relationship-threat might

not significantly impact upon their relationship closeness, as they simply care less about their relationship. However, these possible explanations seem unlikely, as no significant results were found and our hypotheses including commitment as a potential moderator could not be confirmed.

The same line of reasoning also applies for a perceiver's sense of self as this may moderate the association between empathic accuracy for self-threatening thoughts and personal well-being. Again, the negative association between empathic accuracy for self-threatening thoughts on the mood of perceivers with a weak sense of self might be hidden by data from perceivers with a strong sense of self who did not experience a drop in their mood. Perceivers with a strong sense of identity might not experience accurately inferring self-threatening thoughts as destabilizing to their personal well-being. Conversely, perceivers with a weaker sense of self might experience feelings of insecurity after accurately inferring self-threatening content from their partner's thoughts. Although we did not offer predictions on the direction of the moderations, the results were surprising with regard to male perceiver's strength of identity on well-being, as they showed an opposite pattern than that has been previously reasoned. The first significant model indicated that the increase of relationship closeness for male perceivers who had accurately inferred their female partner's non-self-threatening feelings was attenuated for perceivers with a weaker sense of self; the second significant model indicated that the worsening of a male perceiver's mood after accurately inferring their female partner's self-threatening feelings was also attenuated for perceivers with a weaker sense of self. These results suggest that our earlier reasoning should be inverted, so that accurately inferring thoughts/feelings that threaten the well-defined view of a perceiver with a strong sense of self might actually be very confusing and consequently destabilize the perceiver's short-term well-being. A perceiver might interpret this as indicating that their partner is disapproving or even

rejecting their identity. This destabilizing effect might not occur for perceivers with a weaker sense of self as they already perceive their identity as inconsistent or uncertain.

However, as these explanations are all very speculative, future research investigating these ambiguous findings should be conducted. This leads us to some final limitations and directions for future research.

Limitations and Directions for Future Research

Despite the strengths of our multi-method design and statistical approach some limitations and suggestions for improvement should be noted. First of all, the low scores on the measures of perceived threat showed limited levels of variance that possibly reduced the power to detect predicted effects. The same limitation applies for our measure of commitment. Secondly, our sample consisted of white, middle-class, and non-clinical couples who were generally satisfied with their relationships, as is reflected in their moderate to high levels of commitment. Future research would benefit from using a more heterogeneous sample including couples ranging from distressed to very satisfied about their current relationship. Finally, the assumptions concerning the manageability of empathic accuracy due to underlying motives might create the impression that perceivers consciously monitor and regulate their levels of accuracy. However, it is rather unlikely that perceivers are consciously managing this process while considering the potential impact of potential threat. Future research should address this issue by using an experimental design that effectively manipulates the perceiver's accuracy motive versus their esteem-regulatory motive in order to unravel the influence of underlying motivational mechanisms on the empathic accuracy process and situational outcomes.

Conclusion

The current findings provide some suggestions to answer the three principal questions of this study. These questions were deduced from the basis for the empathic accuracy model developed by Ickes and Simpsons, and in turn, this model was used as the basis for our hypotheses. First of all, evidence for the manageability of empathic accuracy had been found in previous research, demonstrating some motivational factors underlying empathic accuracy. Partners' levels of perceived threat during interactions could be considered as the factor that determines the activation of an accuracy-motive (fostering higher levels of empathic accuracy) or an esteem-regulatory motive (discouraging empathic accuracy). In the current study, some evidence was found for the accuracy-motive, as partners showed higher levels of accuracy for their own partner than for an unknown interaction partner. However, no evidence was found for the esteem-regulatory motive as the results did not show a drop in partners' accuracy levels for threatening thoughts/feelings. As no hard evidence was found for an influencing effect of perceived threat on the level of empathic accuracy, our second question remains unanswered at this stage. Thirdly, we did find some evidence for a role of perceived threat as a moderator between empathic accuracy and situational well-being, as higher levels of empathic accuracy for non-threatening feelings were predictive of a pre-to-post-test increase in perceived closeness for men and improved mood in women. However, no evidence for a harmful effect of empathic accuracy for threatening thoughts/feelings on situational well-being was found. These findings suggest that the role of empathic accuracy is complex during couples' conflict, and point to the important role of perceived threat, however, future research is needed to further elucidate the precise interplay of this and other possible moderators on the association between understanding and (post-interaction) well-being.

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6

CHAPTER

GENERAL DISCUSSION

The central aim of this doctoral dissertation was to investigate empathic accuracy within intimate relationships within the scope of four main objectives. In this final chapter, we briefly recapitulate these objectives and present an integrated overview of the most important findings together with some theoretical reflections. We then elaborate on potential clinical implications. Finally, some general and methodological limitations of the current dissertation are considered, leading to some suggestions for future research.

OBJECTIVES AND RESEARCH QUESTIONS

The current dissertation aimed at refining and extending the existing research on the role of empathic accuracy in intimate relationships. With their introduction of the *unstructured dyadic interaction paradigm* in the 1990s, Ickes and colleagues (Ickes, Stinson, Bissonette, & Garcia, 1990) started a period where the research on empathic accuracy increased exponentially. Researchers have examined how accurate we are when trying to understand other people by investigating different kinds of relationships (e.g., with unknown interaction partners, friends, dating partners; Kilpatrick, Bissonnette, & Rusbult, 2002; Simpson, Ickes, & Blackstone, 1995; Stinson & Ickes, 1992), as a function of specific relationship characteristics (e.g., relationship length, satisfaction; Thomas, Fletcher, & Lange, 1997) and in various relational contexts (e.g., support interactions; Verhofstadt, Buysse, Ickes, Davis, & Devoldre, 2008; Verhofstadt et al., 2016). Research on empathic accuracy in intimate relationships has mainly focused on the two most important domains of marital interaction, namely couples' support interactions and couples' conflict interactions. The work of Verhofstadt and colleagues (Verhofstadt et al., 2008; 2016) has led to an interesting and consistent pattern of findings on the association between partners' empathic accuracy and their support provision (i.e., couples' support interactions); the beneficial role of empathic accuracy in helping individuals to provide welcome and effective support to their partner in distress is now well-documented. However, less is known about the association between partners' empathic accuracy and how they deal with relationship conflict (i.e., conflict interactions).

Although some researchers have completed initial investigations into the role of empathic accuracy during couples' relationship conflict, these studies have not yet provided us with a clear picture of the specific ways in which partners' empathic accuracy comes into play or affects outcomes when dealing with relationship conflict. Consequently, as

outlined in the general introduction (*Chapter 1*), we chose to study empathic accuracy in the context of relationship conflict for four main reasons, namely (1) disagreements and conflict are inevitable in intimate relationships, and therefore occur on a common basis, (2) understanding each other is crucial if partners are to effectively discuss and resolve conflict, (3) although mutual understanding when dealing with conflict is crucial, conflicts are by far the most significant domain of interaction in which misunderstanding and perceptual biases arise, and (4) conflict may also trigger high levels of perceived relationship- or self-threat – as one is confronted with opposing goals between oneself and the partner – which might hinder the processes by which people step back and take perspective.

Our first research question focused on the association between empathic accuracy and conflict behavior. Previous research had already indicated that partners' levels of empathic accuracy play an important role in successful couple-focused problem-solving (i.e., accommodative behavior; Kilpatrick et al., 2002). However, we reasoned that empathic accuracy might also be helpful in more individual-focused problem-solving (i.e., demand behavior; *Chapter 2*). Furthermore, when reviewing the existing literature on empathic accuracy, we noticed that there has been no research exploring the association between actual and perceived understanding during relationship conflict. In the context of conflict, in which an individual may feel not understood at all, it is especially important to examine whether this feeling is associated with their partner's lack of actual understanding, and whether this lack of actual and perceived understanding is associated with the couple's general level of adjustment (*Chapter 3*). Following the observation of potential misunderstanding in conflict interactions, the next chapter sought to identify specific patterns of partners' thoughts that potentially contribute to misunderstanding (i.e., empathic inaccuracy) during conflict interactions (*Chapter 4*). In the last chapter, we investigated some theoretical assumptions (i.e., the model devised by Ickes & Simpson) about the

manageability of partners' level of empathic accuracy during conflict interactions and the effect of empathic accuracy on partners' interaction-based situational well-being (*Chapter 5*).

These research goals were examined by the means of a large-scale observational study called the "UGent Family Lab Couple Study". This study combined a questionnaire session and an observational session consisting of an observed interaction task and a video-review task based on the dyadic interaction paradigm.

OVERVIEW OF THE MAIN FINDINGS

Chapter 2 - Empathic Accuracy and Partners' Conflict Interaction Behavior

In the second chapter, two empirical studies were described that addressed the lack of research on empathic accuracy and conflict behavior. Although previous research has examined the link between empathic accuracy and pro-relationship behavior, such as partners' support behavior or partners' accommodating behavior, no research has been conducted on the association between empathic accuracy and more self-serving conflict behavior, more specifically, demand behavior.

Even in satisfying intimate relationships, partners who are more motivated to resolve a conflict by effecting desired changes seem to rely more on demand behavior (Christensen & Heavey, 1990; Eldridge, Sevier, Jones, Atkins, & Christensen, 2007; Heavey, Layne, & Christensen, 1993). Furthermore, research has demonstrated that greater motivation to be empathically accurate typically leads to higher levels of empathic accuracy (Ickes, 2011). Combining these two observations, we expected that individuals who used more demand behavior would also be more likely to "read" their partner's minds in ways

that enable them to exert more influence on their partner and thereby achieve a better outcome. Consistent with this reasoning, we predicted that partners' levels of demanding communication during a conflict discussion, i.e., their use of "blame" and "pressure for change", would be positively associated with their levels of empathic accuracy. We also explored whether this association was moderated by whether or not the perceiver was the person who initiated the conflict.

The sample of Study 1 consisted of 26 cohabitating/married heterosexual couples that completed first a relationship satisfaction self-report questionnaire and then a video-taped conflict interaction with a subsequent video-review task. After controlling for a significant association with levels of relationship satisfaction, the results revealed a significant and positive association between the perceiver's blame behavior and his/her level of empathic accuracy, as well as a significant two-way interaction between the perceiver being the conflict initiator and them applying pressure for change. The first association suggested that partners who displayed more blame behavior during the videotaped conflict interaction showed more empathic accuracy, independent of whether they had initiated the conflict or not. The interaction suggested that when the perceiver was in the conflict-initiating role, his or her levels of pressure for change were associated with lower levels of empathic accuracy. However, this observed negative relation between perceivers' pressure for change and empathic accuracy was reversed when the perceiver was not the conflict initiator.

In Study 2, the same predictions were tested in a sample of 155 cohabiting/married heterosexual couples that again completed a relationship satisfaction self-report and a video-taped conflict interaction with subsequent video-review task. In comparison to Study 1, the data in this study allowed us to differentiate between empathic accuracy for thoughts versus that for feelings, and to include gender as predictor in the model. After controlling

for relationship satisfaction, the analyses revealed no significant effects. A marginal two-way interaction was found in the model predicting empathic accuracy for thoughts, in that the more blame behavior that was employed by the partner that was not in the role of the agent of change, the more empathically accurate he/she was. The observed positive relationship between blame and accuracy seems to be reversed when the person was the agent of change.

Taken together, we found some indications that when a perceiver initiated a conflict interaction and used more demanding behavior, this accusing and confrontational perceiver appeared to be less accurate in “reading” their partner’s thoughts. However, when the perceiver was the person who did *not* initiate the conflict discussion, he or she was found to make more accurate inferences about the initiator’s thoughts.

In other words, conflict initiators who try to impose their will on others tend to be less sensitive to their interaction partner’s thoughts and feelings, whereas partners who accurately infer the initiator’s actual thoughts and feelings seem to be more likely to be able to resist the initiator’s influence and apply a strong counter-influence rather than succumbing to the initiator’s pressure. However, since the two studies could not fully replicate each other’s results, further (experimental) research is required before firm conclusions can be drawn.

Chapter 3 - Empathic Accuracy and Perceived Understanding

In the third chapter, a study that addressed the lack of research on understanding measured from different perspectives (i.e., target versus perceiver’s perspective), and applying different measures (i.e., empathic accuracy paradigm versus self-reports) is described. The main focus of this empirical study was to investigate the association between actual understanding (an objective measure) and the perception of understanding

(a subjective measure). *Actual understanding* was operationalized through the empathic accuracy paradigm (which tests the perceiver's accuracy in inferring the specific content of their partner's thoughts and feelings), and the perception of understanding was split up into understanding from the perspective of the perceiver, which we called *assumed understanding* (i.e., the perceiver's subjective reports on how well they assumed to have understood their partner) and understanding from the perspective of the target, which we called *perceived understanding* (i.e., the target's subjective rating of the degree to which they feel understood by their partner). Additionally, the unique contribution of both actual and perceived understanding to dyadic adjustment was investigated.

Previous studies have found that the perception of partners' responsiveness is based at least in part on the actual amount of responsiveness of an individual's partner (Murray, Holmes, & Griffin, 2000; Reis, Clark, & Holmes, 2004), therefore, the same tendency was expected for understanding. More specifically, we expected a positive association between the perceiver's actual understanding and his/her assumed understanding, and a positive association between the perceiver's actual understanding and the target's perceived understanding. Finally, we tested the hypothesis that both partners' levels of actual understanding and perceived understanding would be positively related to relationship functioning and satisfaction.

These predictions were tested in a sample of 155 cohabiting/married heterosexual couples that provided questionnaire data and participated in a videotaped conflict interaction and video-review task. More specifically, we collected (1) *an interaction-based measure of actual understanding* (i.e., participants' objective scores of how well they accurately inferred the content of each other's thoughts and feelings during the conflict interaction), (2) *a post-interaction self-report measure of assumed understanding* (i.e., participants' subjective reports on how well they assumed they had understood their partner

during the conflict interaction), (3) *a post-interaction self-report measure of perceived understanding* (i.e., each participant's subjective report on how well understood they felt by their partner during the conflict interaction), and (4) *a global self-report measure of dyadic adjustment* (i.e., participants' subjective reports on their general level of dyadic adjustment).

