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UNCERTAINTY IN ONLINE DATING

by

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DISSERTATION

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of Wayne State University,

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TABLE OF CONTENTS

List of Figures.....	iv
Chapter 1: An Overview of Interpersonal Uncertainty	
Introduction.....	1
Historical Perspective.....	8
Communication and Uncertainty.....	21
Chapter 2: Uncertainty in Online Dating.....	29
Characteristics of the Dating Context.....	30
Problematic Integration in Online Dating.....	39
Uncertainty Appraisals in Online Dating.....	45
Coping with Uncertainty.....	52
Chapter 3: Method.....	57
Role of the Researcher.....	57
Participants and Procedure.....	58
Interview Protocol.....	60
Data Analysis.....	62
Validation.....	66
Chapter 4: Results & Discussion.....	68
RQ1: The Multiple Sources and Meanings of Uncertainty.....	69
RQ1a- Sources of Uncertainty.....	71
RQ1b: Meanings of Uncertainty.....	96
RQ2: Uncertainty and appraisal.....	107
RQ3: Coping with uncertainty.....	121

Chapter 5: Summary of Results, Implications, and Limitations.....	151
Summary of Results.....	151
Implications for Theory.....	164
Implications for Practice.....	167
Limitations.....	168
Directions for Future Research.....	169
Conclusion.....	171
Appendix.....	172
References.....	176
Abstract.....	189
Autobiographical Statement.....	191

LIST OF FIGURES

Figure 1: Uncertainty appraisals and acceptability36

CHAPTER 1: An Overview of Interpersonal Uncertainty

Introduction

In the last few years, online dating has shed its stigma to become increasingly popular among those who are looking for a romantic partner: In 2013, as many as 30 million Americans reported having used a dating technology of some kind (Smith & Duggan, 2013), while in 2015, 15% of American adults reported having used an online dating platform of some kind (Smith, 2016). The preeminence of online dating is well represented in the popular press, which has often wittily emphasized the new concerns that are emerging as daters select their potential partners online and communicate with them through different technological devices and platforms (e.g., Ansari, 2015).

One key concern emerges from the uncertainty that daters may experience as they meet and interact with other people online. Since the formulation of uncertainty reduction theory (URT; Berger & Calabrese, 1975), uncertainty has been considered a key phenomenon for relationship formation, with emphasis placed on the communicators' innate desire to predict and explain others' behavior, and thus on the strategies they would enact to *reduce* their uncertainty. Within this theoretical framework, uncertainty has been conceptualized (and operationalized) primarily as a *lack of knowledge* that can be filled through information-seeking and communication (Berger & Bradac, 1982; Berger & Calabrese, 1975), or as a discrepancy between actual and desired knowledge (Rains & Tukachinsky, 2015; Fowler & Afifi, 2011).

This approach to uncertainty may seem even more fit to explain interpersonal dynamics in the online domain, where the split between online and offline identity introduces the potential for deception and misrepresentation (Donath, 1998), possibly making people more sensitive to the information they lack. In effect, daters have been shown to be concerned about others' potentially

deceptive self-presentation or misrepresentation, as well as about potential privacy breaches, and general issues of personal identity (Gibbs, Ellison, & Lai, 2010). To assuage their concerns, daters have also been found to rely on information-seeking as predicted by URT (Gibbs et al., 2010).

While the need to reduce knowledge gaps and doubts during relationship initiation remains undisputed, more recent scholarship has shown that URT's explanatory power may be limited, as responses to uncertainty are often more nuanced than the simple desire to engage in its reduction. In the online context, for example, a study of the all-male application Grindr found that users' sexual goals were positively related to greater desire for uncertainty, rather than the contrary. In other domains, recent evidence indicates that uncertainty can be sought to maintain hope and sense of agency (Brashers, 2001), foster positive moods (Wilson, Centerbar, Kermer, & Gilbert, 2005), increase attraction (Norton, Frost, & Ariely, 2007; Whitchurch, 2011), or increase the motivation to invest resources (Shen, Fishbach, & Hsee, 2015). According to uncertainty management theory (UMT), these varied responses depend on a goal-driven, subjective appraisal that can at times make uncertainty more desirable than certainty (Brashers, 2001).

In parallel, it has also been recently pointed out that the meaning of uncertainty may be more fluid and complex than what proposed by URT. In particular, Babrow (2001) harshly labeled URT as a "dangerous oversimplification" (p. 56), and concurrently pointed to multiple misconceptions regarding uncertainty in the existing literature, including that uncertainty is bad, that it has a single, homogenous meaning, that it can be traced back to a single source, that its course is predictable, and that it can be resolved through information-seeking.

This concern about a monolithic definition of uncertainty is not new. In his test of URT, Douglas (1990) measured both global uncertainty, or attributional confidence, and domain-specific uncertainties (own and partner's behavior; own and partner's feelings), and found that strangers

interacting for the first time can have multiple coexisting certainties and uncertainties, and that therefore the consequences of uncertainty also vary depending on the domain. Thus, he concluded that “there is no reason to suppose that uncertainty levels are invariant across domains or that the consequences of high uncertainty in one domain are entirely congruent with the consequences of high uncertainty in another domain” (p. 78). This notion is also supported by Knobloch and Solomon (1999), and by Brashers (2001): “Uncertainty can be about the self (e.g., one’s own beliefs, values, abilities, and behaviors), others (e.g., others’ beliefs, values, abilities, and behaviors), relationships (e.g., the quality and durability of relationships), and other features of a context (e.g., rules, social norms, and procedures)” (p. 480).

Given the relational nature of the dating context, it stands to reason to assume that daters may experience more than one source of uncertainty, ranging from doubts about the other person, to doubts about the self, as well as doubts about the process and more generally the outcomes of their online dating endeavors, as predicted also by Knobloch and Solomon’s (1999) relational uncertainty construct. However, there is no trace of such complexity in current studies about online dating, where uncertainty has generally been equated with concerns about the partner (see Gibbs et al., 2010) and no effort has been made to investigate how the context might shape the meanings of uncertainty and the uncertainty process as a whole. Corriero and Tong (2016) have started addressing one of the shortcomings of URT-based approaches to uncertainty by reckoning the potential for uncertainty to have a positive valence, yet they still relied on a definition and measurement of uncertainty as a partner-focused lack of knowledge.

Thus, the picture of uncertainty in online dating appears to be far from complete. Little is known about how the technologically-mediated contexts afforded by online dating websites and applications affect users’ perceptions of the meanings of uncertainty and their consequent

behaviors - communicative and not - during the delicate phases of relationship initiation. However, I believe that many unanswered (and unasked) questions can be addressed by exploring this context through the conceptualizations of uncertainty proposed by Babrow (2001) and by Brashers (2001).

Both scholars insist that uncertainty can have multiple sources and meanings, that uncertainty is not always perceived as negative and that reduction is only one of many possible responses to uncertainty, that an individual's' goals are key to their experience of uncertainty, and that uncertainty cannot always be resolved by additional information. Furthermore, Babrow (2001) posits that while communication is central to the experience of uncertainty, communication can also create new uncertainty as much as it can help cope with it. The major distinction between Babrow's (2001) PI and Brashers' (2001) UMT is that the latter is more amenable to quantitative research as it isolates the points in time when uncertainty is "reduced" or "managed," whereas PI theory argues that this very attempt at punctuating experience obfuscates the nature of uncertainty, and by contrast "stresses the fundamental interdependence between and among integrative dilemmas of various sorts (forms, foci) as they play themselves out" (p. 562) across contexts and levels of experience.

Babrow's and Brashers' approaches appear the best fit for some of the characteristics of online dating environments that may limit or challenge the assumptions of URT, such as the limited availability of information, the reduced-cue communication, the abundance of choice which potentially limits a dater's ability to extensively evaluate all options (see Payne, 1976), and the need to reconcile different goals with the primary goal of finding a partner (Dillard, Segrin, & Harden, 1989).

With regards to the latter point, while URT-based studies of online dating have generally focused on information-seeking as the outcome variable, online daters' primary goal is to find a partner; this means that even when information is not available or uncertainty cannot be reduced, daters will still need to make many different decisions - to send a first message or respond to one; to continue an interaction; to move from offline to online - if they want to reach that primary relational goal, and it would be utterly impractical to think that for every potential match in their pool daters would hope to achieve full certainty (Lenton & Fasolo, 2008).

Thus, PI theory and UMT offer better tools to analyze the experience and process of uncertainty in online dating environments, given their ability to integrate uncertainty reduction strategies within a more complex framework that accounts for the boundaries and constraints of actual lived contexts, where uncertainty may never be completely solved, both because the very communication daters employ to cope with it will continually give rise to new concerns, and because the need to reconcile uncertainty-related secondary goals with primary relational objectives (Dillard et al., 1989) may lead daters to accept and adapt to uncertainty rather than focus on "reducing" it (Brashers, 2001).

Furthermore, PI theory and UMT also allow to account for different sources and meanings of uncertainty beyond other-focused "lack of knowledge," and this is extremely relevant since the characteristics of online dating settings - text-based communication and emphasis on mate selection - suggest the need to problematize the very definition of uncertainty to truly understand how the context affects it, and also to better capture the role of communication in the experience and the process of uncertainty.

Thus, in light of the considerations expressed above regarding the characteristics of online dating contexts, this study will attempt to answer the following questions:

RQ1: How do online daters conceive and define uncertainty in terms of its potential sources and its meanings?

RQ2. How is uncertainty appraised, and which emotions (if any) are associated with it?

RQ3: How do daters cope with uncertainty in the online dating environment?

As discussed above, this analysis will rely mainly on the theoretical frameworks offered by Babrow (2001) and by Brashers (2001), whose theories of uncertainty appear more fit to explain real-world experiences, where daters face uncertainties that at times cannot be resolved, where the sources of uncertainty overlap and transform into one another, and where cognitive response to uncertainty are paralleled by emotional responses often unaccounted for in previous research.

Throughout this study, uncertainty will be defined according to Babrow's conceptualization (1992; 2001), which posits that uncertainty stems from an individual's need to integrate probabilistic and evaluative orientations about the world (problematic integration; PI), within the context of broader networks of knowledge, feelings, and intentions (p. 96). Babrow's (2001) distinction between *sources* (or objects) of uncertainty, which can be infinite in number, and *meaning(s)* (or forms), "reflecting variation in the nature of or meanings of uncertainty" (p. 562) will guide the exploration of RQ1, while PI theory's contention that traditional concepts such as "reduction" or "management" are limited and should be abandoned in favor of a broader emphasis on coping will be particularly important to address RQ3.

Brashers' UMT (2001) will provide the main framework for the discussion of uncertainty as a process, with regards to appraisals and daters' response to it. In particular, Brashers' (2001) assumption that uncertainty is evaluated in terms of its relevance and congruence to one's goals will guide the exploration of RQ2, together with concepts from the literature on stress, emotions, and arousal regulation that Brashers himself drew from.

As much as possible, this study will attempt to reconcile the concepts from these different theoretical frameworks within an integrative perspective, with the goal of providing a nuanced and complete understanding of online daters' experience of uncertainty throughout the different phases of the mate selection and relationship initiation process. Although much work has already been done on uncertainty in the interpersonal context, the emergence of online dating as a novel relationship initiation environment warrants a deeper exploration of uncertainty in relation to the specific characteristics of this context, based on the assumption that the characteristics of the context, as well as the demands posed by the online dating process, may dramatically reduce the validity of traditional URT-based approaches.

Through the adoption of a more complex definition of uncertainty, which not only allows to subsume under itself a wider spectrum of responses, but also to shift the focus of analysis from a single process variable (i.e., information-seeking) to broader relational outcomes, this study will add to the existing theoretical knowledge about uncertainty, and it will also shed some light on the consequences of uncertainty in the delicate phases of relationship initiation, where a doubt can make or break a budding connection.

In Chapter 1, I will first review the uncertainty literature with an eye toward the historical development and characteristics of uncertainty models, and secondly discuss the relationship between information/communication and uncertainty which has been at the core of many theories of uncertainty. Chapter 2 will focus on Babrow's (2001) and Brashers' (2001) theoretical frameworks, to illustrate how they can be applied to the online dating context to answer each of the research questions posed by this study. Chapter 3 will discuss the methods employed for data collection and analysis, while Chapter 4 will present the results and their interpretation. Finally, in

Chapter 5 I will highlight the contributions of this study to the literature of uncertainty, and discuss its limitations.

Historical Perspective

In their seminal piece, Berger and Calabrese (1975) suggested that during initial interactions, communicators attempt to reduce their uncertainty about others by gathering information, generally focusing on demographics and biographical information. Uncertainty is here conceived as a lack of knowledge, either descriptive or predictive, that hinders communicators' ability to make sense of their interlocutors' present and future behaviors. Thus, the primary concern of strangers upon meeting is to reduce uncertainty in order to increase the predictability of their own and of their partner's behavior for sense-making purposes (Berger & Calabrese, 1975). The primary means through which uncertainty is reduced, according to the theory, is information-seeking. The theory advances a set of axioms and derived propositions that establish finite relationships between uncertainty and a set of related variables such as liking, information-seeking, communication volume, and similarity.