First, there was no significant association between perceivers' actual understanding and their assumed understanding scores. Second, the perceiver's actual understanding was not associated with their partner's level of perceived understanding. Third, the APIM analyses found no general association between actual understanding and dyadic adjustment. However, the results did show a positive trend between women's actual understanding and their dyadic adjustment scores. The second part of the APIM revealed that an actor's perceived understanding is associated with his or her dyadic adjustment score, and that this is true for both men and women. The partner effect was also significant for women: When men reported higher levels of perceived understanding, women reported higher levels of dyadic adjustment.

In summary, this study suggested the following answers to the questions raised in our general introduction (*Chapter 1*): Is an individual's perception of being understood by their partner based on the partner's level of actual understanding? Surprisingly, our results suggested that this is not the case. Both the perceiver's perception of their own actual ability to accurately understand their partner as the target's perception of the perceiver's understanding performance was not associated with the perceiver's actual understanding score. Second, what is the unique contribution of both actual and perceived understanding in relationship functioning and satisfaction? Our results suggested that perceived understanding is an important predictor of men's and women's adjustment scores, however, actual understanding also tended to be important for women's adjustment scores.

Chapter 4 - Empathic (In)Accuracy and Sources of Misunderstanding

The study described in chapter four investigated the sources of empathic inaccuracy during couples' conflict interactions. Based on the fact that accuracy scores are only poor-to-moderate, we suggested that misunderstandings could be identified at two levels: The thematic level (i.e., content of partners' perspectives, e.g., topic issues, the interaction process, personal characteristics) and the affective level (i.e., affective tone of partners' perspectives: Positive, negative, or neutral). First, we offered predictions about the occurrence of certain types of thoughts during the interaction (i.e., direct perspectives). Second, we made predictions about the comparison between the inferred online thoughts (i.e., meta-perspectives) and the partner's actual online thoughts to discover potential misunderstandings. Finally, we examined the association between these misunderstandings and empathic inaccuracy. Our predictions were mainly based on the earlier work of Sillars and colleagues (Sillars, Roberts, Leonard, & Dun, 2000) who have developed a coding system to investigate the content of partners' online cognitions.

Regarding the examination of partners' direct perspectives, we predicted that both partners would report more positive process thoughts, i.e., more thoughts attributing constructive communication to themselves than to their partner, and that men would report more thoughts concerning content issues in conflict than women, whereas women would report more thoughts about the communication process and other relational issues than men. Furthermore, we predicted that partners who reported more positive thoughts would perceive the interaction as less threatening, and the inverse for negative thoughts. We also hypothesized that partners who scored higher in terms of relationship satisfaction would report more positive thoughts, whereas partners who scored lower would report more negative thoughts. Regarding the examination of direct versus meta-perspectives, we predicted that men would overestimate the incidence of content-focused thoughts and

underestimate the incidence of relationship-focused thoughts by women. We expected the inverse for women's meta-perspectives. Finally, we expected specific mind-reading errors by the perceiver to be reflected in their overall understanding, such that the larger the discrepancy between the target's direct thoughts (with respect to thematic content and affective tone) and the perceiver's inferred thoughts, the lower the perceiver's empathic accuracy would be.

These predictions were tested in the sample of the "UGent Family Lab Couple Study". Partners' own and inferred thought-entries were categorized using the Interaction Cognition Coding System (Sillars et al., 2000). At the thematic level, partners considerably thought about the interaction process and person evaluations, a finding that was true for both men and women, thereby disconfirming the assumed gender difference. Furthermore, partners demonstrated a self-serving bias as they attributed constructive engagement more often to themselves than to their partner, and vice versa. However, an unexpected gender difference was found, as women showed a tendency to think about their partners as defensively or displaying avoidance, but this was not the case for men. Our main finding suggested that the misreading of process thoughts was significantly associated with empathic inaccuracy, and a similar trend was found for the misreading of person appraisal thoughts. At the affective level, the results revealed significant mind-reading errors by women as they under-estimated positivity and over-estimated negativity by men. With regard to our main research question, misreading of positivity and neutrality was positively associated with empathic inaccuracy.

In summary, these findings indicated that partners' low-to-moderate empathic accuracy scores are not only the result of moment-to-moment inaccurate inferences but were also associated with a general tendency of partners to misread each other's thoughts at both the content and affective level.

Chapter 5 - Manageability of Empathic Accuracy

The aim of the final chapter was to test the validity of the assumptions underlying the theoretical framework on empathic accuracy developed by Ickes and Simpson (1997). We translated their assumptions into three general research questions: (1) Is the level of empathic accuracy manageable? Can we dial it up or down? (2) If so, what factors are associated with partners' dialing up/down their level of empathic accuracy? and (3) How is a partner's level of empathic accuracy associated with his/her interaction-based situational well-being?

The first two questions could not be confirmed by our results. More specifically, perceivers showed higher levels of empathic accuracy for their partner's non-threatening thoughts/feelings in comparison to an unknown target's non-threatening thoughts/feelings. However, to confirm the assumption that perceived threat – identified as a factor potentially linked to partners' level of accuracy – is able to downgrade (dial down) the level of empathic accuracy, perceivers' levels of empathic accuracy for their partner's threatening thoughts/feelings should be lower than for their partner's non-threatening thoughts/feelings. Women's level of empathic accuracy showed a tendency in the predicted direction, but surprisingly, men's level of accuracy indicated a tendency in the opposite direction.

To test the third assumption, we investigated the role of perceived threat as a moderator of the association between empathic accuracy and partners' short-term (or situational) well-being. In line with Simpson and Ickes' theoretical model of empathic accuracy, we reasoned that the presence or absence of higher levels of perceived threat would determine if empathic accuracy is desirable or beneficial for short-term relationship well-being (e.g., relationship is perceived as stable, closeness increases) or harmful for

short-term relationship well-being (e.g., relationship distress and instability increases, closeness decreases). The first part of this reasoning was confirmed as higher levels of men's empathic accuracy for their female partner's not relationship-threatening feelings were associated with an increase in the men's perceived relationship closeness, and higher levels of women's empathic accuracy for their male partner's not self-threatening feelings were associated with an improvement in women's self-reported mood. The second part of this reasoning was barely confirmed as only one tendency in the predicted direction emerged: Men who showed higher levels of empathic accuracy for women's relationship-threatening thoughts experienced a decrease in relationship closeness. Furthermore, a non-predicted result indicated that men who were more empathically accurate for the self-threatening feelings of their female partner reported a decline in their perceived relationship closeness.

Taken together, only partial support was generated for the central assumptions (cf. our three research questions) of the Simpson and Ickes' empathic accuracy model. This could be due to some of the methodological aspects of our study, such as the limited variation in partners' level of perceived threat, however, this could also be due to limited validity of the model (see below).

SUMMARY OF RESULTS AND THEORETICAL IMPLICATIONS

The major goal of this doctoral dissertation was to investigate empathic accuracy during couples' conflict *along* four main objectives. The results of this investigation were presented in each of the preceding chapters and are summarized in the previous section. In the sections that follow, we aim to provide a discussion of our findings *across* objectives and to present some general conclusions and theoretical implications.

Empathic Accuracy in Intimate Relationships

Empathic performance. The average empathic accuracy scores for couple-based interactions within our sample ranged from 0% (even lower than the accuracy score expected by chance, which is 5%; Thomas et al., 1997) to 41%, and averaged around 21%, which is in line with previous studies (e.g., Verhofstadt et al., 2008).

Furthermore, partners not only completed a video-assisted review task for their own interaction but also for that of an unknown couple (i.e., a standard stimulus task) in order to determine their baseline empathic accuracy. The average empathic accuracy scores in this task ranged from 1% to 47%, and averaged around 16.7%. These results confirm the acquaintanceship-effect: That partners' scores for an unknown target were significantly lower than for their own partner, even when the readability of the targets were taken into account (see *Chapter 5*).

In the current dissertation, we opted to make a distinction between partners' empathic accuracy for thoughts and that for feelings. Our data suggested a trend of slightly higher accuracy scores for feelings than for thoughts, in both men and women, although this was not significant at the $\alpha < .05$ significance level. These findings may indicate that it is more difficult to infer specific thoughts in contrast to feelings/emotional states (for a possible explanation of this difference, see the discussion in *Chapter 5*).

Relationship well-being. In the Empathy Model devised by Davis (1994) empathic accuracy is considered as a *situational* variant of empathy – in addition to dispositional empathy – at the *cognitive* level – in addition to affective situational empathy such as empathic concern and personal distress (Davis, 1983). Situationally taking the perspective of one's partner is considered as a necessary process in a relationship as it may trigger pro-relationship behavior during a couples' interactions – in other words “understanding is at the heart of intimate relationships” (Pollmann & Finkenauer, 2009, p.

1512). So, generally, this literature suggests that empathic accuracy should be associated with both general relationship well-being, and more situational (i.e., post-interaction) well-being.

In the current dissertation, the association between understanding, more specifically empathic accuracy, the perception of understanding (i.e., assumed and perceived understanding), and *general relationship well-being* was investigated (*Chapter 2*). In line with the results of Pollmann and Finkenauer (2009), we can conclude that perceived understanding (but not actual understanding) is uniquely associated with *general relationship well-being* (i.e., dyadic adjustment). Important to note is that our study was the first to simultaneously investigate situational measures of actual and perceived understanding, as previous research only included general self-report measures of understanding. This finding, together with the finding that perceived understanding scores were not based on partners' actual understanding performance, are considered as two of the main findings of this dissertation because they are vital for clinical practice (see below for the clinical implications of this finding).

With regard to *situational relationship well-being*, our last research chapter indicated that actually understanding one's partner's feelings is in most interactions – but especially non-threatening interactions – important in order for partners to perceive closeness, and that this is especially true for men. However, this may also have a drawback because when men accurately inferred feelings in their female partner that could threaten their self-esteem (e.g., disappointment, frustration), they felt less connected to their partner.

In summary, these findings indicate that partners who feel understood in their relationships, during both mundane and conflict-based interactions, will experience higher levels of general relationship satisfaction and functioning. Additionally, men who succeed at accurately inferring the non-threatening feelings of their female partner during a conflict

interaction, will feel more connected with their partners afterwards. However, the same kind of accuracy during threatening episodes of conflict may trigger more inter-partner distance instead. So, these findings partially confirm the importance of actual understanding to both general and situational forms of well-being, and simultaneously reveal the importance of perceived understanding, and the role of the context in which accuracy occurs.

Accuracy versus bias. Taken together, the importance of actual understanding and feeling understood is apparent in intimate relationships. Yet, it is remarkable that empathic accuracy percentages remain rather low, even in close, stable and long-term relationships. What can possibly account for these counter-intuitive findings?

As indicated by the title of this section, some potential explanations are suggested in the literature that look at accurate versus biased inferences. A perceiver's inference is considered "biased" if this inference shows an overlap with the perceiver's self-appraisals (e.g., *assumed similarity* or *projection*), *idealization*, or other kinds of judgements that are not based on the observable situational information (e.g., *schema-consistent inferences*; see the section on relationship duration below). In what follows, we present some examples of these biases, as deduced from our data.

First, an example of *assumed similarity*:

- I think my partner was thinking... "*Probably the same as I was, namely that we fully agree on this*"

Second, a lot of *projection* was also observed in our data:

- I was thinking: "*What do we still have to talk about?*"
- I think my partner was thinking... "*What further things do I have to discuss about this subject?*"

It should be noted, however, that it is impossible to conclude from these examples whether bias might be a “good” or “bad” thing for empathic accuracy. Kenny and Acitelli (2002) demonstrated that (empathic) accuracy benefits from assumed similarity when partners are actually similar, however, bias may lead to inaccuracy if they are based on the need of the perceiver to see the target in a desirable way that is inconsistent with the true nature of the partner (West, 2008).

Third, some examples of *idealization* were also present in the data:

- I was thinking... “*I am understanding as my partner cannot perform any better than she already does*”

Another important variable that may explain certain biases is *pragmatism* (Swann, 1984; West, 2008). These authors have suggested that an inference can only be defined as accurate if “it reflects the pragmatic needs of the perceiver” (West, 2008, p. 8) – in other words “an accurate belief is an instrumental belief” (Swann, 1984, p. 461). However, this variable has never been taken into account in relationship research, as most researchers collectively believe that it is pragmatic to accurately understand the partner’s mental state. So, thinking about the example of idealization, it might have been very pragmatic for this person to overestimate the efforts of his partner instead of thinking in a more nuanced way.

As stated in the work of West (2008), intuition seems to suggest that the more biased an inference is, the more harmful it will be for a relationship, and the less accurate this inference will be. However, several studies have argued that the motivation to feel good in a relationship and to accurately understand one’s partner may co-occur (Gagné & Lydon, 2004; Murray, Holmes, & Griffin, 2003). Ickes (2011) also emphasized that the percentage of the time individuals are empathic accurate encounters an apparent ceiling of 60% (the highest score that can be observed in the available data) suggesting an “evolutionary pressure to set a range of empathic accuracy that is high enough to enable us to deal

effectively with others but safe enough to maintain the own [private mind]" (Ickes, 2011, p. 201).

In conclusion, the interplay between accuracy and bias can vary as they can co-exist perfectly but might also sum to zero (i.e., the more bias, the less accuracy), and their effect on relationship well-being is mostly determined by their pragmatism. However, it is important to note that biased inferences or motivated inaccuracy may be useful in the short-term, but their long-term "pragmatism" is questionable.

Relationship duration. Even more remarkable than these persistent biases is the fact that empathic accuracy seems to decline with increasing duration of a relationship – a fact that has been consistently demonstrated (Kilpatrick et al., 2002; Thomas et al., 1997), and was also confirmed in the present dissertation (where the association between empathic accuracy and relationship duration was described by $r = -.22, p < .01$). This is probably due to a decline in the accuracy motivation, for two reasons: (1) partners have accumulated confidence in the fact that the relationship will not dissolve when a misunderstanding occurs, and (2) partners often feel as if they already know what the other is thinking. The latter is demonstrated in the following examples of where negative or positive *schema-consistent* inferences have been made (examples drawn from our data):

- I was thinking... *"Why are we discussing this problem again? He is not going to change anyway"*
- I think my partner was thinking... *"We are so close, we can't live without each other"*

As these examples demonstrate, partners develop partner- and relationship specific schemas over time that may become quite predominant and rigid. Consequently, partners pay less attention to situational information or information that is inconsistent with their schemas, and make rapid and automatic inferences instead. In other words, we have

observed “the triumph of habit over scrupulous attention” (Kilpatrick et al., 2002, p. 389) in long-term relationships.

Another possible explanation for the low percentages of empathic accuracy found in the current dissertation is described in the following paragraphs.

Empathic Accuracy and Couples’ Conflict

Three of the four empirical studies focused on specific aspects of conflict *during* the interaction. Our last empirical chapter also focused on the *post-interaction* outcomes of empathic accuracy during conflict. Taken together, these results increase our insight into the role of empathic accuracy in the context of couples’ conflict, addressing the overarching aim of this dissertation.

Empathic accuracy during conflict.

Conflict behavior. The first chapter examined the association between empathic accuracy and *conflict behavior*, more specifically demand behavior (including assigning blame and pressure for change). This pattern of results suggests a potential risk of starting a conflict in which the initiator starts demanding too much. The findings of our first study (*Chapter 2*) illustrated that, as the conflict-initiating individual applied more pressure to change to their partner, his or her empathic accuracy declined. Our findings also showed that this kind of behavior has the potential to elicit a strong counter-response from a partner who had accurately inferred the conflict initiator’s feelings and motives and therefore reacted with counter-pressure for change. As discussed in this chapter, a conflict initiator who applies undue pressure to an interaction partner often winds up at an empathic disadvantage. A similar tendency was found in the second study, but this time for blame

behavior instead of pressure for change, again pointing at an empathic disadvantage for a conflict initiator who shows more blame behavior.

It seems from this that conflict initiators who are too demanding towards their partner tend to be less sensitive to their interaction partners' thoughts and feelings. This might be due to a reduction of the available cognitive resources as conflict interactions seem to be very demanding interpersonal processes with some specific communicative features. As stated in *Chapter 4*, communication during conflict is characterized by: Selective attention, continuous interpretation of intentions that give meaning to communication, routine and automatic inferences to keep up with the pace of interaction, a disorderly nature of communication, and (distressing) emotions. Taken together, if a conflict initiator is preoccupied with achieving his/her personally desired conflict outcome during this demanding type of communication process, then it is very likely that their cognitive resources might become exhausted. This may leave him/her with little or no resources to engage in accurate perspective-taking (tunnel vision). This explanation could also account for the generally low-to-moderate percentages of empathic accuracy found in our studies during the observed conflict interactions in contrast to previous research that found accuracy percentages of 30-35% for married partners during mundane interactions (Ickes, 2011).

Conflict cognitions. Additionally, in our third study (*Chapter 4*), we reasoned that to be able to take the other partner's perspective in order to understand his or her inner world during conflict, individuals must first adopt a so-called shared focus. However, this seems to be a challenging process during conflict, as previous research has found that couples were often, even routinely, thinking about different things, maintaining a shared focus just over half of the time (Sillars et al., 2000; Thomas et al., 1997). These findings were further elaborated upon in our study by the inclusion of an analysis of partners'

cognitions during conflict. Although the results of this indicated that both partners were very aware of the interaction process, a lot of incongruence between their inferences of their partner's thoughts and the partner's actual thoughts emerged. For example, we confirmed the expected self-serving bias as both partners attributed constructive engagement more often to themselves than to their partner, and attributed negative conflict strategies more often to their partner than to themselves.

Furthermore, the results showed a *gender-specific* pattern of errors, more specifically, women imputed a more negative and defensive outlook to their male partners than was suggested by the men's actual thoughts. Although, men also showed over- and underestimations of different thought categories at the thematic level, they did actually have an accurate perception of women's thoughts at the affective level. Finally, the results provided further insight into the occurrence of misunderstandings (i.e., empathic inaccuracy) as errors in terms of reading the affective tone (positivity and neutrality) but also the content (process and person appraisal) of a partner's thoughts were associated with lower accuracy scores.

So, at first sight, the data regarding partners' direct perspectives indicated a high level of congruence in terms of content (i.e., percentages of the occurrence of specific categories), however, in terms of affective tone, we found a more pronounced incongruence between partners. Hence, although these results suggest a shared focus in terms of content, this shared focus seems to lack at the affective level of what partners were thinking during conflict. And despite this suggested shared focus, we could also observe a lot of misunderstandings that were associated with empathic inaccuracy, suggesting inaccurate/absent perspective-taking.

Conflict emotions. As mentioned in the second paragraph of the section on conflict behavior, some characteristics of communication during conflict complicate the interaction

process. The last of these concerned the presence of *emotions related to the conflict*, and the *general affective atmosphere during conflict*. These emotions have been described as often biasing online cognitions, influencing the availability of executive functions. This assertion was confirmed in our third study as individual's levels of perceived threat during conflict (an implicit measure of the emotion "fear") was negatively correlated with the amount of positive thoughts that person had, and positively correlated with negative thoughts (*Chapter 4*). Additionally, self-reported relationship satisfaction (seen as a measure of the general affective atmosphere) was positively correlated with positive thoughts, and negatively correlated with negative thoughts, experienced during the conflict interactions. These results suggest that both specific conflict-related emotions (i.e., perceived threat) and the general affective atmosphere (i.e., relationship satisfaction) can bias the affective tone of partners' cognitions during conflict, which in turn is in line with sentiment override theory (Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005; Weiss, 1980).

In the final experimental chapter, we also investigated whether perceived threat was linked to empathic accuracy – as an outcome of the executive function of perspective-taking (*Chapter 5*). We expected that individuals who were confronted with potentially threatening perspectives of their partner – defined as any thought/feeling that could lead to a destabilization of the relationship stability or the perceiver's self-esteem – would show lower levels of empathic accuracy, triggered by a relationship/self-protecting motive. Despite the high face validity of this prediction, and the strong theoretical framework of the underlying model (see *Chapter 5* for the Empathic Accuracy Model of Ickes & Simpson, 1997), our results could not confirm the predicted effect of perceived threat on empathic accuracy.

In summary, the integration of these results seems to indicate that communication in the context of a conflict interaction is a cognitively demanding process that hinders empathic accuracy by restricting or reducing partners' perspective-taking capacities, and by biasing an individual's own and inferred cognitions during the interaction.

Empathic accuracy and well-being after conflict. In the last empirical study of this dissertation, the predictions regarding empathic accuracy and situational well-being, stemming from the Empathic Accuracy Model (Ickes & Simpson, 1997), were tested (*Chapter 5*). We expected that empathic accuracy could be both beneficial and harmful for relationship well-being. We operationalized well-being as the perception of relationship closeness measured immediately after the conflict interaction task (i.e. situational or short-term), so this measure does not tell us anything about relationship stability or well-being in the long-term. In addition to the model, we also included a measure of personal well-being, also measured immediately after the conflict interaction task. We expected that a perceiver's self-esteem would also be influenced by the thoughts of the target partner – a hypothesis that is very plausible based on the findings of the study in *Chapter 4* indicating that the occurrence of thoughts including person appraisals (of the target, the partner or the relationship) made up an average of 13.5% of the total reported thoughts. In the model, perceived threat is proposed as a moderator of the association between empathic accuracy and well-being, in that empathic accuracy for thoughts/feeling rated as not threatening to the relationship/self, might be associated with an increase in well-being, and empathic accuracy for threatening thoughts/feelings might lead to a decrease in well-being.

The results indeed showed a pattern that matched the predicted direction for not threatening thoughts/feelings, however, three unexpected findings emerged. First, almost all of the significant associations found regarded empathic accuracy *for feelings*, but not empathic accuracy for thoughts (for potential explanations see the discussion in *Chapter*

5). Second, the results seemed *gender-specific*, because empathic accuracy was only significantly related to changes in relationship closeness for men and changes in mood for women. This indicates that for men empathic accuracy is associated with interaction-based relationship well-being, while for women it is related to their personal well-being. Men also indicated higher levels of perceived relationship threat than women. Together, these results suggest that men's feelings about relationship closeness might be less stable than women's feelings of closeness, since men seem to feel easily threatened at a relationship level, and their empathic accuracy was able to trigger an increase or decrease in this perception in a way that was not true for women, who instead experienced a shift in their mood. Third, some unexpected significant associations revealed that the perception of relationship or self-threat did *not uniquely* predict a change in either relationship or personal well-being, respectively, but instead influenced each other *interchangeably*. We found associations between empathic accuracy and either form of minimal versus maximal threat for both men and women. However, men only experienced changes in relationships closeness, even when high levels of threat were directed at a personal level, and, inversely women only experienced changes in mood, even when high levels of threat were directed at a relationship level. In other words, men experienced instability of their relationship (but no mood changes), even though their self-esteem was threatened whereas women experienced mood changes (but no relationship instability), even though their relationship was threatened. These findings further endorse our previously described gender differences.

Considerations regarding the Empathic Accuracy Model. As previously suggested, considerations of pragmatism possibly account for the fact that our findings are not totally in line with the model and its predictions, as this factor was not considered (either in the model, or in our research). However, perceived threat and pragmatism may be strongly related (West, 2008). We reasoned that the more the target's thoughts are

perceived as (potentially) threatening, the less empathically accurate the perceiver will be, but we neglected the reasoning that perceptions for which accuracy can be threatening may be perceptions for which accuracy is pragmatic, and therefore required (e.g., in order to resolve the conflict, face recurring difficulties, or confront unwanted behavior). Although one of the aims of *Chapter 5* was to untangle the effects of empathic accuracy on short-term – which was the focus of our study – versus long-term well-being, we did not fully succeed in this aim. We did not consider that decisions (based on pragmatism) might be distressing or harmful in the short-term but serve the “higher goal” of effecting positive results in the long-term, therefore also serving the suggested relationship- or self-protecting motives. As West (2008) suggested, we still do not know how partners’ cost-benefit ratio when making inferences is negotiated.

CLINICAL IMPLICATIONS

Because the present research was conducted with samples consisting of predominantly well-functioning, non-distressed couples, we must be cautious when deriving clinical implications from our findings. Nevertheless, the present dissertation provides information that might directly enhance clinicians’ understanding of the perspective-taking process within couples, and thereby indirectly contribute to the evidence-based practice of assessing and alleviating misunderstanding and miscommunication in couples.

According to the overall conclusion of this dissertation, it is not possible to either entirely promote or discourage empathic accuracy between partners since the effects of accuracy depend both on *how* and *when* it is applied. Accuracy is beneficial and even crucial for the relationship in the long-term, since it creates the opportunity for relationships

to develop and progress over time, becoming necessary if *intersubjectivity* is to be achieved (e.g., a shared cognitive focus, common communicative frames, emotional closeness; Ickes, 2003). However, during the course of a relationship a lot of moments pass where we are better off not knowing the inner world of our partner. Given this complexity, our findings may sharpen practitioners' insight and awareness with regard to four key points during couple therapy.

First, the fact that empathic accuracy has the potential to destabilize partners' relationship well-being on the short-term (by uncovering differences in opinions, or benevolent misconceptions, etc.) does not mean that partners should avoid empathic accuracy. What accounts for the long-term effects of this potential destabilization – either relationship growth and reinforcement, or relationship conflict and potential dissolution – are partners' abilities to cope with the challenges that are revealed. Therefore, therapists might find it useful to stimulate partners to achieve a “good-enough level” of accuracy: Enough accuracy to allow partners to uncover and recognize essential challenges that should be addressed for the sake of the relationship, but not too much accuracy, therefore protecting them from confrontation with every episode of threat or negativity in their partner's mind. For these reasons it may be useful to raise awareness in couple therapists about the optimal level of empathic accuracy in relationships, and the pros and cons of levels of empathic accuracy that are too low/high.

Second, it might also be important to adjust some of the existing couple therapy programs, especially those that solely focus on the amelioration of partners' communication strategies, in order to improve actual understanding (e.g., Couple Communication Program (CC); Butler and Wampler, 1999; Relationship Enhancement (RE); Accordino & Guerney, 2003; Guerney, 1977). Although these programs have proven their value, as demonstrated in the abundant empirical evidence of their positive short-term

and long-term effects, the findings of the current dissertation suggest an important addition. We discovered that an individual's sense of *being* understood within their relationship is not a positive consequence of actual understanding but rather a seemingly *independent* factor *uniquely* contributing to their relationship well-being. Perceived understanding has been highlighted as part of perceived responsiveness, and fosters validation and caring as subsequent features of responsiveness (Reis, 2014). The belief that the other partner has understood them, and that this will be accompanied by responsiveness, may account for the positive effect of perceived understanding. So, for couple therapists, it might be important to idiosyncratically assess when and after which behaviors/signals a partner feels understood, and how this feeling can be strengthened.

Third, when low levels of empathic accuracy appear to be problematic within a relationship, either because there is a lack of actual understanding or because partners are experiencing a large discrepancy between their levels of understanding of each other, then training in perspective-taking might be appropriate. A lot of existing couple programs in this area focus on strengthening self-disclosure (i.e., increasing the target's readability; see *Chapters 3 and 5*; e.g., RE-program; Ridley & Sladeczek, 1992), or active-listening techniques such as paraphrasing, reflecting, summarizing (e.g., CC-program; Butler and Wampler, 1999) but an additional suggestion has been put forward by our findings. Our fourth chapter highlighted the fact that communication during conflict is multilayered, hence, during couple therapy, attention should be focused on these multiple layers as a possible cause of confusion and misunderstanding. More specifically, partners' communication and interpretations may be based on the application of different cognitive frameworks, with for example, one partner focusing on relational aspects while the other is focusing on the discussed topic. Consequently, partners lack a shared cognitive framework and may even be talking "next to each other". Awareness and explicit disclosure of the

framework one is using, can lead to a reduction in the number of misunderstandings and thus to increased accuracy.