According to the axioms advanced by Berger and Calabrese (1975), uncertainty decreases as the amount of verbal communication increases; high levels of uncertainty determine increases in information-seeking behaviors; uncertainty is inversely related to nonverbal affiliative expressiveness, to content intimacy, and to liking; and similarity reduces uncertainty. Later, a set of antecedents were proposed (Berger & Bradac, 1982) to counter the critique that uncertainty reduction was not necessarily always salient (e.g., Sunnafrank, 1986). Incentive value, deviance from expected behavior, and anticipation of future interaction were thus added to the theoretical framework as boundary conditions to explain when individuals would engage in uncertainty reduction.

While URT gave preeminence to communicator's desire to maximize their own ability to predict and explain their partner's behaviors during interactions, predicted outcome value theory (POV; Sunnafrank, 1986) attempted to circumscribe the importance of uncertainty reduction. This effort was justified by the fact that tests of URT had yielded mixed evidence (Sunnafrank, 1986). Drawing on social exchange theory, POV proposed that the primary motivation of individuals communicating for the first time is the maximization of the expected outcomes of the interaction, rather than the reduction of uncertainty. However, because uncertainty reduction "is expected to enhance individuals' perceived ability to forecast future relational outcomes" (Sunnafrank, 1986, p.3), it remains salient, although as a subordinate goal or concern. Based on this reasoning, Sunnafrank (1986) proposed a reformulation of URT according to which the effects of uncertainty on the outcomes of interest would be moderated by predicted value of the outcome. For example, POV predicts that high levels of uncertainty will produce increased information-seeking behavior at the beginning of an interaction. If decreased uncertainty is associated with positive outcome values, later interaction stages will see a continuing increase in information-seeking behavior. However, when decreased uncertainty is associated with the ability to predict negative outcome values, information-seeking will decrease.

POV's predictions were supported in a correlational study (Sunnafrank, 1990) which found a negative association between uncertainty and amount of communication for a positive predicted outcome, and a lack of correlation for a negative predicted outcome, such that communication would reduce uncertainty only when interlocutors had positive expectations about the relationship. Uncertainty and liking were negatively correlated when the outcome value was positive, while no significant relationship was found for a negative outcome value. Finally, the study found that when

the predicted outcome was positive, asking more questions led to decreased uncertainty, while the opposite was true for a negative predicted outcome.

Further research probed deeper into some key URT axioms, and concurrently tested the viability of Sunnafrank's (1986) opposite predictions concerning the relationship between uncertainty and information seeking, and uncertainty and liking. Kellerman and Reynolds (1990) argued that many URT tenets had been widely accepted without having been tested, and thus focused their attention on two paradigmatic URT axioms: Axioms 3, which predicts a positive relationship between level of uncertainty and information-seeking, and 7, which predicts a positive association between uncertainty and liking. Kellerman and Reynolds further explained that while the first was widely believed despite little empirical support, the second was generally disbelieved despite consistent support.

In their study, they tested experimentally five revised, URT-derived models incorporating a new construct, tolerance for uncertainty, which was defined as an individual's concern for uncertainty reduction. The *baseline* model revolved around Axioms 3, 7, and Theorem 17 as they were proposed by URT: 1) As level of uncertainty increases, information seeking increases; 2) as level of uncertainty decreases, liking increases, and finally, 3) as information seeking increases, liking decreases. The *scope condition* model included tolerance for uncertainty as a boundary condition, such that an increase in uncertainty would only produce an increase in information seeking when tolerance for uncertainty is low. The *replacement* model substituted uncertainty with tolerance for uncertainty, arguing that what drives information seeking and liking is not an individual's actual state of knowledge, but rather his or her desire for more or less uncertainty. The *weighing* model instead proposed that uncertainty effects depend on one's level of uncertainty weighed by the desire or concern to reduce it. Mathematically, this is expressed as follows:

Motivation to reduce uncertainty = Level of uncertainty x (inverted) tolerance for uncertainty. Finally, the *discrepancy* model stated that the effects of uncertainty equal to the difference between one's level of uncertainty and the desire to reduce it. Mathematically, motivation to reduce uncertainty = level of actual uncertainty – tolerance for uncertainty¹.

Kellerman and Reynold's tests showed that uncertainty and information seeking were consistently unrelated, suggesting that Axiom 3 should be rejected, and concurrently invalidating Sunnafrank's (1986) revised model. Furthermore, a systematic negative association was found between tolerance for uncertainty and information seeking, indicating that desiring, rather than lacking, knowledge is what promotes information-seeking in initial encounters (Kellerman & Reynolds, 1990). With regards to Axiom 3, the replacement model – in which level of uncertainty was replaced with tolerance for uncertainty – was judged by the authors as the “simplest and most parsimonious model for predicting information seeking in encounters between strangers,” even though both the weighted model and the discrepancy model also produced good correlations. With regards to Axiom 7, actual uncertainty was shown to be negatively associated with attraction, independent of how concerned a person may be about reducing it. In other words, tolerance for uncertainty was not a relevant predictor of liking, while uncertainty was: The more uncertain a person felt, the less he or she liked the target.

In the discussion, the authors conclude that incentive value emerges as the most consistent antecedents of tolerance for uncertainty, thus lending some support to POV (Sunnafrank, 1986).

¹ Three different scales were initially used to measure concern for uncertainty reduction (tolerance for uncertainty, importance of uncertainty, need for certainty), but because of the high intercorrelations between the three, the authors concluded that the scales were measuring the same quality, and decided to only employ tolerance for uncertainty in tests of the models. Level of uncertainty was measured through a slightly amended version of Clatterbuck's (1979) attributional confidence scale, which gives an assessment of global uncertainty levels.

None of the models allowed to integrate motivation to reduce uncertainty into URT, since the outcomes (information seeking and liking) were predicted by different constructs, respectively tolerance for uncertainty and actual uncertainty. Kellerman and Reynolds also suggest that Axiom 3 should be removed from the theory, Axiom 7 retained, and two new axioms added: Axiom 8 (positive relationship between deviance and uncertainty) and Axiom 9 (negative relationship incentive value and uncertainty). Thus, in addition to URT's original proposition of similarity, nonverbal affiliativeness, and amount of communication, deviance and incentive value should also be considered as determinants of uncertainty. While increases in deviance would cause decreases in intimacy, perceived similarity, and amount of verbal communication, increases in incentive value would cause increases in intimacy, perceived similarity, and amount of verbal communication (Kellerman & Reynolds, 1990, p. 66).

The idea that an individual's tolerance for uncertainty and the subsequent motivation to reduce it are key to predicting communicative outcomes was later adopted by Kramer (1999) in his motivation to reduce uncertainty theory (MRU). According to Kramer, the motivation to reduce uncertainty may vary depending on the specific contextual circumstances, as well as on an individual's tolerance level (see also Miller, 1987). Furthermore, when decreasing uncertainty is costly, tolerance can be developed to minimize costs. Uncertainty can also be decreased by relying on stereotypes or classifications, and not necessarily by engaging in information-seeking.

Kramer's model shows some affinity with POV (Sunnafrank, 1986), in that it argues that what drives communicators' behaviors are social rewards, and not concerns about uncertainty: Therefore, uncertainty reduction and consequent information-seeking are complementary, but subordinate, to other considerations. For example, a concern for social norms may prompt an individual to engage in information-seeking even in presence of low motivation to reduce

uncertainty; absence of such concerns in combination with low motivation could lead the communicator to minimize resource expenditure by simply monitoring or waiting for unsolicited information. On the contrary, high motivation to reduce uncertainty in absence of competing motives (e.g., adherence to politeness norms) may result in direct inquiry.

The importance of MRU lies in its explicit recognition that “communicators have multiple, often conflicting goals or motives that they must balance rather than maximizing any particular one” (Kramer, 1999, p. 309). Like Babrow’s (2001) problematic integration theory (PI), and Brashers’ uncertainty management theory (UMT), MRU suggests that goals can operate as an individual level variable to explain variations in responses to uncertainty. Kramer’s framework can also be considered representative of the “debate about the relative merits of URT and POV” (Knobloch, 2010, p. 72) that was still “raging” more than twenty years after URT had been proposed.

Beyond the “attacks” based on social exchange perspectives, URT has also been critiqued for its exclusive focus on relationship initiation. The idea that uncertainty could be salient beyond initial interactions had already been proposed by Berger and Bradac in 1982, and subsequent studies confirmed that individuals involved in ongoing relationships could experience uncertainty. While Berger and Calabrese (1975) had initially proposed a linear relationship between amount of communication and levels of uncertainty, it was in fact found that communication could not only reduce uncertainty, but also contribute to its increase (Planalp & Honeycutt, 1985). Thus, even given the high amounts of communication typical of ongoing relationships, uncertainty could still significantly affect communicators’ behaviors.

The relational uncertainty (RU) construct was finally established by Knobloch and Solomon (1999), who defined RU as the questions people have about their involvement within a

close relationship. In this context, individuals can have doubts about their own involvement (self as source of uncertainty), doubts about partner's involvement (partner as source of uncertainty), and general doubts about the relationship (relationship as a source of uncertainty); furthermore, uncertainty can be episodic - related to a discrete event - or general (Knobloch, 2010). Relational uncertainty can exert its effects at both the cognitive and emotional level, and it can affect both message production and processing. For example, in a dating relationship, uncertainty had been found to be negatively associated with the affiliativeness, relationship focus, and explicitness of messages on the sender's side (Knobloch, 2006). At the receiver's level, uncertainty had been linked to greater difficulty in interpreting partner's behaviors, thus resulting in a tentativeness bias (Knobloch, 2010).

Bringing uncertainty in the context of ongoing relations contributed not only to highlight the paradoxical effects that communication can have on uncertainty, but it also brought back complexity to the construct, by reminding that multiple sources of uncertainty exist, where URT had mainly focused on one - the partner (Knobloch, 2010). The fact that both the self and the partner could cause uncertainty had in fact been noted by Douglas (1990) who in his study had measured not only uncertainty about the interlocutor's behaviors and feelings toward the self, but also uncertainty linked to one's own feelings and behaviors.

A more radical critique of URT's monolithic perspective on uncertainty was formulated in the context of Babrow's (2001) PI, and of Brashers' (2001) UMT, which also incorporated the idea that certainty and uncertainty exist in a dialectical tension in relationships (Baxter & Montgomery, 1996). In particular, Babrow (2001) stated that the literature on uncertainty is riddled with misconceptions, including that uncertainty is bad, that it has a single, homogenous meaning, that it can be traced back to a single source, or that its course is predictable.

Accepting these misconceptions means that “we will fall victim to often dangerous oversimplifications, such as the ideology of uncertainty reduction” (p. 561). Instead, Babrow defines uncertainty in relation to an individual’s need to integrate probabilistic assessments (what we expect may happen) with evaluations of those same probabilities. Uncertainty thus arises in connection to such integration dilemmas, which are linked to communication in nonlinear fashion: Communication can be the source of dilemmas, but it is also often the main strategy to cope with it (Babrow, 2001). For this reason, PI theory denies that the only response to uncertainty is information-seeking, because uncertainty cannot always be resolved by additional information. Instead, different strategies can be adopted to face a problematic integration dilemma, including the management of uncertainty level, the reappraisal of uncertainty, its reframing as a test, challenge, or exploration, as well as a redefinition of values and probabilities - for example, reframing an object of uncertainty as zero value to minimize its importance and remove any uncertainty associated with it.

PI theory may be challenging to measure quantitatively, as Babrow (2001) points out: the theory “hardly lends itself to quantitative measurement” (p. 569). However, UMT (Brashers, 2001) has proven more easily adaptable to quantitative investigation, and yet maintains the centrality of many concepts also espoused by PI theory. According to UMT, uncertainty “exists when details of situations are ambiguous, complex, unpredictable, or probabilistic; when information is unavailable or inconsistent; and when people feel insecure in their own state of knowledge or the state of knowledge in general” (Brashers, 2001, p.478). While the definition is very broad, the basic processes described by the theory have been proven amenable to quantitative modeling and testing using a manipulation that revolved around inconsistency of information (Rains & Tukachinsky, 2015).

Like PI, UMT emphasizes the perceptual and subjective component of uncertainty, by pointing out that uncertainty “is primarily a self-perception about one’s own cognitions or ability to derive meaning” (p. 478) and that it operates independently from actual uncertainty. Developed in the context of health communication and illness theory, UMT draws on Babrow’s (1992) probabilistic conceptualization of uncertainty, on Lazarus’ (1991) theory of appraisal, emotion, and coping, and on principles of relational dialectics (Baxter & Montgomery, 1996) to argue that uncertainty is not inherently negative, and thus that an individual’s response to it is not necessarily aimed at reducing it. On the contrary, in some cases maintaining uncertainty can be beneficial, for example by helping an individual retain hope and optimism (Brashers, 2001, p. 478).