Finally, it is also important that individuals are aware of how they attribute meaning to their partner's messages during the interaction process, since the process of inference-making is partially driven by the pre-existing relational schemas (see sentiment override; Verhofstadt et al, 2005; Weiss, 1980). If partners start to neglect objective information, they might (unconsciously) guide interactions in a "pre-expected" direction. Imagine that a partner is thinking: *"This discussion will never be resolved"*. This idea may prevent further constructive behavior, regardless of the other partner's intentions or behavior. Furthermore, this schema is also able to determine the function of empathic accuracy. For example, is a partner applying his/her accurate insights to better support the other partner (driven by an underlying focus on relationship goals), or is the partner using these insights to assess their partner's weaknesses and to figure out which buttons to push (driven by an underlying focus on individual goals)? So, besides the existing skill training programs, our findings suggest the inclusion of meaning making/cognition-focused interventions as well, in order to elicit micro-changes in partners' meaning-making, and their cognitive schemas. Examples of these micro-changes are techniques such as de-automation of partners' interpretations based on pre-existing schemas or triggering corrective experiences in partners, reframing, etc. These techniques trigger destabilization, and enhance adaptation of the existing impeding knowledge structures within the safe context of the therapy session, with the hope that – after sufficient repetition – more usable knowledge structures will be created (Luckner, & Nadler, 1997).

LIMITATIONS

In each of the preceding chapters, specific limitations of each of the conducted studies have already been outlined. Therefore, the following paragraphs will only address some general limitations pertaining to this dissertation.

The first limitation concerns the dyadic interaction paradigm. Although the validity of the paradigm has been widely documented – and many studies have used (a variation of) the paradigm – some important methodological reflections concerning each step of the paradigm should be made at this point.

During the *conflict interaction task*, one of the partners was the designated conflict initiator, whose topic was introduced and discussed during the interaction. A first remark regarding this task is that one of the partners was “pushed” into the role of conflict initiator regardless of whether this partner is usually the “demanding” partner, or even feels comfortable in this role. This assignment of roles could have reduced the similarity of the situation with how conflicts about similar topics are dealt with at home, although our control variable suggested that partners perceived the interaction as moderate-to-very similar to conflicts they had previously experienced ($M = 5.18$; $1 = \textit{not comparable at all}$ to $7 = \textit{totally comparable}$). Furthermore, the relevance of the topic was not taken into account, which implies that one (or both) partner(s) may not have been motivated to discuss or resolve the topic, and, as discussed in this dissertation, motivation also influences partners’ level of empathic (in)accuracy.

Then, partners completed a *video-review task* in which they had to report their own thoughts/feelings and infer their partner’s thoughts/feeling at fixed time points, namely every 90 seconds. This procedure has been applied in previous research (Verhofstadt et al., 2008; 2016) but, nevertheless, these pauses may appear totally at random for the participants. Indeed, this automatically generated stop-procedure did not factor in the

course of the interaction, and stop points were generated in a way that is totally independent of partners' natural lines of thought. Additionally, the target partner may not have recalled having any important thought/feeling at that fixed moment, and the perceiving partner might not be able to infer the target's mental state at that particular point. However, he/she might have been more able to accurately infer the target's thoughts/feelings, as they appeared a few second earlier or later. Additionally, accurately reporting thoughts/feelings does not only require *empathic understanding* – the ability to accurately infer thoughts and feelings of a target – but also *empathic expression* – the ability to translate these inferred thoughts and feelings into words and expressions that match the actual content and experience of the target. So, the question of whether the empathic accuracy score merely reflects the empathic performance or also reflects other abilities and performance skills seems relevant. Furthermore, it has been argued that the empathic accuracy score should be controlled for inferences based on *assumed similarity* or *projection* (Thomas et al., 1997), and *chance accuracy* (Ickes et al., 1990). However, when considering calculating the corrected empathic accuracy scores, we concluded that it seemed unnecessary to correct the scores given the very high correlation ($r > .90$) between uncorrected and corrected scores found in previous work (Ickes, personal communication). Furthermore, participants frequently cited that the paradigm is quite time-consuming, and so this may have diminished their motivation and/or concentration towards the end of the task, and additionally, as perceivers did not receive any feedback on how they were performing, some frustration might have been triggered.

The last step in the empathic accuracy design consists of the coding procedure which only encompassed three scoring levels (0 = *different content from the actual thought or feeling*, 1 = *similar, but not the same content as the actual thought or feeling*, and 2 = *essentially the same content as the actual thought or feeling*; Ickes et al., 1990). This

limited range of scores was designed to facilitate the coding procedure, and to enhance the interrater reliability, but this limited range impedes variation in the empathic accuracy scores, and involves collapse of a wide range of inferences into the middle category (a score of 1). Furthermore, it seems that although the coding procedure is quite easy, the procedure still requires many raters to achieve a sufficiently high level of interrater reliability. Ickes recommends that seven raters are involved in order to reach optimal reliability, although previous work demonstrated high reliability with five raters. Due to the large sample and the limited capacity of available raters, the current dissertation included only four raters, however, which seems to be the minimum number of raters to reach acceptable-to-good levels of reliability. On the other hand, this argument could be somewhat tempered as we applied a stricter standard of reliability (Intra Class Correlation, option absolute agreement) causing lower absolute reliability scores than those reported in previous work.

A second important limitation of this dissertation, already mentioned in the individual chapters, concerns the *sample characteristics*. Although we used a large sample with some very important advantages compared to commonly-used samples in social psychological research, such as a wide variety of short-term to long-term relationships that can be considered as stable (cohabiting/married partners instead of dating partners), and a wide age variety (ranging from 19 until 76), the sample is somewhat limited in its generalizability as it consisted of mainly white, heterosexual, middle-class couples who were generally satisfied with their relationship and thus did not experience significant levels of relationship distress. Therefore, it is not clear to what extent our results could be generalized to other samples of partners, for instance partners in same-sex relationships or partners seeking couple therapy, so future investigation of our research questions will be important. Finally, we could not re-test/replicate our findings in other samples between the studies described here, as this dissertation only included one large sample.

DIRECTIONS FOR FUTURE RESEARCH

Since this doctoral dissertation uncovered some interesting associations and, alternatively, did not find evidence for some intuitively expected associations, we can formulate some suggestions for further research. Besides the usual recommendations of using a more diverse and clinically-based sample, and implementing a longitudinal design in order to properly assess causal associations and long-term outcomes (see previous chapters), some additional methodological innovations are proposed, based on the limitations concerning the empathic accuracy paradigm.

First, empathic accuracy has been defined as a performance measure resulting from a process of perspective-taking. Two decades of research have proven that accuracy is determined by the perceiver's capacity, the target's readability, and motivational processes (both personal and relationship motives), but less is known about the perceptual processes leading to empathic inaccuracy (e.g., biases, cognitive frames), and to (not) feeling understood (i.e., the basis of perceived understanding). Future research in this area should clarify which processes are useful in maintaining or increasing personal and relationship well-being (see our considerations about biases and perceived understanding above) and which are not. The latter could give us instructions on how to intervene in these inefficient processes in order to increase actual and perceived understanding.

Since previous research, and the research in the current dissertation, has always been cross-sectional in nature, we recommend that future research use alternative experimental designs. The following remaining questions could be answered by the use of experimental (e.g., interventional) research: Is empathic accuracy trainable? And which strategies are most useful for this purpose? Although previous work has offered some suggestions such as raising the perceiver's motivation (Ickes and Simpson, 1997) or

providing online feedback to a perceiver about their level of accuracy and their target's actual thoughts/feelings (Marangoni, Garcia, Ickes, & Teng, 1995), no other available research has further elaborated on these questions.

Our final recommendation involves some suggestions for adaptations of the empathic paradigm and the statistical analysis techniques used in this dissertation. First, we suggest that partners should interact during a longer period of time, in order to allow for more inference points during the video-review task. Furthermore, we also have our doubts about the fixed points at which participants had to infer things from their target, as this is simply too artificial. Future research should incorporate a more valid way of choosing inference points, and should also deal with the limitation of timing. More specifically, if a perceiver makes an accurate inference about their target's inner world on time, this perceiver would be rated as very accurate, however, if this inference occurs a few seconds too early or too late, the perceiver would be rated as totally inaccurate. Hence, this coding procedure could be considered as a very strict assessment of accuracy as a perceiver might have an accurate sense of the inner world of their partner, but happen to be not precise in terms of timing (i.e., "timely accurate"). A final suggestion involves the use of a more innovative and dynamic analysis-technique called *state space grids* (Hollenstein, 2013; Lewis, Lamey, & Douglas, 1999). This technique enables researchers to represent a synchronous ordinal time series in a 2D fashion by use of visual "grids". This would launch a completely new way of examining empathic accuracy, as this would permit us to analyze simultaneous processes as they evolve during the course of the interaction in a within-person or within-dyad fashion.

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ACHTERGROND

Binnen partnerrelaties blijkt het accuraat kunnen inschatten van de gedachten en gevoelens van de partner van zeer groot belang om het coördineren van dagelijkse interacties en processen mogelijk te maken, alsook om op deze manier een bevredigende en stabiele relatie uit te bouwen en te handhaven (Ickes & Hodges, 2013). Dit roept echter allerlei vragen op, zoals bijvoorbeeld: “Hoe goed kunnen mensen elkaars gedachten lezen en gevoelens begrijpen?”, “Beschikken sommige mensen (bv. hulpverleners) over een beter empathisch vermogen dan anderen?” en “Betreft het hier een (te ontwikkelen) vaardigheid of eerder een persoonskenmerk?”

Empirische studies tonen aan dat de empathische inschattingen (ook *inferenties* genaamd) die we maken bij het ontmoeten van onbekenden gemiddeld slechts in 22 procent van de gevallen correct zijn (Ickes, Stinson, Bissonnette, & Garcia, 1990). Deze score, uitgedrukt in een percentage, noemen we de empathische accuraatheidsscore. De ondergrens van deze score bedraagt 5 procent en dit is de gemiddelde accuraatheidsscore op basis van toeval (*baseline accuracy*). De beste “mind-readers” – die slechts uitzonderlijk voorkomen – halen een topscore van 55 procent wat betekent dat ook zij hun interactiepartner allesbehalve perfect kunnen inschatten.

Conceptualisatie

Het concept empathische accuraatheid is een interdisciplinair onderzocht fenomeen dat zijn oorsprong vindt in de klinische- en raadplegingspsychologie. Rogers (1957) definieerde de term *accurate empathie* als de therapeutische vaardigheid om gevoelig te

zijn voor de inhoud van de achtereenvolgende gedachten/gevoelens van een patiënt. Het concept accurate empathie kan beschouwd worden als voorloper van het concept empathische accuraatheid zoals gedefinieerd door Ickes et al. (1990), met als belangrijkste verschil dat Rogers het empathisch proces *an sich* benadrukte terwijl Ickes de mate van accuraatheid als *uitkomst* van dit proces centraal stelt. Empathische accuraatheid wordt hierbij gedefinieerd als “het begrijpen van iemands episodische gedachten en gevoelens zoals ze spontaan verschijnen tijdens het verloop van een natuurlijke interactie” (Ickes, 1993, p. 588).

De mate van empathische accuraatheid wordt geconceptualiseerd als de uitkomst van een interpersoonlijk, multidimensioneel en situatie-specifiek proces tussen een *target* (de persoon die de gedachten/gevoelens heeft) en een *perceiver* (de persoon die de inschattingen maakt). Het gaat dus over een *dyadisch* proces waarbij twee gesprekspartners interageren met elkaar of geobserveerd worden door een derde. De perceiver poogt via *verschillende dimensies* – observatie, geheugen, kennis, redeneren – tot een accurate inschatting van de innerlijke ervaringswereld van het target te komen (Ickes, 1997). Met andere woorden, de perceiver dient dus de beschikbare informationele cues van het target op te merken, te verwerken, om deze nadien te integreren in de *situatie-specifieke context* van de interactie en de potentieel beschikbare cues uit voorgaande interacties (indien de interactiepartners een gezamenlijke voorgeschiedenis hebben).

Operationalisatie

Onderzoek naar het meten van empathische accuraatheid situeerde zich vóór 1990 hoofdzakelijk binnen opleidingen tot klinisch psycholoog/psychotherapeut. Daar werd nagegaan hoe accuraat studenten gedachten/gevoelens tijdens (gesimuleerde)

therapiesessies konden inschatten. Daarnaast werden twee onderzoeksparadigma's ontworpen om empathische accuraatheid op een meer gecontroleerde en gestructureerde manier te meten. Deze twee onderzoeksparadigma's worden hieronder kort besproken.

In het *standaard stimulus paradigma* (SS-paradigma; Kagan, 1977) dienden participanten een standaard set van gefilmde fragmenten te bekijken, waarbij twee onbekende targets deelnemen aan een (on)gestructureerde interactie (bv. interview, therapeutisch gesprek). Deze videofragmenten werden vervolgens op bepaalde tijdstippen gepauzeerd, en dit op basis van de gedachten/gevoelens die de targets rapporteerden. Tijdens deze pauzes werd aan perceivers gevraagd om met behulp van enkele meerkeuze opties een correcte inschatting te maken van de gedachten/gevoelens van het geobserveerde target. Met andere woorden, de accuraatheid van de inferenties werd in deze studie berekend op basis van de overeenkomst tussen de gedachten/gevoelens zoals gerapporteerd door het target zelf en zoals geïnfereerd door de perceiver. Echter, de perceiver diende hier niet zelf de geïnfereerde gedachten/gevoelens te genereren.

Ickes en collega's ontwikkelden begin jaren 1990 het zogenaamde *dyadisch interactie paradigma* (DI-paradigma). In het oorspronkelijk DI-paradigma is er steeds sprake van twee participanten die zowel perceiver als target zijn. Specifiek, in een eerste fase voeren de twee participanten onderling een conversatie die wordt gefilmd. Tijdens een tweede fase bekijken beide participanten, onafhankelijk van elkaar, hun conversatie opnieuw en rapporteren ze wanneer en welke gedachten/gevoelens ze hadden tijdens de conversatie. In een derde fase bekijken ze de opname nogmaals waarbij ze op vastgelegde momenten de gedachten/gevoelens van hun interactiepartner proberen te infereren. Tenslotte wordt de overeenkomst tussen de geïnfereerde en de effectieve gedachten/gevoelens door onafhankelijke codeerders beoordeeld, wat resulteert in een score tussen 0 en 100 (0 = 0% van de gemaakte inferenties is accuraat, 100 = 100% van de

gemaakte inferenties is accuraat). Variaties op het paradigma betreffen hoofdzakelijk de relatie tussen de interactiepartners (bv. vreemden, vrienden of partners) en het conversatietype (bv. natuurlijke conversatie, therapeutische sessie of conflict).

Bronnen van Empathische Accuraatheid

Onderzoek toont aan dat er verschillende bronnen zijn waaruit men de nodige informatie kan halen om tot accurate inschattingen te komen van iemands gedachten/gevoelens. *Verbale cues* – wat letterlijk gezegd wordt – zijn de belangrijkste bron van EA (Hall & Mast, 2007), terwijl *non-verbale cues* – lichaamstaal, gezichtsuitdrukking, intonatie – als additioneel kunnen worden beschouwd. Meer specifiek, non-verbale cues zijn vooral van belang tijdens alledaagse conversaties, wanneer het target niets zegt, of zijn/haar gedachten/gevoelens (bv. verdriet) probeert te verbergen (Ickes, 2006). Binnen de categorie non-verbale cues dragen vocale cues (bv. stemvolume) het meest bij tot accuraatheid, visuele non-verbale cues (bv. gesticulatie) het minst. Vanzelfsprekend speelt ook de geïndividualiseerde kennis over het target een belangrijke rol, waarbij vrienden en zeker partners elkaar accurater blijken te kunnen inschatten dan vreemden (Stinson & Ickes, 1992). Mensen ontwikkelen immers een persoon-specifiek schema dat hen inzicht verschaft in de structuur en inhoud van de herinneringen aan hun interactiepartner, wat het maken van inferenties faciliteert. Perceivers zijn daarnaast ook accurater voor schema-consistente gedachten (bv. vrouwen die aan mode denken) dan voor schema-inconsistente gedachten (bv. vrouwen die aan voetbal denken) (Gesn & Ickes, 1999). Verder zijn ook sociale cognities of schema's omtrent zichzelf, anderen, het eigen interactiegedrag, sociale rollen en stereotypen een belangrijke bron van empathische accuraatheid. Deze sturen immers de interpretatie van (non-)verbale cues, en dit zowel bij bekende als bij onbekende targets (Ickes & Hodges, 2013).

Predictoren van Empathische Accuraatheid

In het dagelijkse leven wordt vaak gezegd dat bepaalde personen beter zijn dan anderen in het inschatten van iemands gedachten/gevoelens. Dit zou betekenen dat empathische accuraatheid een stabiele trek of vaardigheid is die men bezit of ontwikkeld heeft. Indien deze lekenvisie klopt, zou het mogelijk moeten zijn om een lijst op te stellen met karakteristieken van een “goede” perceiver. Dit laatste bleek echter bijzonder moeilijk te zijn, aangezien onderzoek aantoont dat geen enkele persoonlijkheids- of andere stabiele trek of variabele eenduidig het niveau van empathische accuraatheid voorspelt (Ickes et al, 2000). Dit voorgaand onderzoek naar predictoren van accuraatheid kan ingedeeld worden volgens enerzijds stabiele karakteristieken en anderzijds meer situationeel bepaalde motivatie van de perceiver of het target (zie Hodges, Lewis, & Ickes, 2015; zie Tabel 1). Ondanks het beperkte succes van het onderzoek naar stabiele predictoren van empathische accuraatheid, werden wel enkele veelbelovende relatie- en target karakteristieken gevonden die aangeven wanneer perceivers gemotiveerd zijn om empathisch (in)accuraat te zijn. In wat volgt bespreken we kort de predictoren die relevant zijn voor het huidig doctoraatsonderzoek, de overige predictoren worden gepresenteerd in Tabel 1 (voor een uitgebreid overzicht: zie *Hoofdstuk 1 - General Introduction*).

Target-karakteristieken. Het gebrek aan evidentie voor stabiele en eenduidige perceiver-karakteristieken gaf aanleiding tot het onderzoek naar target-karakteristieken. Dit onderzoek richtte zich op de individuele verschillen tussen targets die bepalen hoe moeilijk het al dan niet is voor een perceiver om de gedachten/gevoelens van een bepaald target te infereren.

Leesbaarheid. Concreet betekent dit dat de accuraatheid van de perceiver in belangrijke mate afhangt van hoe “leesbaar”, transparant of doorzichtig (‘readable’) de gedachten/gevoelens van een target zijn in vergelijking met andere targets. Verschillende

studies operationaliseerden deze leesbaarheid via een objectieve index die de moeilijkheid om gedachten/gevoelens te infereren, nagaat ('inferential difficulty'; Marangoni, Garcia, Ickes, & Teng, 1995). Deze index wordt door onafhankelijke observatoren bepaald en dit op basis van de (non-)verbale cues die uitgezonden worden door de targets (bv. verbale inhoud, gezichtsuitdrukking).

Motivationele aspecten. Naast de onderzochte meer stabiele perceiver- en targetkarakteristieken werden ook situationele, in het bijzonder motivationele, aspecten beschreven als zijnde bepalend voor empathische accuraatheid. Met andere woorden, de mate waarin een perceiver gemotiveerd is om de gedachten/gevoelens van zijn/haar interactiepartner accuraat in te schatten, bepaalt onafhankelijk van andere factoren de accuraatheidsscore.

Voor het huidige doctoraatsonderzoek waren vooral de bevindingen omtrent *relationele motivatoren* van belang. Binnen deze motivatoren wordt vervolgens het onderscheid gemaakt tussen korte termijn of proximale motivatoren – zoals zijn/haar partner willen begrijpen tijdens conflict (Kilpatrick, Bissonnette, & Rusbult, 2002) of bijstaan in stressperiodes (Verhofstadt, Davis, & Ickes, 2011) – en lange termijn of distale motivatoren – zoals betrokkenheid op de partner en relatiebehoud (Simpson, Oriña, & Ickes, 2003). Voornamelijk bij het tot stand komen en uitbouwen van relaties is empathische accuraatheid zeer belangrijk om de partner te leren kennen en om diens interesse en engagement accuraat in te schatten (Hodges et al., 2015).

Maar niet alle relationele aspecten blijken partners te motiveren om accuraat te zijn. Zo blijken empathische accuraatheid en *relatieduur* negatief gecorreleerd, vermoedelijk omdat men binnen de relatie een partner-specifiek schema gaat ontwikkelen en steeds vaker vanuit dit schema automatische inferenties maakt en steeds minder aandacht schenkt aan de actuele cues. Daarnaast vond men ook een negatieve correlatie tussen empathische

accuraatheid en *relatietevredenheid* maar dan enkel in *relatiebedreigende contexten* (zie verder; Ickes & Simpson, 2001).

We kunnen hier besluiten dat wat betreft de motivatoren perceivers controle hebben over het “meer” of “minder” accuraat zijn, afhankelijk van welke proximale of distale motivatoren en doelen op dat moment een rol spelen (zie Smith, Ickes, Hall, & Hodges, 2011).

EMPATHISCHE ACCURAATHEID IN PARTNERRELATIES

Partners dienen relatief accuraat te zijn in het inschatten van elkaars gedachten/gevoelens indien ze hun individuele en gezamenlijke gedrag effectief willen coördineren, dit omdat zij uiteenlopende wensen, verwachtingen en doelen kunnen hebben in de relatie. Deze coördinatie is noodzakelijk voor het handhaven van de relatietevredenheid en -stabiliteit (Ickes & Hodges, 2013). Een groot deel van het onderzoek naar empathische accuraatheid is dan ook uitgevoerd binnen intieme relaties. In wat volgt worden vier belangrijke onderzoekslijnen besproken, en belichten we enkele belangrijke onbeantwoorde vragen omtrent empathische accuraatheid binnen partnerrelaties.

Empathische Accuraatheid en Interactiegedrag

Op dagelijkse basis worden partners geconfronteerd met stressoren die hun oorsprong hebben buiten (individuele stressoren) of binnen (gemeenschappelijke stressoren) de relatie (Bodenmann, 2005). Hoe partners samen omgaan met deze dagelijkse stressoren werd bestudeerd in twee verschillende onderzoeksdomeinen: enerzijds in

onderzoek naar sociale steun (omgaan met individuele stressoren), en anderzijds onderzoek naar conflicten (omgaan met gemeenschappelijke stressoren).

Zowel tijdens steun als conflict interacties dienen partners hun (gezamenlijke) acties goed te coördineren tijdens het omgaan met deze stressoren – acties met een grotere kans van slagen als partners meer empathisch accuraat zijn. De mate van empathische accuraatheid, gemeten tijdens een interactie waarbij een persoonlijk probleem van de partner werd besproken, blijkt inderdaad sterk geassocieerd met het verlenen van meer instrumentele steun (bv. advies verlenen) en minder negatieve steun (bv. de partner bekritisieren, het probleem minimaliseren; Devoldre, Davis, Verhofstadt, & Buysse, 2010). Ook tijdens conflict is de mate van empathische accuraatheid belangrijk voor een adequate probleemoplossing: partners moeten namelijk accommoderen – destructieve impulsen inhouden en ombuigen in een constructieve houding – om tot een oplossing te komen en een verdere escalatie van het conflict te vermijden (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Zowel mannen als vrouwen vertonen meer accommodatief gedrag indien zij meer accuraatheid vertonen tijdens het conflict (Kilpatrick et al., 2002).

Hoewel dit eerdere onderzoek suggereert dat empathische accuraatheid partners kan helpen om pro-relatie gedrag te tonen tijdens interacties, lijkt het ook aannemelijk dat partners gemotiveerd zijn om accurate inschattingen te maken omwille van meer "persoonlijke redenen". Een accuraat inzicht in de gedachten en gevoelens van de partner tijdens het conflict stelt ons immers in staat om te anticiperen op bepaalde reacties en om de partner te overtuigen of te “manipuleren”, en zo een beter (persoonlijk) resultaat te bereiken. Echter, voor zover wij weten, is onderzoek naar de bovenstaande assumptie nog niet uitgevoerd.

Empathische Accuraatheid en Zich Begrepen Voelen

Zoals reeds blijkt uit deze introductie, ondersteunt veelvuldig onderzoek de intuïtieve overtuiging dat wederzijds begrip een cruciale rol speelt in intieme relaties, meer in het bijzonder, voor de mate van relationele tevredenheid en relationeel functioneren (zie *Hoofdstuk 3*). Echter, Pollmann en Finkenauer (2009) suggereerden dat het combineren van deze resultaten een belangrijk onderscheid uit het oog verliest, namelijk het onderscheid tussen *objectief* begrip (cf. empathische accuraatheid) en *subjectief* begrip (cf. gepercipieerd begrip, de mate waarin een target zich begrepen voelt door de perceiver). Slechts een paar studies hebben de unieke rol van gepercipieerd begrip onderzocht en vonden een positieve associatie met positieve relatie-uitkomsten, zoals relationeel functioneren, intimiteit en vertrouwen. Bovendien werd gepercipieerd begrip ook gevonden als voorspeller van relationeel welzijn op lange-termijn (Pollman & Finkenauer, 2009; Reis, Clark, & Holmes, 2004).

Echter, tot op heden werd nog geen integrerend onderzoek uitgevoerd naar de unieke rol van objectief en subjectief begrip binnen partnerrelaties.

Empathische Accuraatheid en Bronnen van Onbegrip

Zoals reeds vermeld in de inleiding kunnen we ons afvragen hoe goed partners in staat zijn om elkaar daadwerkelijk te begrijpen. Studies die deze vraag trachtten te beantwoorden suggereren dat partners slechts matig tot beperkt zijn in het afleiden van gedachten en gevoelens van de ander. Volgens Ickes (2011) bereiken gehuwde partners een gemiddelde empathische accuraatheidsscore van 30-35%. Ander onderzoek vindt nog lagere scores van gemiddeld 20% (Verhofstadt, Buysse, Ickes, Davis, & Devoldre, 2008;

Verhofstadt et al., 2016); wat logischerwijs betekent dat partners in 65-80% van de gevallen inaccuraat zijn tijdens het inschatten van de andere partner.

Bijkomend kunnen we ons dus afvragen hoe deze misverstanden gecreëerd worden. Een aanzet tot het beantwoorden van deze vraag kan gevonden worden in de communicatie literatuur die in één van zijn axioma's stelt dat alle communicatie zowel een inhouds- als betrekking- of relationeel niveau heeft (Watzlawick, Beavin-Bavelas, & Jackson, 1967). Dit betekent dat partners niet alleen nadenken over de expliciete inhoud van een boodschap maar ook zullen nadenken over het proces van interactie en wat dit impliceert voor de onderlinge relatie. Een frequent geobserveerd misverstand tussen partners' perspectieven tijdens een conflict is dan ook de *inhoud-proces verwarring* (Sillars, Roberts, Leonard, & Dun, 2000). Deze verwarring doet zich voor wanneer de ene partner de interactie interpreteert in termen van de schijnbare inhoud of het onderwerp, terwijl de andere partner nadenkt over het proces van de interactie en de bijbehorende relationele betekenissen. Bovendien kunnen misverstanden zich naast het thematische niveau, ook op het affectieve niveau situeren. De 'sentiment-override' theorie suggereert dat het algemene gevoel van relationele (on)tevredenheid een belangrijke impact heeft op situationele percepties en emoties (bv. Fincham, Garnier, Gano-Phillips, & Osborne, 1995; Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005; Weiss, 1980). Meer specifiek, over de tijd heen ontwikkelt zich een algemeen gevoel omtrent de relatie dat wordt opgeslagen in een cognitief relationeel schema. Dit schema zal op zijn beurt de situationele gedachten en gevoelens tijdens interacties beïnvloeden op een zichzelf in standhoudende manier (bv. Fincham, 2001; Holtzworth-Munroe & Jacobson, 1985). Dit proces kan vanzelfsprekend opnieuw tot misverstanden leiden.

Echter, op dit moment werd nog geen onderzoek gevoerd naar misverstanden die onderliggend zijn aan empathische inaccuraatheid.

Modificeerbaarheid van Empathische Accuraatheid

Zoals besproken in de paragraaf omtrent motivationele predictoren van empathische accuraatheid (p. 252), heeft voorgaand onderzoek voornamelijk situationele en relationele factoren geïdentificeerd. Bovendien heeft eerder onderzoek ook aangetoond dat empathische accuraatheid de relatie zowel positief als negatief kan beïnvloeden. Deze waarnemingen gaven de aanzet tot de ontwikkeling van het *Empathisch Accuraatheidsmodel* van Ickes en Simpson (1997).