The defining tenet of UMT is that the ambiguity, ambivalence, or lack of knowledge that characterize situations of uncertainty do not inevitably trigger a negative response. An emotional response occurs, but its valence will depend on a subjective evaluation or appraisal, such that when uncertainty is appraised as a threat, a negative emotion ensues, and when uncertainty is appraised as a challenge, a positive emotion ensues. Neutral responses are also possible, as well as combined responses, where negative and positive affect are both present, (e.g., being thrilled) (Brashers, 2001).

The major determinant of appraisal valence are goal-related considerations (Brashers & Hogan, 2013). In other words, an individual will evaluate uncertainty based on whether it affects his or her goals (goal relevance), on whether it facilitates or hinders such goals (goal congruence), as well as on the controllability of the event and the potential to cope with uncertainty. Based on the uncertainty appraisal and on the emotional response triggered by it, an individual may then adopt five different coping strategies: seeking and avoiding information, more general avoidance behaviors, adaptation to chronic uncertainty, obtaining assistance, and managing uncertainty

management (Brashers, 2001). This last class of coping strategies specifically accounts for the possibility that conflicting goals (e.g., reducing uncertainty while avoiding face threats) may require management. While initially developed in the health context, UMT has been successfully applied to the interpersonal communication context as well (e.g., Maguire, 2007).

Fowler and Afifi's (2011) theory of motivated information management (TMIM) translates UMT into a strictly interpersonal communication context, by tying uncertainty more specifically to information-management and to the role of efficacy. Adopting Brashers' (2001) definition of uncertainty, the theory proposes a process comprised of three phases: interpretation, evaluation, and decision. Crucial to the model is the idea that what drives the interpretation of uncertainty is the perception of a discrepancy between actual and desired uncertainty, with anxiety resulting from a gap in either direction. In this respect, the theory is reminiscent of Gudykunst's (1995) anxiety/uncertainty management theory (AUM), which considered anxiety - a generalized or unspecified sense of disequilibrium, characterized by the anticipation of negative consequences - as the "affective (emotional) equivalent of uncertainty" (p. 12).

In the original formulation of TMIM, an uncertainty discrepancy similarly triggers anxiety, which is proposed as a partial mediator of uncertainty effects on subsequent evaluations and decisions. More recently, Fowler and Afifi (2011) have extended the model to encompass a broader range of emotional responses and thus account for different appraisals of and responses to uncertainty, thus adhering more closely to UMT's tenets. The evaluation phase gives prominence to assessment of coping efficacy and communication efficacy, which drive the adoption of coping strategies in the decision phase. The decision phase revolves around the adoption of the most adequate strategies, which include information seeking or avoidance, and cognitive reappraisal - diminishing anxiety by altering the need to manage uncertainty (Afifi &

Weiner, 2006). Perhaps the most promising aspect of TMIM is its provision of a feedback mechanism within the information management process, achieved by incorporating in the model both the actor who seeks the information, and the partner who might provide it. This effort to account for the dyadic nature of uncertainty in interpersonal contexts may be best utilized in the context of longitudinal studies attempting to capture the “temporal” and “interconnected” nature of uncertainty (Brashers, 2001).

However, the model is problematic for at least three reasons. First, the fact that TMIM posits uncertainty discrepancy as the main predictor is at odds with results suggesting that a more parsimonious model is obtained with just tolerance/desire for uncertainty as independent variable (Kellermann & Reynolds, 1992; Rains & Tukachinsky, 2015) and with the fact that at least one previous study had established that actual uncertainty was unrelated to information-seeking (Kellermann & Reynolds, 1992). Second, the model is heavily indebted to Brashers’ (2001) UMT, but its increased complexity (e.g., the provision of efficacy as a mediator between appraisal and information-seeking) does not seem to be warranted by greater explanatory power, suggesting that UMT may be more parsimonious and thus preferable. Finally, TMIM focuses on information-related behaviors as final outcomes; however, this does not permit to account for other outcomes of uncertainty that may not be mediated by information-seeking. In online dating contexts, additional information may simply not be available (e. g, user names mask a dater’s real identity), and daters may adapt to a highly uncertain context where they need to make decisions under conditions of limited information.

Although Rains and Tukachinsky’s (2015) quantitative rendition of UMT also focused on information seeking as a dependent variable, the study was significant in that it was the first to operationalize and measure UMT constructs quantitatively to test the relationships between

uncertainty, appraisal, and information-seeking. Rains and Tukachinsky hypothesized that a) the amount of desired uncertainty would predict the intensity of uncertainty appraisal; b) the intensity of uncertainty appraisal would predict the depth of information-seeking; c) appraisal would mediate the relationship between desired uncertainty and information-seeking depth. Furthermore, the study also explored the role of the discrepancy between the uncertainty one has (actual uncertainty), and the uncertainty one desires, on appraisal and information-seeking. Thus, it was hypothesized that d) actual uncertainty would moderate the relationship between desired uncertainty and appraisal intensity, and e) that the interaction between desired and actual uncertainty would exert a significant indirect effect on information-seeking depth through uncertainty appraisal (see also Kellerman & Reynolds, 1990, for the operationalization of discrepancy as an interaction term).

A sample of 157 students was assigned to either a certainty or uncertainty prime that made their knowledge about skin cancer, or lack thereof, particularly salient. In the heightened uncertainty condition, participants were told that they lacked knowledge about skin cancer, and that the condition is a complex, ambiguous, and unpredictable one, in line with Brashers' (2001) definition of uncertainty. In the heightened certainty condition, participants were told that they had sufficient knowledge about skin cancer, and that the condition is a simple, concrete, and predictable one. Secondly, participants were prompted to think about and list the things they felt uncertainty or certain about, depending on the condition they were in.

Following the prime, participants' actual uncertainty (how much uncertainty they felt) and desired uncertainty (how much uncertainty they wanted) were measured. Appraisal intensity was operationalized with three items for danger (fear, anxiety, and worry), and three for opportunity (relieved, pleased, and confident), all rated on a 7-point scale. After completing

these measures, participants were encouraged to search for information, and the number of web-pages they visited, as well as the time they spent on each, were recorded to assess information-seeking depth.

Path analysis yielded results in line with the relationships proposed by Brashers (2001). Desired uncertainty was found to predict the intensity of uncertainty appraisals, such that higher desired uncertainty was associated with a stronger appraisal of uncertainty as an opportunity, and a weaker appraisal of uncertainty as a danger. Also, appraisal intensity, coded so that higher values would indicate a stronger opportunity appraisal and weaker danger appraisal, was found to mediate the relationship between desired uncertainty and information-seeking depth. Contrary to what they expected, Rains and Tukachinsky (2015) found that desiring more uncertainty was associated with greater depth (more time spent per page) but less breadth (more pages visited) of information-seeking, while desiring less uncertainty was associated with less depth but more breadth of information-seeking. This effect was explained as an attempt by participants to identify self-serving information that would confirm their appraisal of uncertainty as an opportunity.

Interestingly, the hypotheses involving the effects of actual uncertainty on appraisal and information seeking were not substantiated. In particular, the discrepancy between actual and desired uncertainty did not significantly predict information-seeking, and while actual and desired uncertainty were correlated, the path from actual uncertainty to appraisal was not significant – and thus actual uncertainty exerted no effects on information-seeking. According to Rains and Tukachinsky (2015), the non-significance of actual uncertainty suggests the need to reconsider the inclusion of actual or experienced level of uncertainty in models of uncertainty like the TMIM (Afifi & Weiner, 2006), which uses uncertainty discrepancy as a predictor. This

conclusion is in line with Kellerman and Reynold's (1992) finding that the best predictor of information seeking is tolerance for uncertainty, rather than actual uncertainty.

All the theories outlined here have some merit in that they contribute to advancing our knowledge of uncertainty, its causes, and its consequences. However, Brashers' (2001) UMT and Babrow's (1992, 2001) PI are the most comprehensive and nuanced for what concerns the conceptual definition of uncertainty, its sources, and meanings, and they also allow to account for a broader range of responses beyond reduction. While recognizing the similarities between the two approaches, and drawing extensively from both, I ultimately subscribe to Babrow's (2001) contention that trying to isolate "reduction" or "management" from the stream of experience may obfuscate many of the nuances of the construct. Thus, rather than trying to define uncertainty in a finite way and measure it quantitatively, this study will adopt a qualitative approach based on Babrow's theorizing, to retain the complexity of daters' lived experience of uncertainty.

Communication and Uncertainty

The overview presented in the earlier section clearly shows that information and communication have been at the core of uncertainty theories – albeit sometimes implicitly - since the formulation of uncertainty reduction theory (Berger & Calabrese, 1975). This section will present an overview of how information and communication have been treated in the interpersonal uncertainty literature. As discussed in the previous section, Berger and Calabrese's (1975) URT maintained that uncertainty decreases as a function of the volume of communication. When people communicate, they exchange information which is supposed to improve people's predictive and explanatory knowledge about each other. Therefore, uncertainty decreases. In the URT framework, information can be considered both a causal variable and a

dependent one. Causally, lack of information determines uncertainty, and uncertainty in turn causes communicators to engage in information-seeking behaviors aimed at reducing knowledge gaps (Axiom 3; Berger & Calabrese, 1975). Generally, URT-based research has focused on information as a terminal variable, examining the information-seeking strategies that communicators employ to reduce their uncertainty (e.g., Tidwell & Walther, 2002), but the role of information as a causal variable has not been systematically investigated. More often, uncertainty studies have often taken Axiom 1 for granted (more communication leads to more information and to reduced uncertainty).

It must be noted, however, that numerous critiques were formulated, and revisions proposed; however, the alternative conceptualizations were often not easy to translate quantitatively (e.g., Kramer's MRU, 1999; Babrow's PI, 2001; Baxter & Montgomery, 1996), and this may explain the continued reliance on URT, especially in experimental contexts. For example, Kellerman and Reynolds (1990) questioned the relationship between uncertainty and information seeking posited by Axiom 3, but they still relied on a manipulation of the *amount* of information to induce uncertainty. Information amount and information similarity were manipulated in a set of 12 scenarios (e.g., participants were told they had "a little, some, or a lot" of information, and "very little, some, or a great deal" of similarity), which revealed no significant effects on information-seeking. While the sheer amount of information available (or actual uncertainty) was found not to be a reliable predictor of information seeking, this outcome was instead satisfactorily predicted by tolerance for uncertainty, revealing what Clatterbuck (1979) first and Brashers (2001) later labeled as the perceptual nature of uncertainty.

Kellerman and Reynolds' (1992) reliance on an operationalization of uncertainty in terms of information *amount* is problematic for at least two reasons: First, it ignores the potential for

additional information and continued communication to *increase* uncertainty, rather than reduce it. Second, it fails to consider that the *quality* of information and of communication overall (see Clatterbuck, 1979) may be just as important as their volume. This in turn leads to a simplistic view of communication and of its role, and it also underestimates the potential for communication to cause uncertainty when information fails to meet sufficiency and validity criteria (Babrow, 2001)

Evidence supporting this critical angle can be found in early studies attempting to expand URT to different contexts, or to test its axioms. For example, Parks and Adelman (1983) examined how communication with one's partner and with the partner's network affected uncertainty and relational stability. In line with URT assumptions, the authors hypothesized that increased communication between partners would lead to a reduction in uncertainty over the course of time; however, this hypothesis was not supported. Parks and Adelman (1983) ruled out the possibility of a nonlinear relationship, and suggested that the link between uncertainty at time 2 and communication with partner may be obfuscated by multicollinearity (p. 73). Nonetheless, in the discussion they also consider the possibility that "the sheer volume of communication may be less important than specific *type* or *content*," such that "redundant or irrelevant information may not reduce uncertainty as much as new information and some types of communication might even act as 'disinformation' by increasing confusion and uncertainty" (p. 73).

The potential for information to increase uncertainty rather than reduce it in the context of ongoing relationships was directly addressed by Planalp and Honeycutt (1985), who asked participants to recall events that increased uncertainty in the context of their existing relationships. In particular, subjects were asked to report about an occasion where they "learned some surprising information about a friend, spouse or romantic partner, and 2) that information

led [them] to question something basic to [their] relationship” (p. 595). Planalp and Honeycutt found that uncertainty can also increase as a function of increased communication, and that six major types of uncertainty-producing events could be distinguished. Thus, they concluded that communication can increase uncertainty if the new information is *inconsistent* with prior knowledge. They reasoned that this would explain why, in Parks and Adelman’s (1983) study, the sheer volume of communication between partners had not been found to be directly associated with decreases in uncertainty.

Although this evidence that information may increase uncertainty comes from studies involving ongoing relationships, the possibility for information to increase uncertainty even in interactions among strangers getting to know each other seems highly plausible. Communicator’s desire to make accurate attributions about others to predict and explain their behavior (Berger, 1975; Clatterbuck, 1979) may in fact lead them to form assumptions based different kinds of cognitive mechanisms (e.g., stereotyping, projection), which in turn would create the possibility for new information to be inconsistent with such assumptions. Thus, uncertainty may not only be caused by lack of information, but by additional information that is inconsistent with prior knowledge, or information that disconfirms what an individual has assumed about another dater, in line with findings by Planalp and Honeycutt (1985) as well as by Ramirez and Zhang (2008) and Ramirez et al. (2014). In the context of zero-history dyads, the consequences of such inconsistencies may be even more profound than for ongoing relationships, since communicators may be less inclined to seek or offer explanations, and may simply choose to disengage or not to pursue an interaction.

Thus, although information and communication have always been at the core of uncertainty research, most theories examine only some aspects of this relationship, and most

propose narrow definitions of communication in terms of information volume or quantity, which I have argued may prevent us from achieving a better understanding of how uncertainty relates to communication. However, Babrow's (1992, 2001) PI offers a comprehensive framework that permits to obviate to such limitations and integrate findings from different perspectives alternative to URT. First, PI theory postulates the centrality of communication for the experience of uncertainty, especially with regards to the strategies individuals may employ to cope with it, but it also recognizes the potential for communication and information to increase uncertainty within a relational context (Planalp & Honeycutt, 1985).

Secondly, PI theory (Babrow et al., 1998), posits that uncertainty has many dimensions, or forms, including the complexity of the object of thought, probabilistic formulations, lay epistemology, and the *qualities of information* (2001, p. 558). This latter dimension of uncertainty is particularly important as a counterpoint to theories and research focusing exclusively on communication volume and information quantity as determinants of uncertainty. According to Babrow, the qualities of information that may contribute to the experience of uncertainty are its *sufficiency* (e.g., clarity, completeness, and volume), its *validity* (e.g., freedom from error, source expertise or trustworthiness, ambiguity, applicability, consistency), and its *structuring* (e.g., how to organize and/or order a series of interdependent choices). The latter category refers to the ordering "a series of interdependent choices, particularly when these decisions depend on uncertain outcomes" (Babrow, 2001, p.558) or to the "integration of a particular belief with other beliefs or values" (p.558). The idea that information structuring can cause uncertainty reflects PI's theory assumption that uncertainty itself stems from the need to integrate values and probabilities (problematic integration) that may often conflict with each other.

It must be noted that the distinction between quality and quantity of information had already been articulated in the early stages of uncertainty research. Clatterbuck (1979) stated that “the absolute amount of information is not a sufficient predictor of uncertainty reduction because it does not reflect the perceived quality of the information,” and because “it fails to take into consideration the interpretative context in which the information is provided” (p. 148). Rather, what predicts uncertainty reduction according to Clatterbuck is the “perceived adequacy of information,” which in turn leads to certainty, defined as “attributional confidence” (p.148).

Babrow’s dimensions of sufficiency and validity also reflect long standing questions about the nature of information as expressed in the maxims of quantity and quality established by Grice’s (1975) cooperative principle. According to the maxims, communicators should provide information that is sufficient in terms of volume (quantity), and accurate (quality) in order to maximize the efficacy of the exchange. The Gricean reasoning is not at odds with the uncertainty framework: on the contrary, it reinforces it. If communicators expect others to behave cooperatively during interaction, any deviation from cooperation in the form of scarce, irrelevant, or inaccurate information may signal a discrepancy between what is expected and what actually occurs, thus triggering uncertainty.

Finally, Babrow’s (2001) categories of sufficiency and validity also resonate with current directions in the study of computer mediated communication (CMC) that have highlighted the importance of warrants - cues that validate or legitimize an online self-presentation (DeAndrea, 2014), and of warranting value - the perception about how online information is immune to manipulation by the person to whom the information refers (DeAndrea, 2014).

Despite their potential significance, especially in the online domain, the dimensions of information proposed by Babrow remain largely unexplored, and PI as a whole has not been

applied to the research of interpersonal uncertainty. Some aspects of it have been used by Rains and Tukachinsky (2015) and Fowler and Afifi (2011), who adopted Brasher's (2001) definition of uncertainty as existing "when details of the situation are ambiguous, complex, unpredictable, or probabilistic; when information is unavailable or inconsistent; and when people feel insecure in their own state of knowledge or the state of knowledge in general" (p. 478). This definition was in turn heavily indebted to Babrow's idea of problematic integration. In Babrow's (1992) words,

we all need both probabilistic and evaluative orientations (retrospective, present, or prospective senses of what is likely and what is good or bad), and these orientations must be integrated into broader knowledge, affect, and intentional structures. In certain situations, however, integration is problematic (p. 99).

In effect, both Rains and Tukachinsky (2015) and Fowler and Afifi (2011) manipulated uncertainty by highlighting inconsistencies in what Babrow would define as "associational webs of understanding" (p. 560). Rains and Tukachinsky induced a variation in perceived uncertainty through a prime that heightened participants' certainty or uncertainty about skin cancer, while Fowler and Afifi (2011) tried to induce variation in participants' feelings of uncertainty by prompting them to doubt their own knowledge about their parents' wishes (e.g., "Do you know if your parent would want to move in with you if he/she couldn't take care of him/herself?" p. 515). In their studies, uncertainty resulted from a compare-and-contrast cognitive process, where additional information was made inconsistent with what the participants already knew or thought they knew. In other words, uncertainty was not induced through a single piece of information per se, but by creating a discrepancy among multiple pieces of information, or more specifically by creating what can be considered an information structuring dilemma. Thus, participants'

uncertainty stemmed from the complexities of the integration process that Babrow considers central to the experience of uncertainty.

Although both studies testify to the relevance of Babrow's conceptualizations of uncertainty, neither explicitly drew on PI theory or on the notion of information structuring, and the quantitative methodology adopted by both severely undermined their intent to adopt more nuanced definitions of uncertainty derived from Babrow's and Brashers' research, since the need to operationalize uncertainty in a finite and bounded way inherently contradicts the fluidity of uncertainty and of its meanings embodied by Babrow's and Brashers' theories.

In conclusion, this section has demonstrated the importance of refining our understanding of the relationship between communication and uncertainty, and has shown how Babrow's and Brashers (2001) conceptualizations may help integrate different findings with regards to this relationship that so far have only been investigated in a piecemeal fashion. In the chapter that follows, I will explore Babrow's and Brashers' theoretical framework in relation to the specific context that is the object of this study, and show its applicability to the research questions I have posed in the introduction.

CHAPTER 2: UNCERTAINTY IN ONLINE DATING

In the previous sections, I examined the existing models of the uncertainty process and the relationship between information and uncertainty in terms of the most common operationalizations. I also showed how recent studies (e.g., Rains & Tukachinsky, 2015; Fowler & Afifi, 2011) have moved toward a different perspective rooted in Brashers' (2001) and in Babrow's (2001) definitions of uncertainty, in recognition of the complexity of the construct. Furthermore, I have argued that it would be beneficial to apply such complexity to online dating - a specific interpersonal context that so far has been mostly investigated with a narrow URT-based focus, leading to neglecting fundamental questions, in particular how the context changes the nature of uncertainty, and what the consequences of uncertainty are for daters online. Given that as many as 48 million Americans have used some form of online dating platform (Smith, 2016), these questions have considerable practical and theoretical relevance.

This chapter will focus on how Babrow's (2001) PI and Brashers' (2001) UMT can guide our understanding of uncertainty in online dating. The first section will examine the characteristics of the online dating context, with an emphasis on how such characteristics might change daters' experience of uncertainty with respect to offline contexts. The following sections will focus each on one the aspects of uncertainty examined by the research questions presented in the introduction, which relate to 1) the sources and meanings of uncertainty; 2) daters' appraisals of uncertainty, and, 3) daters' strategies to cope with uncertainty. For each of these aspects, I will present the theoretical foundations this study draws upon and explain how these apply to the context at hand, potentially leading to a better understanding of uncertainty, its meanings, and its consequences.

Characteristics of the Dating Context(s)

Most of the existing research focusing on uncertainty in online dating (but also in communication more broadly) is informed by three core assumptions: 1) that uncertainty is negative; 2) that daters will engage in information seeking to reduce uncertainty, and 3) that more information/communication will reduce uncertainty. Furthermore, URT-based studies have also assumed that uncertainty reduction is an individual's primary goal.

However, online dating has a number of characteristics that set it apart from more traditional offline relationship initiation environments, and these characteristics could potentially affect dater's experience of uncertainty with regards to its definition, appraisal, as well as its emotional consequences and overall relationship outcomes. Key characteristics to consider are:

- 1) Most of daters' primary goals are relational (sex, relationship, friendship)
- 2) The information available to daters is limited
- 3) Text-based communication characterizes the first stages of interactions
- 4) Daters are faced with an abundance of options

Daters' primary goals are relational. The first major characteristic of any dating context, which has often been underplayed in previous studies of uncertainty in online dating (e.g., Gibbs et al., 2010) is that daters' primary goals are relational. Daters are online to find a partner, to hook up, or to find friendship (Sumter, S. R., Vandenbosch, L., & Ligtenberg, L., 2017; Van De Wiele, C., & Tong, S. T., 2014); in this sense, the need to reduce (or cope) with uncertainty is simply a byproduct of that goal, and hence secondary (Dillard et al., 1989; Kramer, 1999). This in turn may imply that daters' desire or willingness to engage in uncertainty reduction or in particular coping strategies may be constrained by the primary goal as well as by other secondary goals. In particular, *communication* goals, such as ensuring smooth and coherent communication, as well as *face*

concerns, could directly conflict with the desire to reduce uncertainty and limit daters' information-seeking (Dillard et al., 1989; Caughlin, 2010; Kramer, 1999; Wilson, Kunkel, Robson, Olofuwote, & Soliz, 2009).

Thus, adopting a narrow URT-based approach, which does not traditionally account for concurrent or conflicting goals, and which also assumes that uncertainty reduction is the individual's primary concerns, appears limited in its ability to explain daters' responses to uncertainty in online dating contexts.

The information available to daters is limited. Almost all websites and apps provide information about potential matches in the form of a profile, which vary in the degree of detail and amount of information. These variations in profiles are based on the constraints of the platform and on each user's individual self-presentation preferences. Almost invariably a photo, a name or username, and a profile/self-presentation are present. Some platforms may provide an index of compatibility (e.g., OkCupid's match percentage), while others highlight the connections one has in common with the other person through third-party social networks (e.g., Tinder). Some require that the dater specifies whether she is in a relationship or not (e.g., single, divorced), while others do not.

The profile is considered key to impression formation (Gibbs et al., 2010), and a recent meta-analysis of dating studies (Khan & Chaudhry, 2015) has shown that different profile components may correlate to relevant dating outcomes (e.g., likeability, perceived relationship potential, attractiveness) as daters use the information embedded in those components to make inferences and resolve doubts about a potential match.

However, the information available to daters may be limited in many ways. While daters can self-select into platforms that better suit their information preferences with regards to both

amount and type, the information available across profiles within a given platform may vary. For example, some daters may declare their goals, while others may just refer to their goals implicitly; some daters may post multiple pictures, some just one; some may have lengthy self-descriptions, other may be briefer. A dater may thus find that information he or she considers vital is missing, or ambiguous.

Secondly, the information available cannot be taken at face value (Ellison, Heino, & Gibbs, 2006), since the disembodied online persona offers the potential for deception and manipulation by means of selective self-presentations (Ellison et al., 2006; Hancock, Toma, & Ellison, 2007). Thus, others' identity claims need to be screened carefully, and daters will be required to evaluate the warranting value (DeAndrea, 2014) of the different information embedded in a profile (Ellison et al., 2006). Furthermore, daters may also have to decide which cues are meaningful, and which are not, and how much "weight" should be attributed to intentional versus unintentional cues.

Additionally, daters online rarely have access to information that in offline contexts can be gathered through passive information-seeking strategies (e.g., observing a potential match in their own environment), and extractive strategies such as using Google may also be limited by the lack of identifiers; thus, daters' primary way to gather information is generally through interactive strategies (Gibbs et al., 2010), which (as mentioned previously) could be constrained by other primary and secondary communicative goals.

Thus, it should be clear that a definition of uncertainty that is solely based on "not knowing" (or on the potential for multiple outcomes), and reliance on information-seeking as the (dominant form of coping with uncertainty?) may not be enough to address the complexity of the experience of uncertainty in online dating contexts. To cope with uncertainty and make it tractable, daters have to answer multiple interrelated questions, order information hierarchically, estimate

probabilities about the accuracy and meaningfulness of available information cues, decide which missing information cues are vital and which can be forgone, and so forth. This is why Brashers (2001) defines uncertainty as “multilayered”: uncertainty can occur at multiple levels, from “simple” uncertainty about a single unknown (e.g., “Is this person in a relationship?”), to uncertainty about hierarchies of goals (e.g., “Since this person is attractive, shall I be less strict about other criteria?”), to uncertainty about the value to attribute to each cue contextually (i.e., which piece of information is more meaningful?), or to uncertainty about how to deal with uncertainty (e.g., “What shall I do if some information I want is missing?”) - what Brashers (2001) calls “managing uncertainty management” and Babrow (2001) calls “epistemological uncertainty.”