Positieve associatie tussen begrip en relatie-uitkomsten. In de literatuur omtrent wederzijds begrip wordt reeds decennia lang een positieve associatie tussen begrip en relationeel functioneren verondersteld en waargenomen (zie Sillars & Scott, 1983). In dit overzicht wordt de veronderstelling dat congruentie tussen partners' percepties (= een gedeelde perceptuele werkelijkheid) cruciaal is voor het relationeel functioneren, overvloedig gedocumenteerd. De auteurs verwijzen naar studies die positieve verbanden vonden tussen aanpassing binnen de relatie en het begrijpen van de partners' attitudes, verwachtingen en zelf-percepties (zie Sillars & Scott, 1983). De algemene conclusie van deze studies is bijgevolg dat meer begrip goed is voor relaties. Vervolgens werd een dominant advies met betrekking tot communicatie binnen koppels naar voren geschoven waarin het belang van zelfonthulling om wederzijds begrip te bevorderen, sterk gepromoot werd (Bochner, 1981).

Negatieve associatie tussen begrip en relatie-uitkomsten. Hoewel het hierboven beschreven dominant advies door veel klinici en onderzoekers werd onderschreven, hebben sommige auteurs hun bezorgdheid geuit. Zij poneerden dat het verhogen van de openheid en de vermindering van "relatie-bevorderende misvattingen" ook nadelig kan zijn voor de relatie (Bochner, 1981; Parks, 1981). Verschillende studies ondersteunden deze opmerking door het identificeren van omstandigheden waarin meer

begrip samenhangt met meer conflict en ontevredenheid (zie *Hoofdstuk 1 & 4*), zoals bij het onthullen van *onoverbrugbare verschillen* tussen partners' perspectieven of *goedbedoelde misvattingen* of bij inzicht in *kwetsende of gemene waarheden* van het target.

Ickes en Simpson poogden bovenstaande bevindingen te integreren in een theoretisch model dat rekening houdt met zowel de motieven van de partners als de verwachte resultaten van empathische accuraatheid gegeven de situatie. Dit model maakt het mogelijk om de mate van empathische accuraatheid te voorspellen in bepaalde contexten en de verwachte impact van deze mate van accuraatheid op zowel het relationeel als persoonlijk welzijn.

Empathisch Accuraatheidsmodel. Het model (Ickes en Simpson, 1997; 2001; zie *Hoofdstuk 1 - General Introduction*, p. 35) toont verschillende paden die het niveau van empathische accuraatheid voorspellen, alsook uitspraken doen over de korte-termijn effecten ten gevolge van het niveau van accuraatheid. Het centrale aspect dat bepaalt of empathische accuraatheid het individuele en/of relationele welzijn op korte termijn zal versterken of destabiliseren is de mate van ervaren bedreiging in de gegeven situatie (potentiële “gevaarzones”). Met andere woorden, indien de situatie niet als een gevaarzone wordt geïdentificeerd, dan zal de waarnemer zich in het algemeen niet bedreigd voelen, zal hij/zij hoge mate van empathische accuraatheid nastreven, en zal deze accuraatheid een positieve invloed hebben op het welzijn. Echter, indien de situatie als potentieel bedreigend wordt ervaren, kan een hoge mate van empathische accuraatheid ongewenste gevolgen hebben, en dit afhankelijk van hoe ambigu de gedachten en gevoelens van het target zijn (cf. leesbaarheid). Immers, rechtlijnige, eenduidige gedachten vergen niet veel moeite om accuraat af te leiden, met een matige tot hoge mate van empathische accuraatheid tot gevolg (bv. wanneer een partner bekend een affaire te hebben, dan kan de schadelijke inhoud niet vermeden worden door minder accuraat te zijn). Het model geeft

aan dat een perceiver die zich (zeer) bedreigd voelt – wat allicht het geval is in het voorbeeld – en zijn/haar partner accuraat inschat, instabiliteit zal ervaren op individueel/relatieel vlak (bv. instabiliteit van zijn/haar gevoel van eigenwaarde en/of relatie). Het laatste pad van het model beschrijft de situatie waarin gemotiveerde empathische *in*accuraatheid het meest aangewezen zou moeten zijn. De rol van *in*accuraatheid als beschermend mechanisme (op korte termijn) wordt hier duidelijk aangezien het model suggereert dat potentieel bedreigende ambigue gedachten/gevoelens van het target vermeden kunnen worden (indien de perceiver geen moeite doet om de ambigue gedachten/gevoelens accuraat in te schatten, dan zullen deze onduidelijk/ongekend blijven). Kortom, wanneer een perceiver mogelijk bedreiging ervaart zal zijn/haar niveau van empathische accuraatheid dalen, wat op zijn beurt het individueel en/of relationeel welzijn op korte termijn zal beschermen.

Het model lijkt er dus in geslaagd om de complexe bevindingen en soms tegenstrijdige uitkomsten van empathische accuraatheid te integreren, zonder de belangrijke rol van empathische accuraatheid in partnerrelaties te ontkennen. Het meest innovatieve aspect van dit model is daarnaast de introductie van empathische *in*accuraatheid als beschermingsmechanisme op kort termijn, wat impliceert dat perceivers gemotiveerd kunnen zijn – zonder uitspraken te doen over hoe bewust en autonoom deze motieven zijn – om *in*accurate inschattingen te maken.

Aangezien dit model tot op heden slechts beperkt empirisch geverifieerd werd, is het belangrijk om onderzoek uit te voeren naar de assumpties die ten grondslag liggen aan dit model.

DOELSTELLINGEN VAN HET DOCTORAATSONDERZOEK

De complexe rol van empathische accuraatheid in partnerrelaties blijkt uit het hierboven beschreven voorgaand onderzoek en onderstreept de noodzaak aan meer diepgaande kennis van het concept. Deze vaststelling vormde de basis voor onze grootschalige observationele studie genaamd de “UGent Family Lab Couple Study”, uitgevoerd in het kader van het huidige doctoraatsonderzoek. Deze studie combineerde een uitgebreide online vragenlijst sessie met een observationele sessie bestaande uit een geobserveerde dyadische interactie-taak en een video-review taak. Het doel van dit grootschalig onderzoek was om (1) de hieronder beschreven onderzoeksvragen te testen binnen een grote steekproef van koppels, (2) gebruik te maken van een multi-methodische benadering (nl. een combinatie van zelfrapportage, observationele gegevens, gedragscoderingen en online zelfrapportage items) en (3) zowel algemene als situationele maten van de relevante variabelen te integreren.

We kozen ervoor om empathische accuraatheid *in de context van koppelconflict* te bestuderen omwille van vier redenen. Ten eerste zijn meningsverschillen en conflicten onvermijdelijk in intieme relaties aangezien elke partner zijn/haar eigen verwachtingen, doelstellingen, behoeften en perspectieven heeft. Conflict ontstaat dan ook wanneer een persoon deze doelen nastreeft op een manier die interfereert met de doelstellingen van de andere partner (Lewin, 1948). Hoe partners zich gedragen en wat ze denken en voelen tijdens een conflict is reeds decennia lang een belangrijk onderwerp van psychologisch onderzoek, aangezien conflict een belangrijk en frequent voorkomend domein van interactie is (zie: Bradbury & Karney, 2014). En hoewel intensief bestudeerd, bleven enkele belangrijke aspecten onderbelicht, zoals de rol van empathische accuraatheid tijdens conflict. Ten tweede is elkaar begrijpen cruciaal om een conflict effectief te bespreken en op te lossen. Partners moeten namelijk eerst een gezamenlijke focus omtrent de kern van

de zaak bereiken, om daarna het perspectief van de ander in te kunnen nemen en zijn/haar visie op het onderwerp te kunnen begrijpen. Echter, voorgaand onderzoek toonde aan dat dit een zeer veeleisend proces is tijdens conflict. Daarom is onze derde reden voor het bestuderen van conflict de schijnbare discrepantie tussen de noodzaak om elkaar te begrijpen enerzijds en conflict als “ideale” context om misverstanden te creëren en bloot te leggen anderzijds. Ten slotte kan conflict partners ook de kans bieden om verschillen in doelen of perspectieven met elkaar te verzoenen, maar als gevolg van deze tegenstrijdige doelen en perspectieven kan conflict ook leiden tot een hoge mate van relatie- of zelfbedreiging, wat op zijn beurt opnieuw efficiënte perspectief-name kan verhinderen.

Samengevat, conflict binnen de relatie blijkt optimaal om onze onderzoeksvragen te bestuderen aangezien het effectief begrijpen van elkaar zowel van cruciaal belang, als een moeilijke uitdaging blijkt binnen deze context.

OVERZICHT VAN DE ONDERZOEKSVRAGEN EN -BEVINDINGEN

Empathische Accuraatheid en Partners' Conflict Interactiegedrag

De eerste doelstelling van het huidige proefschrift was het onderzoeken van de associatie tussen partners hun niveau van empathische accuraatheid en hun conflict interactiegedrag, met name de mate waarin zij veeleisend gedrag stellen tijdens conflict met hun partner. Zoals hierboven beschreven heeft eerder onderzoek al aangegeven dat empathische accuraatheid een belangrijke rol speelt in het effectief omgaan met en oplossen van problemen. Echter, in tegenstelling tot relationeel-gericht probleemoplossend gedrag, kan ook meer individueel-gericht probleemoplossend gedrag baat hebben bij hogere niveaus van empathische accuraatheid.

Personen die een onenigheid of conflict initiëren, wensen over het algemeen bepaalde veranderingen in het gedrag, de opvattingen of de waarden van hun partner of wensen de status quo van de relatie te veranderen, en zullen daarom geneigd zijn om meer veeleisend gedrag te vertonen (Christensen & Pasch, 1993; Eldridge & Christensen, 2002). Daarnaast heeft onderzoek ook aangetoond dat het niveau van empathische accuraatheid deels afhankelijk is van situationele en relationele motivatoren. Met andere woorden, aangezien veeleisend gedrag van de conflict-initiërende partner wordt aangedreven door een motief om bepaalde verandering te bereiken, lijkt het waarschijnlijk dat dit motief ook aanleiding geeft tot het accuraat trachten in te schatten van de gedachten en gevoelens van de partner. Bijgevolg onderzochten we in *Hoofdstuk 2* de veronderstelling dat partners met meer veeleisend interactiegedrag, mogelijks ook empathisch accurater zijn op een manier die hen in staat stelt om meer invloed uit te oefenen op hun partner en daarmee een betere uitkomst te kunnen bereiken voor zichzelf.

Deze veronderstelling werd getest in twee empirische studies waarin koppels eerst een vragenlijst omtrent hun relationele tevredenheid invulden en daarna deelnamen aan een gefilmde conflict-interactie taak met bijhorende video-review taak. In Studie 1 vonden we, na controle voor relatietevredenheid, significante associaties met de twee subcategorieën van veeleisend gedrag, namelijk beschuldigen en het uitoefenen van druk tot verandering. De eerste associatie suggereerde dat partners die tijdens de conflict-interactie meer beschuldigden, hogere niveaus van empathische accuraatheid bereikten, onafhankelijk van het feit of ze al dan niet het conflict geïnitieerd hadden. De tweede associatie suggereerde een tweewegsinteractie, namelijk wanneer de perceiver het conflict geïnitieerd had, was het uitoefenen van druk tot verandering gelinkt met een lager niveau van empathische accuraatheid. Echter, deze negatieve associatie tussen druk uitoefenen en empathische accuraatheid bleek omgekeerd voor perceivers die het conflict *niet* initieerden.

In Studie 2 maakten we het onderscheid tussen empathische accuraatheid voor gedachten en empathische accuraatheid voor gevoelens en werd geslacht als voorspeller in het model opgenomen. Na controle voor relatietevredenheid lieten de analyses geen significante effecten zien. Wel werd een duidelijke trend gevonden in het voorspellen van empathische accuraatheid voor gedachten, namelijk indien de perceiver het conflict initieerde, dan was zijn/haar beschuldigend gedrag negatief geassocieerd met zijn/haar empathische accuraatheid. En opnieuw werd dit verband positief wanneer de perceiver het conflict *niet* initieerde.

Samengevat lijken onze bevindingen aan te tonen dat wanneer een perceiver een conflict initieert en daarbij veeleisend gedrag (zowel beschuldigen als druk uitoefenen) stelt, dan blijkt deze perceiver minder accuraat te zijn in het "lezen" van de gevoelens/gedachten van de partner. Echter, wanneer de perceiver het conflict niet initieert, dan blijkt deze partner wel meer accurate conclusies te maken over de gedachten/gevoelens van de initiatie nemende partner en reageert deze partner ook met een "tegenaanval" van beschuldiging of druk tot verandering. Maar, aangezien beide studies elkaars resultaten niet volledig konden repliceren is verder onderzoek aangewezen, dat bij voorkeur niet cross-sectioneel is van aard om de causaliteit van de variabelen te kunnen bepalen.

Empathische Accuraatheid en Zich Begrepen Voelen

De tweede doelstelling van het huidige proefschrift focuste zich op de link tussen empathische accuraatheid en gepercipieerd begrip. Zoals reeds vermeld, is er geen eerder onderzoek voor handen dat onderzocht of het gevoel (niet) begrepen te worden door de partner (cf. waargenomen of gepercipieerd begrip) (gedeeltelijk) gebaseerd is op het werkelijke of objectieve begrip (cf. empathische accuraatheid) van de partner. Een tweede

vraag die we ons stelden is in hoeverre iemand zijn eigen accuraatheid kan inschatten (cf. verondersteld begrip). In *Hoofdstuk 3* gingen we daarom na of er een verband was tussen de objectieve mate van begrip (empathische accuraatheid) en subjectieve maten van begrip (eigen verondersteld begrip en gepercipieerd begrip van de partner). Daarnaast onderzochten we ook de unieke associatie tussen relatietevredenheid en empathische accuraatheid enerzijds, en zich begrepen voelen anderzijds.