Text-based communication characterizes the first stages of interactions. Besides static information, each platform provides ways to signal interest to a potential match and different opportunities to communicate. On Tinder or on Bumble, communication is only possible when both sides have expressed a mutual degree of interest by choosing the other person’s profile, whereas on OkCupid users can see who has viewed their profile, but reciprocal interest is not a prerequisite for communication, as any dater is free to inbox anybody else. Websites like Match and OkCupid allow users to send explicit signals like winks or likes to express interest, while on Bumble it is possible to postpone the expiration of a match in the hopes that the woman will finally send a message; however, despite some variations, what all platforms have in common is their reliance on a text-based chat which allows daters to communicate without exchanging personal information.

There is little doubt that this text-based modality, characterized by an absence of nonverbal cues and asynchronicity, will affect daters’ experience of and responses to uncertainty during the

mate selection process and in the first phases of relationship formation. Gibbs et al. (2010), for example, have highlighted that “the lack of shared physical context and nonverbal cues can create greater uncertainty about others and complicate the process of forming relationships” (p. 71). While there is agreement that individuals communicating through text-based channels will still be able to form impressions about others despite the absence of nonverbal cues (Walther, 1992), it is crucial to note that they will do so primarily through interactive information-seeking strategies (Tidwell & Walther, 2002).

However, the potential for this adaptation mechanism to be constrained by face and communication goals (Dillard et al., 1989; Wilson et al. 2009) has not been investigated, leaving open the possibility that daters’ ability to form accurate impressions may be more limited than is normally assumed, and uncertainty heightened. In other words, if daters need to ask questions to form accurate impressions in absence of nonverbal cues, but they choose not to do so to maintain own face, to protect other face, or to create a balanced communication exchange, then even if impression accuracy (and thus uncertainty levels) online could theoretically equal impression accuracy offline, this may not be the case in actuality.

The adaptation mechanism suggested by SIP (Walther, 1992) also does not account for the fact that human attraction and bonding have a strong biophysiological component (Maner, J.K., & Ackerman, J. M., 2013). Therefore, even though impression formation may occur in text-based, online environments, the impressions formed may be satisfactory for team work or for a friendly acquaintanceship, but not satisfactory for mating purposes. In other words, a dater may have a sense of whether a potential match is compatible in terms of goals and interests, but may not be able to judge physical attractiveness. It may also be hard to gauge the degree to which offline communication will be satisfactory; since asynchronous text-based communication enables

selective self-presentation as well as message editing and reviewing, daters can “engage in relational optimization” (Walther, 1996, p. 23) and convey a different impression than they would if they were communicating face to face, for example sounding wittier or more interesting than they would be perceived in a face to face conversation.

Another issue concerning text-based online environments is the potential for hyperpersonal processes and idealization (Walther, 1996) to take place, leading daters to overattributions and to form impressions that are inflated with respect to what they would be in an offline interaction. While this could lead to more certainty about a potential match (Nowak, Watt, & Walther, 2005), the final outcome may not be positive at all, since Ramirez, Sumner, Fleuriet, and Cole (2014) also found evidence that violated expectations after a transition from online to offline (modality switch) can increase uncertainty and reduce the likelihood of relationship pursuit. Such expectancy violations were more evident when the online interaction between daters had been longer prior to the face-to-face meeting, but modality switches even after a brief period online are thought to set the stage for expectancy violations (Ramirez & Zhang, 2008).

Finally, in absence of face to face interaction, text-based communication and the information it encapsulates is subject to issues of warranting (DeAndrea, 2014), which refers to “the capacity to draw a reliable connection between a presented persona online and a corpore- ally- anchored person in the physical world” (Walther, Van Der Heide, Hamel, & Shulman, 2009, p. 232). The limitations imposed by online dating contexts to true warranting (Gibbs et al., 2010) may lead to increased uncertainty compared to offline, although daters may use unintentional cues to validate a potential match’s claims. However, deciding which cues are meaningful and how much value should be assigned to them is in itself a potential cause of uncertainty - which has so far not been investigated.

The affordances of online text-based communication may also interact with personality differences, including self-esteem and attachment style. For example, daters may feel less exposed to the threat of social evaluation (Dickerson & Kemeny, 2004), and the text could serve as a filter between the self and the others, buffering the social risk posed by a potential rejection (Scissors, Roloff, & Gergle, 2014). This may be especially true for low self-esteem individuals: Since text-based communication allows daters more time to self-present and greater control on how others perceive the self through editing of the information presented (Walther, 1996), their self-efficacy and self-esteem may be boosted through the crafting of a successful profile.

On the flip side, the literature on attachment style indicates that secondary attachment strategies may result in biased perceptions of self and of others through projection mechanisms. To cope with a social threat, avoidant individuals often increase perceptions of dissimilarity that justify distancing behaviors, while anxious individuals emphasize their distress through rumination, and increase perceptions of similarity with the target, nurturing a false consensus feeling that eventually justifies unrequited approach behaviors (Shaver & Mikulincer, 2007).

It is plausible to imagine that this same bias could occur in the context of initial interactions online, and that some daters may interpret delays in a potential partner's response (for example a time lag between messages) as symptoms of indifference or lack of interest. This biased perception would in turn trigger distancing behaviors that may ultimately prevent relationship formation. On the contrary, an anxious individual may perceive the delay as a threat and thus engage in excessive proximity-seeking (too many messages too often; rushed intimacy) that may similarly endanger his or her possibilities of success.

This review, by no means exclusive, has pointed out some of the ways in which the affordances of online text-based, asynchronous communication could potentially amplify or

dampen daters' perceptions of uncertainty, and ultimately affect relational outcomes. While the impact of this text-based asynchronous modality need not be negative as predicted by older cues-filtered out theories, its potential to affect daters' experience of uncertainty in ways that differ significantly from offline contexts should not be discounted.

Daters are faced with an abundance of options. One of the most interesting aspects of online dating environments is that daters can generally choose between a high number of potential matches - with the exceptions of platforms like eHarmony, which drastically reduce the pool of daters to choose from. While apparently a good thing, abundance of choice has been linked to choice overload (Iyengar & Lepper, 2000), whereby a larger number of options may be detrimental given the cognitive costs associated with its processing (Lenton & Francesconi, 2008).

In online dating contexts, overload could be a product of the sheer number of profiles available (Iyengar & Lepper, 2000), but it could also be driven by the breadth and depth of the information presented on or associated with each profile, as suggested by Lenton, Fasolo, and Todd (2008), as well as by Payne (1976). The need to process a large amount of options or information could lead to increased uncertainty and difficulty to decide (Iyengar & Lepper, 2000), and to poorer choice quality (Wu & Chiou, 2009). However, overload may be mitigated if a dater is more certain about his or her preferences for a mate (Chernev, Böckenholt, & Goodman, 2014).

Independent of whether daters perceive overload or not, a more interesting consequence of choice abundance in the online dating context is that it demands a revision of URT assumptions according to which uncertainty will trigger information-seeking, which in turn will dictate self-disclosure (Gibbs et al., 2010). In presence of a multitude of choices, daters' ability and willingness to maximize certainty through information-seeking for every potential match in their pool will

likely be limited, especially considering that the *time* spent to choose a potential match is considered one of the highest costs daters face in mate choice (Lenton & Francesconi, 2010).

Indeed, in contrast with URT-derived assumptions, Payne (1976) found that when faced with a complex decision task requiring to weigh multiple alternatives, each endowed with different information dimensions, individuals employed decision strategies “designed to eliminate some of the available alternatives as quickly as possible and on the basis of a limited amount of information search and evaluation” (p. 366). Within the dating context, research has indeed shown that as the number of available options increases, daters are more likely to employ heuristic (*noncompensatory*) choice strategies as opposed to comprehensive choice strategies, which are more cognition intensive (*compensatory*; Lenton & Stewart, 2008; Lenton & Francesconi, 2010). According to Lenton and Stewart, compensatory strategies may include most confirming dimensions (MCD; choosing the person who meets or exceeds the highest number of a dater’s standards for an ideal partner) and weighted averaging (WAV; looking at every single aspect of each person’s profile and trying to calculate which person has the best overall profile in terms of a dater’s personal standards), while noncompensatory strategies may include satisficing (choosing the first person who meets or exceeds some - but not necessarily all - of a dater’s most important standards for an ideal partner), lexicographic (choosing the person who best fulfils a dater’s single most important criterion), and elimination by aspect (eliminating the people who are not acceptable on a given criterion, one criterion at a time).

Applying noncompensatory strategies may help daters reduce the cognitive costs associated with choice abundance, and also help them cope with the uncertainty inherent in this type of decision-making without necessarily engaging in information-seeking. However, although maximizing certainty through compensatory strategies (and information-seeking) for every match

in their pool may be too costly for daters, it is possible that comprehensive choice strategies based on information seeking may be used for the few potential matches who pass the initial screening based on less comprehensive heuristics. Furthermore, it is also possible that daters with stronger standards (mate standard strength) will rely on compensatory strategies independent of the width and breadth of choice (Lenton & Stewart, 2008).

To bear in mind that online dating contexts are decision-making environments characterized by choice abundance, and in which gathering information can be cognitively costly, is important because it allows us to understand the limitations of URT's assumption that uncertainty will lead to information-seeking. In fact, it is possible that uncertainty will lead to information-seeking as part of a comprehensive choice strategy only for a selected number of matches (see Payne, 1976), while heuristics - which allow to quickly and effortlessly weed out the least interesting matches - may become a novel strategy to cope with uncertainty that does not require information-seeking, and relies instead on assigning zero value to a match, thereby removing the object of uncertainty itself (Babrow, 2001).

Problematic Integration in Online Dating

The discussion above has shown how online dating contexts possess distinct characteristics that may affect the way daters experience uncertainty, especially with regards to its meanings. Can uncertainty be simply defined in terms of "not knowing," or is there a better way to conceptualize it in this context? Given that daters often need to decide under conditions of uncertainty while taking into account their own desires and beliefs, as well as the probabilities of different scenarios materializing, relying on a more complex definition of uncertainty such as Babrow's (1992, 2001) may increase our ability to understand the complexity of daters' experiences as it relates to the

context, and thus to better gauge how online dating platforms shape relationship initiation and formation more generally.

Furthermore, the relational uncertainty construct (Knobloch & Solomon, 1999), which is accounted for in Babrow's PI and in Brashers' UMT, indicates that in a relational context uncertainty is not simply other-focused, and thus this study will move from the assumption that daters may experience uncertainty in relation to multiple sources, including the self, the other, and the relationship, with the goal of clarifying whether these three dimensions are indeed salient for daters, and if so, in which way.

In the section that follows I will discuss Babrow's PI (2001) as the theoretical framework that will inform this study's approach to the first research question focusing on the sources and the meanings of uncertainty for online daters.

Problematic Integration. Babrow (1992) starts from the premise that we need both probabilistic and evaluative orientations to function in the world. The first allow us to form beliefs and expectations (e.g., "She must be lying"), while the second type of orientations refer to value judgements (e.g., "Lying is unacceptable"). Additionally, probabilistic and evaluative orientations also need to be integrated, and this integration is smooth when probabilities and evaluations converge, and if probabilities are clear and evaluations consistent. To explain this concept, Babrow (1992) gives the example of an individual who considers romantic love to be both likely and a good thing: This person will almost surely have no problem in responding positively to other's overtures and to engage in "dating activity" (p. 97). Another individual might consider romance to be both unlikely and undesirable, and thus be completely comfortable if her sexual partner revealed he had no interest in a romantic relationship. Both cases are illustrations of convergence, which allows an individual to integrate easily expectations and evaluations into broader webs of

“beliefs, attitudes, and intentions” (p. 97). Vice versa, when probabilities are unclear, probabilities and evaluations diverge, or ambivalence is present, integration can become problematic. For example, if an individual who desires romantic love is rejected multiple times, his positive evaluation of romantic love may clash with reduced expectations about its likelihood, thus generating a divergence that needs to be somehow reconciled.

According to Babrow (1992), different forms of PI exist: divergence, ambiguity, ambivalence, and impossibility (p. 98). Each form can be transformed into any of the others, often through communication. *Divergence* refers to what we believe might or will happen, and what we would like to happen, and is “experienced in flexible interpretations of imprecise and ambiguous natural language” (p. 100). Babrow also notes that individuals usually tend to minimize divergence, especially when associations are undesirable, through different psychological processes (e.g., dissonance), but that some mechanisms also work toward increasing divergence (e.g., “too good to be true” rationalizations). *Ambiguity* stems from probabilities of either desired and undesired occurrences that are unclear, and is best described as “uncertainty about uncertainties” (Babrow, 1992, p. 112), in which multiple probability distributions are possible. This contrasts to an uncertain probability, where only one probability distribution is possible (and the probability has a value between 0 and 1), or unknown probabilities, where all outcomes are equally likely. *Ambivalence* refers to circumstances when “alternatives are similarly valued [...] and (b) the choices are mutually exclusive” (p.116), or alternatively when “an object evokes contradictory feelings” (p. 118), such for example when antithetical characteristics are co-present in a person. Finally, *impossibility* denotes certainty, although Babrow (1992, p. 121) notes that practical impossibility may easily be theoretical possibility (i.e., low probability).

While analytically distinct, these dilemmas can morph into one another and overlap, such

that distinguishing them empirically may be impossible. For example, let us imagine that a dater is reviewing a profile where the photo is highly attractive, but the self-presentation is riddled with misspellings. The contradictory nature of the information clearly poses a dilemma: What piece of information should the dater attend to? Identifying the type of dilemma, however, may be more complicated, and depending on the inferences the dater draws she could be facing ambiguity (What information is more accurate?), divergence (low likelihood of compatibility and high desirability based on attractiveness), or ambivalence (What information do I consider more relevant?). Even worse, the three dilemmas may be copresent, or one may morph into another as different considerations take precedence.

Meanings (forms) of uncertainty. Uncertainty stems from experiencing these different integration dilemmas², and according to Babrow (2001) it can either be ontological – uncertainty about the nature of the world – and epistemological – uncertainty that relates to the process of knowing. Within the latter category, further distinctions are offered among different forms that uncertainty can assume in relation to: a) the nature of knowing, or lay epistemologies (i.e., what does it mean to be certain or uncertain), b) the qualities and uses of information and c) the nature of the probabilistic association (e.g., ambiguity, ambivalence). These are discussed below.

The first category comprises uncertainty related to the nature of knowing that also described as “lay epistemologies” (p. 559) and refer to an individual’s understanding of what it means to be certain, or uncertain. The second category refers to how individuals experience the information they have about the world, and the concerns, doubts, and uncertainties that arise when they have to evaluate information and use it. These uncertainties can be related to the qualities of information, such as *sufficiency* (is the information clear, sufficient, and complete?) and *validity*

² These forms of PI are later (Babrow, 2001) labeled as pertaining to the “nature of the probabilistic association” between probabilities and evaluations.

(Is the information free from error, unambiguous, consistent, applicable, and does it come from a reliable source?). Additionally, uncertainties can arise from the need to *organize or structure information*, in relation to either “a series of interdependent choices, particularly when these decisions depend on uncertain outcomes “ (Babrow, 2001, p.558) or to the “integration of a particular belief with other beliefs or values” (p.558). In this second form, it is unclear how information structuring differs from PI itself, and I will make no attempt to distinguish information structuring dilemmas (IS dilemmas) from integrative dilemmas. Different types of integration dilemmas (divergence, ambiguity, ambivalence, impossibility) reviewed in the section above can result from the need to organize or structure information.

After this brief review, the section that follow will present a brief example to illustrate how Babrow’s concepts of problematic integration, information structuring, and dilemmas can help shed light on the meaning and consequences of uncertainty in the online dating context.

OkCupid’s Blackout Dates: A PI Interpretation. The relevance of this perspective is illustrated by an informal experiment conducted by OkCupid (Rudder, 2014). To test how the presence or absence of a photo in dating profiles would affect online interactions, OkCupid obscured for a day all daters’ profile pictures. During that day, daters surprisingly set up *in proportion* more first dates than on days when profile pictures were normally available. This outcome seems at odds with what we know about the relevance of a person’s physical attractiveness for dating purposes (Khan & Chaudhry, 2015; Rudder, 2014), and with the diffidence daters often report toward users who do not include a photo of themselves in their profile (Blackwell, Birnholtz, & Abbot, 2014). URT inspired approaches would predict that in absence of profile pictures, uncertainty would increase, and potentially liking would decrease, thus deterring

relationship initiation. However, that was not the case in Rudder's (2014) informal "experiment." What could explain this inconsistency?

Applying the logic of PI theory allows us to propose some plausible explanations. According to PI, any single "unknown" does not stand in a simple, direct relationship with an individual's overall experience of uncertainty, but is on the contrary evaluated through a process of integration and structuring of information that includes both the characteristics of the environment and the individual's pre-existing knowledge, attitudes, and beliefs (Babrow, 2001).

In the case at hand, the willingness to commit to a "blind" date may have been caused by the realization that photos were not available throughout the whole website: Thus, the absence of a photo was not assumed to reflect a person's dubious motive (e.g., a desire to conceal physical aspect, mischievous intentions). So, while normally the absence of a photo would have triggered a negative impression, in this specific case the "unknown" may have led to radically different conclusions on a dater's part, thus facilitating rather than hindering initiation. The result can also be explained because uncertainty leaves more room to form positive impressions compared to a wealth of information, which can potentially trigger a "negativity cascade" through increasing perceptions of dissimilarity (Norton et al., 2007).

Overall, the interpretation of "blackout dates" proposed here suggests that whether the information provided by a dater through a static self-presentation or dynamic communication facilitates or hinders relational development may not depend on any single element in isolation, but rather on a complex evaluation that requires the weighing of multiple unknowns, an evaluation of their individual or combined "malleability," as well as considerations regarding one's own communicative and relational goals. Tentative probability estimates for questions like "How attractive is this person to me?", "How interesting is the profile?" "Are we likely to be

compatible?” “Is this person presenting himself or herself truthfully?” will have to be integrated with a dater’s general beliefs about relationships and probability estimates about the likelihood of any given scenario before a dater decides whether a potential match is “worth” any further effort, or whether their profile should be discarded altogether. In this perspective, any behavior the dater may perform subsequently – seek communication, discard the profile, attempt to find additional information – will depend on a “preliminary” resolution to an integrative dilemma by means of information structuring. The resolution is “preliminary” because, as noted before, the appraisal-coping process is iterative (see Blascovich, 1992), and information, as well as uncertainty, are constantly being re-evaluated (Brashers, 2001).

Given the richness of interpretations that can be obtained by applying PI theory to the study of uncertainty in the online dating context, this study will thus use Babrow’s (2001) PI to guide its exploration of what it means for daters to be uncertainty, with the expectation that integrating beliefs, values, probabilities, and structuring information will be at the core of daters’ experiences. Furthermore, uncertainty scholars (Knobloch & Solomon, 1999; Douglas, 1990; Brashers, 2001) also maintain that multiple sources of uncertainty exist beyond the other, and this study will also attempt to clarify if this contention applies to the online dating context, and if so which facets of each source will be more prevalent in daters’ experience. Thus, the first research question is as follows:

RQ1: How do online daters conceive and define uncertainty in terms of its potential sources and its meanings?

Uncertainty Appraisals in Online Dating

After defining uncertainty with regards to its sources and its meanings, this study’s second question focuses on explaining what guides daters’ responses to uncertainty. To do so, I will draw

on the concept of appraisal (Lazarus, 1991; Brashers, 2001), defined as the “evaluation of the personal significance of what is happening in an encounter with the environment” (Lazarus, 1991, p. 820). Appraisals involves an evaluation of what is at stake (*primary* appraisal) and an evaluation of one’s own ability to cope with a given situation (*secondary* appraisal) (Lazarus, 1991); both primary and secondary appraisal will jointly affect an individual's emotional and cognitive response. Furthermore, a situation or event can also be reappraised after an initial appraisal as a means to cope with it; as Lazarus (1991) notes, “appraising and coping are often difficult to distinguish empirically” (p. 77) and that they “conceptually [...] go hand in hand and overlap” (p. 78).

It is also important to note here that although appraisal involves a cognitive component, it need not be an intentional and conscious process (Lazarus, 2001; Blascovich, 1992). Instead, “a large proportion of our appraisals is the result of unconscious processes” (Lazarus, 2001, p. 52) resulting potentially in the individual’s inability to correctly pinpoint the cause of a given behavioral or emotional response to uncertainty.

In the following sections I will first present the way appraisal is conceptualized in UMT, and I will then discuss the relationship between appraisal and emotions with reference to the online dating context, before introducing the second research question this study investigates.

Appraisal in UMT. Developed in the context of health communication and illness theory, UMT draws on Babrow’s (1992) probabilistic conceptualization of uncertainty, on Lazarus’ (1991) theory of appraisal, emotion, and coping, and on principles of relational dialectics (Baxter & Montgomery, 1996) to argue that uncertainty is not inherently negative, and thus that an individual’s response to it is not necessarily aimed at reducing it. On the contrary, in some cases maintaining uncertainty can be beneficial, for example by helping an individual retain hope and

optimism (Brashers, 2001, p. 478).

The defining tenet of UMT is that the ambiguity, ambivalence, or lack of knowledge that characterize situations of uncertainty do not inevitably trigger a negative response. An emotional response occurs, but its valence will depend on the valence of a subjective evaluation or appraisal, such that when uncertainty is appraised as a *threat*, a negative emotion ensues, and when uncertainty is appraised as a *challenge*, a positive emotion ensues. Neutral responses are also possible, as well as combined responses, where negative and positive affect are both present, (e.g., being thrilled) (Brashers, 2001). It's important to note that Babrow (2001) shares a similar perspective on the valence of uncertainty, and considers it to be valenced only as a result of an appraisal; however, Brashers' (2001) UMT is clearer as to which factors influence appraisal, and therefore it may be more helpful in trying to systematize our understanding of it.

According to Brashers, the major determinant of appraisal valence are goal-related considerations (Brashers, 2013). In other words, an individual will evaluate uncertainty based on whether it affects his or her goals (*goal relevance*), on whether it facilitates or hinders such goals (*goal congruence*), as well as on the controllability of the event and the potential to cope with uncertainty. Drawing from with Lazarus's (1991) appraisal theory, goals are the reference point against which a situation is subjectively appraised, such that in the absence of a relevant goal, uncertainty may not be salient at all in a given situation (Brashers, 2013). Once uncertainty becomes salient because of its relevance to a goal, its appraisal will vary depending on whether it facilitates or hinders that goal (goal congruence) (Brashers, 2013).

The importance of goals in shaping the experience of uncertainty is one of the most notable features of UMT, because it allows to reconcile theories that give primacy to uncertainty (e.g., URT) and theories that are rooted in a social exchange perspective (e.g, POV, MRU) and thus

consider uncertainty related goals subordinate to “primary” relational goals (Dillard et al., 1989 etc etc). Studies by Mongeau and colleagues (Mongeau, Serewicz & Therrien, 2004; Mongeau, Jacobsen, & Donnerstein, 2007) found that reducing uncertainty was the most frequently mentioned goal in first dates; however, research by Dillard et al. (1989) also suggests that primary goals frame the interaction and define the interpersonal influence situation, while secondary goals represent general motivations that are recurrent for an individual, and generally shape and constrain primary goals after being activated by the awareness of a primary goal (e.g., identity goals, interaction goals, arousal management goals).

Without discounting the importance of uncertainty-related motives, it seems more appropriate to consider them secondary goal (Dillard et al., 1989; Kramer, 1999) that are primarily managed through communication (Brashers, 2001; Babrow, 2001) and that can at times conflict with primary relationship goals (initiation, pursuit) and with other communication goals such as face management (Wilson et al., 2009). Coping or resolving uncertainty can however become primary goals if uncertainty becomes highly salient, for example if a dater is suspicious of a potential match’s motivations.

Initially developed in the health context, UMT has also been successfully applied to the interpersonal communication context (e.g., Maguire, 2007), and the theory has been shown some support in the online environment by Corriero and Tong’s (2016) study of the mobile all-male dating application Grindr. Contrary to what URT would predict, Corriero and Tong (2016) found that Grindr users who had sexual goals in mind desired more rather than less uncertainty, since not knowing much about a potential sexual partner potentially allowed daters to maintain positive illusions and emotional detachment, or enhanced the thrill of the sexual encounter through

heightened perception of risk. Thus, the study showed that goal congruent uncertainty could be desirable, reducing reliance on information-seeking strategies.

The same logic can apply to other online dating environments, such that uncertainty in the form of problematic integration dilemmas may be at times loathed and at times appreciated; threat or challenge appraisals will be driven by considerations of goal relevance and goal congruence, and appraisals will lead to different relational outcomes. For example, as illustrated in the previous section, uncertainty could be sought if it allows a dater to neglect or downplay a potential match's low attractiveness, in the presence of other strong motivators to pursue the interaction such as intellectual affinity. Uncertainty could also be valued as a positive thing since it may contribute to the excitement of a budding relationship, it may keep potential partners engaged and "on their toes," and it may overall contribute to feelings of "romance" (Knobloch & Miller, 2008; Knobloch & Solomon, 2003).

It is also important to point out that another key factor driving appraisals is the *tractability* or *malleability* (Babrow, 1992) of an integration dilemma, which can refer to both to the actual solubility of a problem, but also to the individual's confidence of his or her own ability to cope with uncertainty either through communication or other non-communicative means. This concept is implicit in many theories of uncertainty, including Afifi and Weiner's (2004) TMIM, but it is in Babrow's theory that this factor emerges more distinctly, and thus his conceptualization will be employed throughout this study.