Verrassend genoeg vonden we geen significant verband tussen het objectief begrijpen van de partner (of empathische accuraatheid) en beide scores van gepercipieerd begrip (m.a.w. eigen verondersteld begrip en waargenomen begrip door de partner). Dit betekent enerzijds dat perceivers hun eigen prestatie of hoe goed ze hun partner hebben ingeschat tijdens de conflict-interactie, niet accuraat kunnen beoordelen. Anderzijds betekent dit ook dat het gevoel begrepen te worden door de perceiver niet gebaseerd is op de realiteit of op hoe goed de perceiver er echt in geslaagd is de gevoelens en gedachten van zijn/haar partner in te schatten. Daarnaast vonden onze APIM analyses geen verband tussen objectief begrip en relatietevredenheid. Echter, de resultaten duiden wel op een positieve trend tussen het werkelijk begrip van vrouwen en hun relatietevredenheid. Verder vonden we dat het gevoel begrepen te worden wel geassocieerd is met relatietevredenheid, zowel voor mannen als voor vrouwen. Bovendien was het voor de relatietevredenheid van vrouwen ook belangrijk dat hun mannelijke partner zich begrepen voelde.

Empathische (In)Accuraatheid en Bronnen van Onbegrip

De derde doelstelling van dit proefschrift was om de eerder lage tot matige empathische accuraatheidsscores, alsook de potentiële misverstanden die ten grondslag liggen aan deze scores te onderzoeken. Meer in het bijzonder wilden we een diepgaandere

analyse van de inhoud van de gedachten uitvoeren ter aanvulling op een louter kwantitatieve analyse van empathische accuraatheid (cf. percentage score) door het categoriseren van directe en meta-perspectieven van partners tijdens een conflict-interactie. Directe perspectieven verwijzen naar de eigen continue stroom van gedachten, terwijl meta-perspectieven betrekking hebben op het inschatten van de gedachten van de partner. In *Hoofdstuk 4* trachtten we met behulp van een inhoudsanalyse mogelijke misverstanden te identificeren (bv. inhoud-proces verwarring, misverstanden op affectief niveau door ‘sentiment override’). Daarna werd de associatie tussen deze geïdentificeerde misverstanden en empathische inaccuraatheid onderzocht.

De analyse van de gedachten werd zowel op thematisch niveau (“Waarover gaan de gedachten?”) als op affect niveau (“Welke valentie hebben deze gedachten?”) gevoerd. Uit de analyse van de directe- en meta-perspectieven op thematisch niveau bleek dat zowel mannen als vrouwen vaak gedachten hadden aangaande het proces van interactie en aangaande persoonsbeoordelingen (van zichzelf, de partner of de relatie). Verder gaven partners’ eigen gedachten blijk van een zelf-bevestigende bias aangezien ze vaker constructief-engagerend gedrag aan zichzelf toeschreven dan aan hun partner. Er werd ook een onverwacht genderverschil gevonden in het feit dat vrouwen meer dachten dat hun partner zich defensief of vermijdend gedroeg, in vergelijking met hoe mannen dachten over hun vrouw. Tenslotte, onze belangrijkste bevinding op thematisch niveau wijst op een significant negatief verband tussen het maken van een verkeerde inschatting (over- of onderschatting) van de proces gedachten van de partner en empathische accuraatheid enerzijds, en een soortgelijke trend werd gevonden voor een verkeerde inschatting van de partners’ persoonsbeoordelende gedachten en empathische accuraatheid anderzijds. Op affectief niveau, bleken er vooral misvattingen te ontstaan bij vrouwen die het aantal positieve gedachten onder- en het aantal negatieve gedachten overschatten bij hun partner.

En bovendien bleken misvattingen omtrent de positiviteit en neutraliteit van de partner zijn/haar gedachten ook geassocieerd met lagere empathische accuraatheidsscores.

Kortom, deze bevindingen tonen aan dat de lage tot matige empathische accuraatheidsscores niet alleen het gevolg zijn van misvattingen van moment tot moment, maar geassocieerd zijn met een algemene tendens van partners om elkaars gedachten op zowel inhoudelijk (thematisch) als affectief niveau te over- of onderschatten.

Modificeerbaarheid van Empathische Accuraatheid

Het vierde objectief had als doel de rol van vermogen versus motivatie in empathisch (in)accuraatheid te onderzoeken. Zoals reeds beschreven in de paragraaf omtrent het Empathisch Accuraatheidsmodel, treed gemotiveerde empathische (in)accuraatheid op wanneer iemand “een motief heeft om wat zijn/haar interactiepartner denkt/voelt (in)accuraat in te schatten, wat resulteert in een empathische accuraatheidsscore die beduidend lager/hoger is dan de score van andere personen in dezelfde situatie” (Cuperman, Howland, Ickes, & Simpson, 2011, p. 216). De assumpties in dit model werden ook reeds onderschreven door theorieën binnen de sociale cognitie die veronderstellen dat cognitieve redeneer- en denkprocessen gestuurd worden door een *accuraatheidsmotief* (= motief om tot een accurate conclusie te komen) enerzijds en door een *eigenwaarde-regulerend motief* (= motief om tot een wenselijke/eigenwaarde-versterkende conclusie te komen) anderzijds (Kunda, 1990). Indien deze redenering, en dus de onderliggende assumpties van het model valide zijn, moet het mogelijk zijn de volgende assumpties aan te tonen in de data van dit proefschrift: (a) partners’ niveau van empathische accuraatheid is modificeerbaar, (b) ervaren bedreiging is geassocieerd met het niveau van empathische accuraatheid (vermeerderen of verminderen) en (c) empathische inaccuraatheid kan

optreden als beschermingsmechanisme van individueel/relatieel welzijn op korte termijn. Deze drie assumpties werden expliciet getest in *Hoofdstuk 5*.

In dit hoofdstuk werd enig bewijs gevonden voor de modificeerbaarheid van empathische accuraatheid aangezien de scores van partners fluctueerden over de zeven punten tijdens de interactie. Daarnaast werd enige aanwijzing gevonden voor een accuraatheidsmotief bij partners, aangezien ze significant hogere scores van accuraatheid haalden voor hun eigen partner dan voor een onbekende partner. Echter, dit kan ook evidentie zijn voor een effect van vertrouwdheid en van gedeelde geschiedenis (zie *Hoofdstuk 5*). Er werd echter geen evidentie gevonden voor een eigenwaarde-regulerend motief, aangezien de resultaten geen daling in partners' accuraatheid aantoonde voor de gedachten/gevoelens met een hogere mate van bedreiging. Gepercipieerde bedreiging was met andere woorden niet geassocieerd met empathische accuraatheid. We vonden wel aanwijzingen voor gepercipieerde bedreiging als moderator van het verband tussen empathische accuraatheid en situationeel welzijn. Specifiek, hogere niveaus van empathische accuraatheid voor niet-bedreigende gevoelens waren voorspellend voor een toename in ervaren nabijheid voor mannen en een verbeterde stemming bij vrouwen. Er werden echter geen aanwijzingen gevonden voor een schadelijk effect van empathische accuraatheid voor bedreigende gedachten/gevoelens op situationeel welzijn.

Deze bevindingen suggereren een complexe rol van empathische accuraatheid tijdens conflict in koppels en lijken te wijzen op de modificeerbaarheid van empathische accuraatheid. Echter, toekomstig onderzoek is nodig om het precieze samenspel van potentiële predictoren, accuraatheid en uitkomstvariabelen verder te exploreren en te integreren.

KLINISCHE IMPLICATIES

Op basis van de algemene conclusies van dit proefschrift, is het niet mogelijk om empathische accuraatheid eenzijdig te promoten enerzijds of empathische accuraatheid geheel te ontmoedigen anderzijds, aangezien de effecten van empathische accuraatheid afhangen van *hoe* en *wanneer* het aangewend wordt. Toch kunnen onze bevindingen, in hun complexiteit, vertaald worden naar vier belangrijke punten relevant voor therapeuten tijdens partnerrelatietherapie.

Ten eerste, ondanks het feit dat empathische accuraatheid relatie/individueel welzijn op korte termijn kan destabiliseren (door o.a. het onthullen van verschillen in opvattingen, goedbedoelde misvattingen), betekent dit niet dat partners accurate inschattingen dienen te vermijden. Hoe partners deze korte-termijn destabilisatie omzetten in lange-termijn effecten – hetzij groei en versteviging, hetzij conflict of zelfs uiteen gaan – is afhankelijk van hun vaardigheden om om te gaan met de nieuwe onthulde uitdagingen. Bijgevolg kan het voor therapeuten nuttig zijn om partners te stimuleren tot het bereiken van een “goed-genoeg” niveau van empathische accuraatheid, voldoende accuraatheid om essentiële verschillen of uitdagingen te identificeren en aan te pakken in het belang van de relatie, maar ook voldoende inaccuraatheid om zichzelf en/of de relatie te beschermen tegen de confrontatie met iedere vorm van bedreiging of negativiteit in de gedachten van hun partner.

Ten tweede kan het ook belangrijk zijn om een aantal van de bestaande therapieprogramma's bij te sturen. Immers, vaak richten deze programma's zich uitsluitend op de verbetering van communicatievaardigheden met als doel wederzijds (objectief) begrip te verbeteren (bv. Couple Communication Program (CC); Butler en Wampler, 1999; Relationship Enhancement (RE); Accordino & Guerney, 2003; Guerney, 1977). Hoewel deze programma's hun waarde hebben bewezen, zoals blijkt uit de overvloedige empirische

bewijzen van hun korte- en lange-termijn effecten, suggereren onze bevindingen een belangrijke aanvulling. Onze resultaten toonden namelijk aan dat het *gevoel* begrepen te worden niet het automatische gevolg is van het *feitelijk* begrepen worden door de partner, en bovendien bleek gepercipieerd begrip uniek bij te dragen tot relationele tevredenheid. Therapeuten kunnen dus, naast het stimuleren van elkaar feitelijk te begrijpen, ook op zoek gaan naar momenten of factoren die het gevoel geven van begrepen te worden en exploreren hoe dit gevoel versterkt kan worden.

Ten derde, wanneer lage niveaus van empathische accuraatheid effectief een probleem vormen binnen de relatie, bijvoorbeeld door een gebrek aan feitelijk inzicht of het ervaren van een groot verschil op vlak van empathische accuraatheid tussen beide partners, dan kan een training in perspectief-name geschikt zijn. Een groot deel van de bestaande therapieprogramma's op dit gebied zijn hierbij gericht op het verhogen van zelfonthulling (d.w.z. het verhogen van de leesbaarheid van het target, zie *Hoofdstuk 3* en *5*), of het aanleren van actief-luisteren technieken. De resultaten van *Hoofdstuk 4* wezen op het feit dat communicatie meerdere lagen heeft en er vaak misverstanden ontstaan door het verwarren van deze lagen, bijvoorbeeld één partner denkt na over mogelijke relationele aspecten, terwijl de andere partners zich focust op het besproken onderwerp. Tijdens partnerrelatietherapie kan bijgevolg aandacht besteed worden aan de boodschappen op beide niveaus, en kan psycho-educatie leiden tot het inzicht dat beide partners dienen te communiceren op een gelijk niveau en dit vanuit een gedeeld denkkader, wat op zijn beurt kan leiden tot een vermindering van het aantal misverstanden.

Tenslotte is het ook belangrijk dat partners weten hoe zij betekenis attribueren aan (non)verbale signalen van de partner tijdens het interactieproces, aangezien het infereren van gedachten (gedeeltelijk) wordt gestuurd door de reeds bestaande partner/relationele cognitieve schema's (zie 'sentiment override'; Verhofstadt et al, 2005; Weiss, 1980).

Bovendien kunnen deze schema's ook de functie van empathische accuraatheid bepalen, bijvoorbeeld, zal iemand zijn/haar accurate inzichten gebruiken om de partner beter te ondersteunen (aangedreven door een onderliggende focus op relatie doelen) of zal iemand zijn/haar accurate inzichten gebruiken om de zwakke plekken van de partner te identificeren en zo te weten waar hij/zij kan op inspelen om een bepaald doel te bereiken (aangedreven door een onderliggende focus op individuele doelen)? Naast de bestaande vaardigheidstrainingen kunnen cognitie-gerichte interventies ook nodig zijn zodoende micro-veranderingen in partners' attributieprocessen en hun bijhorende cognitieve schema's te initiëren.

LIMITATIES

Een eerste algemene (methodologische) limitatie heeft betrekking op het dyadisch interactie paradigma. Tijdens de conflict-interactie taak werd één van beide partners aangewezen als conflict initiator (hij/zij die het onderwerp diende te kiezen en te introduceren). Een eerste opmerking hierbij is dat een partner "verplicht" werd in de rol van conflict-initiator, ongeacht of deze partner zich comfortabel voelde in deze rol en/of tijdens conflicten thuis deze rol zou opnemen, en bovendien weten we niet of deze partner al dan niet gemotiveerd was om zijn/haar onderwerp te bespreken of op te lossen.

Vervolgens voltooiden beide partners een video-review taak, waarbij ze hun eigen gedachten/gevoelens en deze van hun partner op vaste tijdstippen dienden te noteren, namelijk om de 90 seconden. Deze procedure werd reeds toegepast in eerder onderzoek (Verhofstadt et al, 2008; 2016), maar desondanks zijn deze tijdsintervallen artificieel, aangezien dit soort automatisch gegenereerde stops geen rekening houdt met het verloop van de interactie en de natuurlijke gedachtegang van beide partners. Bovendien is het

mogelijk dat een partner zich geen gedachte/gevoel kan herinneren op dat bepaalde moment of niet in staat is om de gedachten/gevoelens van de partner op dat moment te infereren, wat misschien wel mogelijk was op een ander moment tijdens het interval. Tevens vereist het accuraat rapporteren van geïnfereerde gedachten/gevoelens niet enkel *empathisch inzicht* – het vermogen om accuraat gedachten/gevoelens af te leiden van een target – maar ook *empathische expressie* – het vermogen om deze geïnfereerde gedachten en gevoelens in woorden uit te drukken die overeenkomen met de beoogde inhoud en ervaring van het target. Dus, we kunnen ons de vraag stellen of de empathische accuraatheidsscore enkel de empathische prestaties weerspiegelt of ook andere vaardigheden. Als laatste haalden de deelnemers vaak aan dat het paradigma tijdrovend is, wat hun motivatie en/of concentratie negatief kan beïnvloeden, en omdat de perceivers geen feedback ontvingen over hoe ze de taak uitvoerden, kan dit bij sommigen frustratie uitgelokt hebben.