Uncertainty and Emotions. To fully understand how uncertainty shapes relationship formation in online dating, it is also necessary to understand how different uncertainty appraisals elicit different emotional responses, which by coloring daters' experience may prompt them to disengage from an interaction or vice versa to continue pursuing a potential match.

Lazarus' (1991) cognitive-motivational-relational theory of emotion - on which UMT is based - highlights that appraisal patterns feed into distinct emotions, such that each emotion is defined by its own pattern of appraisal, involves its own innate action tendency, and implies distinct physiological responses (p. 822). Action tendencies can be overridden through coping. Lazarus further classifies emotions in four categories: 1) Emotions resulting from harms, losses, and threats (anger, anxiety, fear, guilt, shame, sadness, envy, jealousy, disgust); 2) Emotions resulting from benefits (happiness and joy, pride, gratitude, love); 3) Borderline cases (hope, contentment, relief, compassion, and aesthetic emotions); 4) Nonemotions (e.g., grief, confidence, confusion).

In applying Lazarus' (1991) theory to uncertainty, Brashers (2001) distinguishes among 1) negative emotional responses, when uncertainty is viewed as a danger or threat; 2) Positive emotional responses, when uncertainty is seen as beneficial; 3) Neutral emotional responses, such as indifference, when uncertainty is appraised as inconsequential or it is not salient. For example, a negative response such as anxiety could be experienced if uncertainty is perceived as precluding effective decision making (i.e., intractable uncertainty); fear could follow if uncertainty is seen as threatening health and safety; uncertainty could also cause insecurity or be framed more optimistically and lead to feelings of hope (Brashers, 2001).

On these premises, a study by Knobloch and Solomon (2003) investigated the relationship between uncertainty and emotions in offline dating contexts using a sample of romantically-involved college students. The study found that increases in uncertainty were associated with more anger and sadness, and with less happiness and jealousy. On the contrary, increases in certainty were associated with more happiness and less anger, sadness, fear and jealousy. In terms of behavioral and communicative responses resulting from these emotions, Knobloch and Solomon

found that integrative behaviors (such as calm discussion and direct questioning) were used frequently for all types of events, and overall uncertainty and certainty-increasing events were not found to elicit drastically different reactions, such that the typical tactics adopted seemed to be prosocial and direct (p. 299). However, certainty-increasing events were more likely to elicit closedness, while uncertainty-increasing events were more frequently associated with distance, distributive (anger, blaming), and avoidance behaviors.

This study is important because it shows that uncertainty will affect a dater's emotional response and subsequent communication behaviors, with uncertainty generally provoking negatively valenced responses. However, this evidence was collected in the context of existing romantic relationships, and it is highly likely that within initiation contexts both the emotional responses and the coping strategies adopted will differ. First, since the initiation stage is generally characterized by relatively little attachment compared to later relationship stages (Hazan & Shaver, 1994), the type and the intensity of an emotional response may be different than in an established relationship; second, the ensuing behaviors may similarly be affected. For example, daters who have only exchanged a few messages with each other may be indifferent to uncertainty, or their emotional response to it may be less other-focused and more generalized (e.g., they may feel anxiety rather than anger).

To summarize, this study starts from the premise that uncertainty will lead to different appraisals based on goal-related considerations, and that these appraisals will in turn generate emotional responses and subsequent behavioral and communicative responses. To clarify what kind of appraisals and emotions will be more common in the online dating context, and to look at the potential consequences of uncertainty on relationship formation, the following research question is proposed:

RQ2. How is uncertainty appraised, and which emotions (if any) are associated with it?

Coping with Uncertainty

The final question this study seeks to answer pertains to the strategies daters may employ to cope with uncertainty. As discussed in the relevant section, the characteristics of online dating environments limit not only the type, quality, and amount of information available, but also daters' ability and willingness to gather information. First, information may not be available; second, information may be too costly to obtain, or obtaining it would hinder other goals; third, daters may want to save cognitive resources and thus employ decision-making strategies that rely on heuristic assessments that do not require additional information. Thus, daters may not be intent on maximizing certainty for every potential match in their dating pool or for every individual they may be interacting with. Additionally, goal considerations may lead daters to appreciate uncertainty more than traditionally believed.

This in turn implies that focusing excessively on reduction strategies and on information-seeking may limit our understanding of how daters actually "deal" with uncertainty in the online dating context, and that replacing the concept of reduction with that of coping (Babrow, 2001) may lead to a more comprehensive picture of the mechanisms - conscious and nonconscious, cognitive and emotional - that online daters employ to face uncertainty.

The role of communication. The basic premise of Babrow's (2001) and Brashers' (2001) approach to uncertainty is that individuals will engage in multiple different responses aimed at *coping* with uncertainty, based on goal-driven appraisals. Since both scholars assume that appraisals can be positive, negative, or neutral, they consequently refuse the idea that uncertainty will inevitably lead individuals to engage in reduction strategies, although both recognize that reduction is one of the many strategies that can be adopted to cope with uncertainty.

UMT (Brashers, 2001) predicts that individuals may adopt four different coping strategies: seeking and avoiding information, more general avoidance behaviors, adaptation to chronic uncertainty, obtaining assistance, and managing uncertainty management. This last class of coping strategies specifically accounts for the possibility that conflicting goals (e.g., reducing uncertainty while avoiding face threats) may require management.

However, Babrow critiques the idea of “management,” arguing that to focus on isolated moments in which uncertainty is reduced or managed is too simplistic, and obscures the complexity of the experience; instead, he considers appraisal and coping to be often undistinguishable - in line with Lazarus, 1991- and also proposes that the very strategies adopted to cope with uncertainty may also cause uncertainty (Babrow, 2001). This is not to say he discounts the strategies proposed by Brashers (2001); rather, Babrow argues that uncertainty, in the form of PI, often cannot be reduced - nor managed - since it permeates experience itself.

This is especially true for communication, which is at the heart of PI theory. Writes Babrow (2001): “The theory of problematic integration [...] is a general perspective on communication” (p. 554) and “communication is central to the creation, maintenance, and resolution of PI” (Babrow, 1995). Thus, PI will be resolved in, but also created by, social interactions (Babrow, 1995); this means that individuals will naturally use communication to offer or obtain information in an attempt to cope with uncertainty, but in doing so, new problematic integration dilemmas will be created.

To say that communication (and information), which has traditionally been linked to uncertainty reduction, stands in a more complex and fluid relationship with uncertainty also casts doubt on the possibility to truly reduce uncertainty or resolve it through more information (Babrow, 2001). As discussed in Chapter 1, Planalp and Honeycutt (1985) had already found that

increased communication could cause an increase in uncertainty, in contrast with URT axioms, and in the case of online communication, it has been shown that new information gained through a modality switch (Ramirez et al., 2014) may indeed increase uncertainty through expectancy violations.

Since communication is at the heart of relational processes, communication will arguably be one of daters' primary means of coping with uncertainty. Communicative interactions will allow daters to gather new information; however, whatever new information is gathered may easily increase uncertainty, rather than appease it, especially if it disconfirms a prior impression (Planalp & Honeycutt, 1995; Ramirez et al., 2014; Ramirez & Zhang, 2008). Interactive information-seeking can certainly have a role in communicative exchanges, but as previously discussed daters may limit their use of direct questioning if they perceive that this kind of strategy conflicts with other communicative or identity goals such as ensuring smooth communication or managing face.

Other coping strategies. Babrow (2001) and Brashers (2001) also emphasize that multiple different strategies other than communication or information-seeking exist to cope with uncertainty, and many of them seem particularly applicable to the online dating context in light of the characteristics discussed at the opening of this chapter. These strategies include *adapting to chronic uncertainty, reappraisal, avoidance, and reframing uncertainty*.

Brashers argues that when uncertainty is ongoing or *chronic* - for example through the course of a relationship - individuals may come to accept it as part of an adaptive mechanism that allows them to reduce the discomfort they perceive as a result of uncertain circumstances. Accepting uncertainty may rely on fostering trust in a partner, ignoring uncertainty-producing events, but also on changing one's approach to decision-making. Writes Brashers: "Finally, people can use heuristics to make choices (Elstein, 1999), rely on minimal information and the search for

a “good enough” solution (Pierce, 1996), or simply ignore uncertainty in their planning and decision making (Houglan & Shepard, 1980)” (p. 484). Stereotyping may also be used.

Acceptance and adaptation to uncertainty through changes in decision-making strategies echo the findings of the literature on decision-making in mate selection reviewed at the beginning of the chapter, and thus suggest that decision-making heuristics could emerge as a primary coping strategies in the online dating context, where daters’ inability to maximize certainty for all the potential matches in their pool should lead them to the adoption of cognitive shortcuts based on the underlying assumption that uncertainty is intrinsic to the mate selection process itself.

A second strategy, closely linked to decision-making, relies on *reappraisal*, or changing one's evaluative orientation to the object of our doubts. According to Babrow (2001), “uncertainty is problematic to the extent that we value (positively or negatively) what we are uncertain about” (p. 563). Thus, assigning zero value to a situation, a person, or an event, will lead to the removal of the object of uncertainty itself, and thus to the appeasement of such uncertainty. In the online dating context, reappraisal as a strategy to cope with uncertainty may take different forms. For example, if a potential match responds to a dater’s messages intermittently (inducing uncertainty), the dater may reevaluate the match (e.g., decide he or she is less interesting or attractive) thereby de-problematizing uncertainty.

Avoidance can include behaviors such as direct information avoidance, selective attention, selective ignoring, and social withdrawal (Brashers, 2001). Currently held knowledge could also be suppressed through thought suppression or intentional forgetting (Brashers, 2001). If a dater wants to maintain a positive outlook on a potential relationship in the face of disconfirming evidence, he or she can choose to ignore certain cues while focusing only on others; it is also possible that a dater may choose to avoid gathering additional information online to be able to

form a less biased impression when meeting a potential partner offline. Social withdrawal may take the form of deleting one's profile, or taking a break (Brubaker, J. R., Ananny, M., & Crawford, K., 2016), if uncertainty becomes too overwhelming.

One last category of coping strategies proposed by Babrow (2001) hinges on *reframing uncertainty as a test* (e.g., of character, faith) and an *opportunity for self-exploration*, thus rendering the experience meaningful in a new way (p. 564). Being able to deal with uncertainty-inducing situations may be reframed as an opportunity to grow, increase self-confidence, and gain a better understanding of oneself and one's own preferences.

The categories presented above are not meant to be exhaustive, but rather to illustrate the limitations of an approach solely based on the idea of reduction, and to provide an alternative to said approach. Additionally, they also highlight how coping can occur within the individual and not necessarily through interaction and communication, and even less so through information-seeking. These categories will be used to investigate the final research question posed by this study:

RQ3: How do daters cope with uncertainty in the online dating environment?

CHAPTER 3: METHOD

In line with Babrow's (2001) PI theory, this study assumes that uncertainty - conceived as the problematic integration of probabilistic and evaluative orientations - permeates experience and communication, and that within this broad definition, uncertainty has both ontological and epistemological dimension and can take on different forms (meanings) that can be copresent. Different types of uncertainty - ambiguity, ambivalence, impossibility - can exist for each form of uncertainty, but no attempt will be done to distinguish between them, as each type of uncertainty can overlap or transform into another (Babrow, 1992).

Since this study tackles questions that relate both to the *experience* of uncertainty and to the *process* of uncertainty, I adopt a qualitative approach to data analysis that loosely combines a phenomenological lens - aimed at understanding participants' own experience and definitions of uncertainty - with a grounded theory one - which focuses on the participants' actions, interactions, cognitions and emotions to clarify the relationships between theoretical categories (Cresswell, 2013). Although this study is for the most part exploratory and not aimed at theory-building, where possible or necessary I will attempt to draw relationship among the categories to support or modify the theoretical frameworks this study draws from.

Role of the Researcher

Part of the interest for the phenomenon and the process explored in this study stems from my own experience dating online and from my own problematic relationship with uncertainty. Between 2015 and 2017 I dated online using a variety of platforms including Match.com, OkCupid, and Tinder, and I found my current partner on Bumble. My overall experience dating online has been positive, although I was also able to empathize with daters who felt frustrated or had a more negative outlook. Although I disclosed to the participants that I had dated online, I did

not discuss my experience with them until the end of the interview, and only if they asked, to avoid influencing them. Having dated online allowed me to create rapport easily and to better understand what daters were telling me, but I constantly questioned my interpretation to make sure I was not superimposing my own experience on the data.

From a theoretical standpoint, I made the effort to challenge the hypotheses and preconceived views I had developed regarding uncertainty. This was particularly important for the discussion of appraisal and the nature of uncertainty, which are currently the most contentious issues regarding the subject. While I initially subscribed to theoretical positions contending that uncertainty is not necessarily negative, the data I collected challenged me to review my own stance, and acknowledge its limitations.

Participants and Procedure

A total of 13 semi-structured interviews were conducted during the period between June 2016 and May 2018. While the target sample was 20 interviews, saturation was reached after six interviews; however, further data were collected to ensure richness of analysis and to validate the codes and themes. Each participant discussed in depth at least two interactions ($M = 2.50$), for a total of 33 interactions within the full sample.