De laatste stap in het paradigma bestaat uit het codeerproces dat slechts drie scores omvat (0 = *andere inhoud van de werkelijke gedachte/gevoel*, 1 = *gelijkaardige maar niet dezelfde inhoud als de werkelijke gedachte/gevoel* en 2 = *hoofdzakelijk dezelfde inhoud als de werkelijke gedachte/gevoel*; Ickes et al, 1990). Deze beperkte range van scores is ontworpen om de codering te vergemakkelijken en bijgevolg de interbeoordelaarsbetrouwbaarheid te verhogen. Echter, dit beperkt eveneens de mogelijke variatie in de scores van empathische accuraatheid, aangezien veel inferenties de score 1 krijgen. Bovendien blijkt dat, hoewel het codeerproces vrij eenvoudig is, de codering toch een voldoende aantal beoordelaars vereist. Ickes suggereert zeven beoordelaars voor een optimale betrouwbaarheid, eerder werk haalde een hoge betrouwbaarheid met vijf beoordelaars, maar door de grote steekproef en het beperkt aantal beschikbare beoordelaars, heeft het huidige proefschrift slechts vier beoordelaars opgenomen, wat toch het minimum aantal beoordelaars blijkt te zijn om een acceptabele mate van betrouwbaarheid te bereiken.

Anderzijds kan dit argument enigszins getemperd worden, mits we een strengere maat van betrouwbaarheid hebben toegepast dan voorgaand onderzoek.

Een tweede belangrijke beperking van dit proefschrift werd reeds in de afzonderlijke hoofdstukken aangehaald, en heeft betrekking op de steekproefkarakteristieken. Hoewel we een grote steekproef verzamelden met een aantal zeer belangrijke voordelen ten opzichte van de gangbare steekproeven in sociaal-psychologisch onderzoek, zoals onder andere een brede range in relatieduur en leeftijd, is de steekproef ook beperkt in zijn generaliseerbaarheid gezien de inclusie van voornamelijk blanke, heteroseksuele, middenklasse koppels die over het algemeen tevreden zijn over hun relatie. Verder toekomstig onderzoek is dus aangewezen ten einde onze bevindingen te kunnen generaliseren in andere steekproeven, bijvoorbeeld holebi partners of partners op zoek naar/in relatietherapie.

Tabel 1

Overzicht van het Onderzoek naar de Bronnen en Predictoren van Empathische Accuraatheid

	Specificatie	Verband met EA
Perceiver karakteristieken		
Interpersoonlijke sensitiviteit	Vaardigheid decoderen non-verbaal gedrag	/
	Interpersoonlijke perceptie	/
	Dispositionele empathie	Niet eenduidig
	Empathie voor emoties	+ (enkel bij SS-paradigma én hoog expressieve targets)
Cognitief vermogen en stijl	Intelligentie	+ verbaal IQ (enkel bij ♂)
Seks en geslacht	Geslacht	Niet eenduidig: ♀ > ♂
	Geslacht	+ (♀ & activatie vrouwelijke genderrol)
Ontwikkelingsstoornissen	ASS/PDD	- (sterker bij ongestructureerde interactie)
Target karakteristieken		
Leesbaarheid	Transparantie (IDI)	Lage IDI > Hoge IDI
Seks en geslacht	Geslacht	Niet eenduidig (♂: makkelijker leesbaar; ♀: duidelijker non-verbale signalen)
Motivationele aspecten		
Situatiele motivatoren	Geld	+ (bij nadruk op verbale cues) / of - (bij nadruk op non-verbale cues)
	Garantie op succes bij aantrekkelijke ♀	+
Motivatoren afkomstig van perceiver	Nood om bij sociale groep te horen/verbondenheid	+
	Veilige hechting	+ (niet relatie-bedreigende context) - (relatie-bedreigende context)
	Angstige hechting	- (niet relatie-bedreigende context) + (relatie-bedreigende context)
	Vermijdende hechting	- (beide contexten)
Motivatoren afkomstig van target	Andere geslacht	+
	Fysieke aantrekkelijkheid	+
Relationele motivatoren		
	Conflictsituatie (niet relatie-bedreigend)	+ (accuraatheidsmotief; gevolg (1) accommodatie indien wederzijds begrip of (2)

	escalatie indien blootleggen van onoverkomelijke meningsverschillen)
Conflictsituatie (relatie-bedreigend)	+ (accuraatheidsmotief; gevolg: (tijdelijke) instabiliteit relatie/zelf) - (beschermingsmotief; gevolg: stabiliteit (op KT) wordt behouden)
Sociale steun	+ (= meer instrumentele steun en minder negatieve steun)
Relatieduur	+ (ontstaan/begin relatie) - (langdurige relatie)

Noot. / = Geen verband; + = meer accuraatheid; - = minder accuraatheid; tabel overgenomen uit Hinnekens et al. 2015.

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Data Storage Fact Sheet 1

Name/identifier study: Demand behavior and empathic accuracy in observed conflict interactions in couples.

Author: Hinnekens, Céline, Ickes, William, De Schryver, Maarten, & Verhofstadt, Lesley

Date: October 2015

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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:

Hinneken, C., Ickes, W., De Schryver, M., & Verhofstadt, L. L.(2015). Demand behavior and empathic accuracy in observed conflict interactions in couples. *The Journal of Social Psychology*, 156, 437-443. doi: 10.1080/00224545.2015.1115386

* Which datasets in that publication does this sheet apply to?: This dsfs applies to the study that is reported in the publication stated above.

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? ☒ YES / ☐ NO

If NO, please justify:

* On which platform are the raw data stored?

- ☒ researcher PC
- ☐ research group file server
- ☒ other (specify): back-up on external hard drive

* Who has direct access to the raw data (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify): ...

3b. Other files

* Which other files have been stored?

- ☒ file(s) describing the transition from raw data to reported results. Specify: R syntax file

- ☒ file(s) containing processed data. Specify: Three datasets containing the data of a large survey + observational study (file 1: coding-data empathic accuracy = raw data stored by coder and calculated (total)scores; file 2: coding-data demand/withdrawal behavior = raw data stored by coder and calculated (total)scores; file 3: survey data = raw data and calculated (total)scores of the questionnaires).

- ☒ file(s) containing analyses. Specify: R output files
- ☐ files(s) containing information about informed consent
- ☐ a file specifying legal and ethical provisions
- ☐ file(s) that describe the content of the stored files and how this content should be interpreted. Specify: ...
- ☐ other files. Specify: ...

* On which platform are these other files stored?

- ☒ individual PC
- ☐ research group file server
- ☒ other: back-up on external hard drive

* Who has direct access to these other files (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify): ...

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* Have the results been reproduced independently?: ☐ YES / ☒ NO

* If yes, by whom (add if multiple):

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- address:
- affiliation:
- e-mail:

Data Storage Fact Sheet 2

Name/identifier study: Empathic accuracy and observed demand behavior in couples.
 Author: Hinnekens, Céline, Vanhee, Gaëlle, De Schryver, Maarten, Ickes, William, & Verhofstadt, Lesley
 Date: September 2016

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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:

Hinneken, C., Vanhee, G., De Schryver, M., Ickes, W., & Verhofstadt, L. L. (2016). Empathic accuracy and observed demand behavior in couples. *Frontiers in Psychology*, 7. doi: 10.3389/fpsyg.2016.01370

* Which datasets in that publication does this sheet apply to?: This dsfs applies to the study that is reported in the publication stated above.

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? [x] YES / [] NO
 If NO, please justify:

* On which platform are the raw data stored?

- [x] researcher PC
- [] research group file server
- [x] other (specify): Online data-depository:

<https://figshare.com/s/1dd9ca870d12284ddfb6> under the name "Empathic Accuracy and Observed Demand Behavior in Couples + back-up on external hard drive"

* Who has direct access to the raw data (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☒ other (specify): Visitors of the document on figShare

3b. Other files

* Which other files have been stored?

- ☒ file(s) describing the transition from raw data to reported results. Specify: R syntax files + word-file + SPSS syntax files
- ☒ file(s) containing processed data. Specify: Two datasets containing the data of a large survey + observational study (file 1: coding-data empathic accuracy = raw data stored by coder and calculated (total)scores; file 2: coding-data demand/withdrawal behavior = raw data stored by coder).
- ☒ file(s) containing analyses. Specify: R output files
- ☐ files(s) containing information about informed consent
- ☐ a file specifying legal and ethical provisions
- ☐ file(s) that describe the content of the stored files and how this content should be interpreted. Specify: ...
- ☒ other files. Specify: word-file describing the variables and measurement

* On which platform are these other files stored?

- ☒ individual PC
- ☐ research group file server
- ☒ other: Online data-depository:

<https://figshare.com/s/1dd9ca870d12284ddfb6> under the name “Empathic Accuracy and Observed Demand Behavior in Couples + back-up on external hard drive

* Who has direct access to these other files (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
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- ☒ other (specify): Visitors of the document on figShare

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- affiliation:
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Data Storage Fact Sheet 3

Name/identifier study: “I think you understand me.” Studying the associations between actual, assumed, and perceived understanding within couples.

Author: Hinnekens, Céline, & Verhofstadt, Lesley

Date: December 2016

1. Contact details

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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:

Hinneken, C., & Verhofstadt, L. L. (2016). “I think you understand me.” Studying the associations between actual, assumed, and perceived understanding within couples. *Manuscript submitted for publication.*

* Which datasets in that publication does this sheet apply to?: This dsfs applies to the study that is reported in the publication stated above.

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? [x] YES / [] NO
If NO, please justify:

* On which platform are the raw data stored?

- [x] researcher PC
- [] research group file server
- [x] other (specify): back-up on external hard drive

* Who has direct access to the raw data (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify):

3b. Other files

* Which other files have been stored?

- ☒ file(s) describing the transition from raw data to reported results. Specify: word-file + SPSS syntax files
- ☒ file(s) containing processed data. Specify: The datasets contain the data of a large survey + observational study (coding-data empathic accuracy = raw data stored by coder and calculated (total)scores).
- ☒ file(s) containing analyses. Specify: Output files APIM (web application; word-files)
- ☐ files(s) containing information about informed consent
- ☐ a file specifying legal and ethical provisions
- ☐ file(s) that describe the content of the stored files and how this content should be interpreted. Specify: ...
- ☐ other files. Specify:

* On which platform are these other files stored?

- ☒ individual PC
- ☐ research group file server
- ☒ other: back-up on external hard drive

* Who has direct access to these other files (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify):

4. Reproduction

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* Have the results been reproduced independently?: ☐ YES / ☒ NO

* If yes, by whom (add if multiple):

- name:
- address:
- affiliation:
- e-mail:

Data Storage Fact Sheet 4

Name/identifier study: Empathic accuracy and cognitions during conflict: An in-depth analysis of understanding scores.

Author: Hinnekens, Céline, Sillars, Alan, Verhofstadt, Lesley, & Ickes, William

Date: December 2016

1. Contact details

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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:

Hinneken, C., Sillars, A., Verhofstadt, L. L., & Ickes, W. (2016). Empathic accuracy and cognitions during conflict: An in-depth analysis of understanding scores. *Manuscript submitted for publication*.

* Which datasets in that publication does this sheet apply to?: This dsfs applies to the study that is reported in the publication stated above.

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? ☒ YES / ☐ NO
If NO, please justify:

* On which platform are the raw data stored?

- ☒ researcher PC
- ☐ research group file server
- ☒ other (specify): back-up on external hard drive

* Who has direct access to the raw data (i.e., without intervention of another person)?

- ☒ main researcher

- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify):

3b. Other files

* Which other files have been stored?

- ☒ file(s) describing the transition from raw data to reported results. Specify: word-file + SPSS syntax files
- ☒ file(s) containing processed data. Specify: The datasets contain the data of a large survey + observational study (coding-data empathic accuracy = raw data stored by coder and calculated (total)scores).
- ☒ file(s) containing analyses. Specify: SPSS output files
- ☐ files(s) containing information about informed consent
- ☐ a file specifying legal and ethical provisions
- ☒ file(s) that describe the content of the stored files and how this content should be interpreted. Specify: Coding Manual of ICCS
- ☐ other files. Specify:

* On which platform are these other files stored?

- ☒ individual PC
- ☐ research group file server
- ☒ other: back-up on external hard drive

* Who has direct access to these other files (i.e., without intervention of another person)?

- ☒ main researcher
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- ☐ all members of the research group
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Data Storage Fact Sheet 5

Name/identifier study: The manageability of empathic (in)accuracy during couples' conflict: Relationship-protection or self-protection?

Author: Hinnekens, Céline, Loeys, Tom, De Schryver, Maarten, & Verhofstadt, Lesley

Date: December 2016

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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:

Hinneken, C., Loeys, T., De Schryver, M., & Verhofstadt, L. L. (2016). The manageability of empathic (in)accuracy during couples' conflict: Relationship-protection or self-protection? *Manuscript submitted for publication*.

* Which datasets in that publication does this sheet apply to?: This dsfs applies to the study that is reported in the publication stated above.

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? ☒ YES / ☐ NO
If NO, please justify:

* On which platform are the raw data stored?

- ☒ researcher PC
- ☐ research group file server
- ☒ other (specify): back-up on external hard drive

* Who has direct access to the raw data (i.e., without intervention of another person)?

- ☒ main researcher

- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify):

3b. Other files

* Which other files have been stored?

- ☒ file(s) describing the transition from raw data to reported results. Specify: word-file + SPSS syntax files
- ☒ file(s) containing processed data. Specify: The datasets contain the data of a large survey + observational study (coding-data empathic accuracy = raw data stored by coder and calculated (total)scores) + R syntax files.
- ☒ file(s) containing analyses. Specify: R output files
- ☐ files(s) containing information about informed consent
- ☐ a file specifying legal and ethical provisions
- ☐ file(s) that describe the content of the stored files and how this content should be interpreted. Specify:
- ☐ other files. Specify:

* On which platform are these other files stored?

- ☒ individual PC
- ☐ research group file server
- ☒ other: back-up on external hard drive

* Who has direct access to these other files (i.e., without intervention of another person)?

- ☒ main researcher
- ☒ responsible ZAP
- ☐ all members of the research group
- ☐ all members of UGent
- ☐ other (specify):

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* Have the results been reproduced independently?: ☐ YES / ☒ NO

* If yes, by whom (add if multiple):

- name:
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