The interviews were conducted either in person ($n=5$) or through Skype ($n=8$). I did not observe any manifest difference in terms of participants' willingness to disclose or other general behaviors between online and in person interviews, and all the people I interviewed online already had a Skype account and were familiar with videochat systems, decreasing the likelihood that the channel affected them differentially. Although videoconferencing technology did not create any major disruptions, in one case, the connection had been at times unstable, leading to a lower quality transcript (words missing). For both coding and exemplar selection, I used the notes taken during

the interview when necessary, especially if I decided to use a segment where a word was missing, but in general I tried to avoid incomplete segments.

Interviews varied in length between 36 and 67 minutes ($M = 54$ minutes). Participants were mostly female (70%), prevalently Caucasian (62%); their median age was 34.50 years. Participants reported using a variety of online dating websites and apps including OkCupid, Match, Bumble, and Tinder, among others, and having been online for periods from one year to 12 years ($M = 4$) years. Daters who had been online the longest reported having been “on and off,” or having taken breaks, or been in a relationship in between periods. Almost all participants had tried at least two different websites or apps, including Match, eHarmony, okCupid, Bumble, Tinder. The way in which apps and websites differentially affected participants’ experience was not investigated in this study.

The participants were recruited through snowball and convenience sampling among adults aged 18 or older who had been consistently using online dating platforms and apps, and who had had at least 5 interactions/exchanges with another dater in the previous ten days. Participants had to be either romantically single ($n = 11$) or divorced ($n = 2$) and given the possibility that goals and dynamics could potentially differ between heterosexual and homosexual populations, the study limited recruitment to the heterosexual population.

Participants who expressed interest in the study were screened either via email, phone, or in person through simple questions to verify they met the study criteria described above. Their age, occupation, and ethnicity were also collected, and they were asked to choose a pseudonym for themselves. Two people were turned away for not being heterosexual; two for having been inactive on their online dating accounts for a few months. Three failed to follow up on the initial contact.

Depending on the participant's residence and preferences, the interviews were conducted either in the Qualitative Lab at Wayne State University, Department of Communication (Manoogian Hall, 4th floor), or in a public place chosen by the participant off campus, or on Skype. Interviews were recorded using a Sony icd-px470 stereo digital voice recorder; the original recordings were destroyed after transcriptions had been completed.

Participants were asked to read and sign the informed consent, after which they were explained the study's main research question, overall procedures, and compensation. In exchange for their participation, they received either class credit or a \$15 gift card upon study completion. Participants agreed to being recorded and they were also reminded that they could choose not to answer questions, and that they could leave the study at any time.

Interview Protocol

The interviews followed a semi-structured protocol (see Appendix A) comprised of introductory questions about participants' online dating experience in general, a detailed discussion of specific interactions, and a final question about participant's own definition of uncertainty and their overall assessment of the experience. Daters were also asked to identify on a graph moments they considered salient from the point of view of their uncertainty experience, and to explain what made them more or less certain at those times.³

Prior to starting the interview, participants were provided with an overview of the study, but they were not supplied a univocal and unambiguous definition of uncertainty allowing them to maintain as broad a perspective as possible, and to let meaning and process elements emerge

³ Graphing uncertainty during interactions was initially planned to be repeated for every interaction discussed by each participants, but due to time constraints graphing was limited to one for each interview. The graphs were not analyzed separately, as I originally intended, given their low number ($n=8$). However, daters' discussion of the graph while they were compiling it was recorded and analyzed as part of the interview.

spontaneously from daters' recollections. The questions regarding specific interactions were aimed at gathering data regarding sources of uncertainty, as well as about the uncertainty process (e.g., appraisal, coping, relationship outcomes). To guide the selection of relevant messages, I used different strategies depending on each participant, included asking them to think which interactions had caused more uncertainty, which had progressed further, which they found more interesting to discuss. All participants were able to log into their online dating account(s) to retrieve messages (sent or received) and user profiles in a way that allowed more precise recollections. All participants discussed at least two different interactions each ($M = 2.50$), although with different levels of detail. A total of 33 interactions were discussed. Initially participants were asked to log onto their account to retrieve the messages they wanted to discuss, and read them aloud to facilitate recall; however, it became apparent that this procedure did not improve recall, but rendered the interviews too lengthy. Therefore, after the first 3-4 interviews, participants were asked to discuss the interactions without retrieving the related messages or log onto their account. If participants appeared uncomfortable with the process or were not able to describe the interaction in detail, we moved to a different interaction or to the next phase of the interview. During the discussion, probes were used to help them recollect and articulate participants' perceptions and actions, but caution was used not to "suggest" answers or create a demand bias.

Finally, daters were asked to define their experience of uncertainty as a whole, although they were free to provide examples if they wished to do so. Probes were used to help daters articulate their thoughts, but participants were not asked to validate any specific definition of uncertainty unless they brought it up spontaneously. If a participant's definition or description overlapped significantly with an existing concept or category, I would ask them to confirm whether the existing concept was a good fit for what they were trying to express. All of these procedures

were approved by the university's institutional review board in June 2016, and again in a following amendment in March 2017.

Data Analysis

Prior to analysis, the anonymized interviews were transcribed through rev.com and checked for quality against the original recordings, which amounted to a total of 11.8 hours. All transcribed interviews (for a total of 189 pages, single spaced) were analyzed through *thematic analysis* (Braun & Clarke, 2012) using Atlas TI. Thematic analysis is a way to identify “what is common to the way a topic is talked or written about and of making sense of those commonalities” (p. 57) through six steps: 1) Familiarizing with the data; 2) Generating initial codes; 3) Searching for themes; 4) Reviewing themes; 5) Naming themes; 6) Reporting. This type of analysis was chosen due to its extreme flexibility and its ability to accommodate different theoretical perspectives and to combine inductive and deductive coding in a non-prescriptive way.

Familiarization and coding. Prior to starting the analysis, I reviewed each of the transcribed interviews using the notes collected during the interview to familiarize with the data and form a general impression of the material collected as a whole. The notes were not included as part of the analysis. After familiarization, since TA is not prescriptive regarding how data is segmented, I went through each interview and assigned a code to any segment of text that related to the uncertainty experience or to the uncertainty process. In addition to segments of text in which participants responded to direct questions, uncertainty was also identified in segments where daters mentioned concerns, insecurities, hesitations, or being/becoming certain. Coping strategies were identified in segments in which daters discussed their responses to localized or general states of uncertainty. For example, heuristics were identified as a coping strategy in light of daters' recognition that the online dating environment is characterized by generalized uncertainty. Rather

than relying on a codebook, I employed *open coding*, creating semantic or latent (Braun & Clarke, 2012) codes inductively and line by line for relevant segments. Codes were allowed to overlap. Code generation was heavier during the coding of the first three or four interviews, and subsequently I was able to use more frequently the codes I had previously created. During this process, but also later during code revision and theme development, I often went back to previously coded material and existing codes to make any revisions necessary to ensure consistency with the new interview content.

Semantic or descriptive codes typically remained close to the content of the data and to the participants' meanings. "Uncertainty about other: Safety" is an example of a semantic code which was assigned when the participant explicitly discussed his or her concerns over safety when dating online. Another example of a semantic code is "Coping: Not taking it too seriously/low stakes." *Latent* codes by contrast were used to "identify meanings that lie beneath the semantic surface of the data" and thus to "provide an interpretation about the data content" (Braun & Clarke, 2012, p. 61). These codes were used more frequently to capture aspects of the uncertainty process (e.g., salience, appraisal, coping), especially those that participants were not able to identify and describe as such. "Decision-making: Overload" is an example of a latent code identifying cognitive overload as a factor affecting decision-making.

Combining semantic and latent codes was particularly important because participants often discussed uncertainty implicitly, by talking about how they became more *certain* through decision-making, or communicative interactions aimed at gathering information. For example, daters frequently reported that drug use was a deal-breaker that would lead them to discard a potential match. While from a purely semantic standpoint this statement could be considered irrelevant, it is in fact relevant in a context characterized by the need to form impressions and make decisions

in conditions of uncertainty, since it tells us something about how epistemological uncertainty is dealt with. Brashers (2001) indeed considers heuristics one of many potential ways to cope with uncertainty. Adopting a narrow lens - either based on semantic content or on a particular definition of uncertainty - would have directly contradicted the goals of this study, which was meant to be exploratory in nature.

Furthermore, from a theoretical standpoint, uncertainty cannot be truly understood without referencing certainty, and consequently the strategies adopted that make an individual more certain, or the information daters use to form impression about others. Even without stating it explicitly, all the existing theories of uncertainty conceptualize it in relation to its “opposite,” through the emphasis on reduction, coping, information, or integration.

It is also important to note that while daters felt that uncertainty as a concept applied to their dating experience and had affected it, they often had not conceptualized their dating experience in terms of uncertainty prior to being interviewed. This means that they did not necessarily have abstract categories and concepts in place to articulate their experience, the tension between certainty and uncertainty, or their coping strategies, and thus going beyond what they explicitly named and labeled was important to capture crucial aspects of the process that would have otherwise gone unnoticed.

Saturation was reached within the first six interviews, with fewer and fewer new codes appearing after the first three. However, all interviews were coded to validate and refine existing codes, and to obtain richness of nuance. Codes were revised iteratively both during the coding process, after coding of all the interviews, and during theme generation and review, to ensure consistency.

Theme generation, review, and naming. During coding, I started grouping codes loosely by using common labels (e.g., coping, decision-making). After exhaustive coding of each interview, I reviewed the codes one by one in Atlas TI's code manager to verify that I had applied them consistently, and that they belonged to the same group. While groups did not necessarily represent themes, group categorization helped in the subsequent step of theme generation.

Themes, which capture “something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set” (Braun & Clarke, 2006) - were defined by identifying overlaps, similarities, and differences between relevant codes. Since this study also examined the uncertainty process, themes were also generated by identifying codes that were related *axially* (e.g., salience of uncertainty). The approach I adopted to theme generation was both inductive and deductive. Sensitizing concepts drove the identification of some major themes or subthemes, especially for what concerned sources and meanings of uncertainty, as well as coping strategies (e.g., self as a source of uncertainty, safety, information-seeking strategies), but other emerged organically from the data (e.g., closedness/openness as a type of uncertainty about the self, decision-making as a coping strategy). When enough nuance was present, multiple sub-themes were created within each theme, and all themes were validated against the data they were supposed to represent and in relation to the whole dataset.

Atlas TI' code co-occurrence table was used to select all the codes that belonged to the same group or to related groups, to examine and review the relevant collated data across the dataset, and thus help in creating the themes. The table was also used to determine how frequently codes and themes appeared across and within interviews, and thus identify the ones that seemed particularly salient in the sample. The frequency criterion was used to choose the most relevant

themes and subthemes for the analysis, and within each theme and subtheme the most relevant exemplars were identified to guide and support the analysis. At times, deviant or peculiar examples were also chosen to explore exceptions to the interpretations I provided or highlight outlying experiences. Codes that were highly infrequent and that did not fit into a theme were set aside, although they were examined to ensure they did not invalidate the analysis and interpretation.

All the collated data for each theme was reviewed to ensure that the overarching theme was *useful* (Does the theme say something valuable about the data?), *coherent*, and *thick* (Is there enough data to support it?) (Braun and Clarke, 2012). Finally, themes were reviewed in light of the full dataset, to make sure they captured “the most important and relevant elements of the data, and the overall tone of the data.” Themes that appeared to be marginal or too thin were discarded. Although naming themes was an ongoing process during the analysis, theme names were reviewed once the set of themes had been finalized.

Validation

According to Braun and Clarke (2012), thematic analysis needs to “provide examples of, and analyze, enough data to convince the reader that this pattern you claim really was evident” (p. 69). This criterion aligns with the employing *thick descriptions* to allow readers “make decisions about transferability” (Cresswell, 2013, p. 252). In addition, other strategies were used to validate the analysis. *Negative case analyses* were supplied to “provide a realistic assessment” of the phenomenon that did not necessarily line up within the main patterns. *Researcher bias* was discussed to help the reader understand how my own online dating experience may have impacted data collection and analysis. Finally, results were discussed during phone conversations with study participants (*member checking*) who wished to do so ($n=3$) in order to verify the credibility of the interpretations provided, as well as with other individuals who had experience with online dating.

The three participants found the results to be in line with their experience. They were also provided the manuscript to offer more in-depth feedback, but all failed to respond to follow up checks or explained they had not been able to read the manuscript.

CHAPTER 4: RESULTS & DISCUSSION

Previous investigation of communication-related uncertainty in online dating, informed by Berger and Calabrese's (1975) uncertainty reduction theory, have characterized uncertainty as negative, and have focused on information-seeking as the main strategy individuals use to reduce it. However, online dating environments that have emerged in recent years are fundamentally different from the face to face contexts in which uncertainty had been previously studied, to the point that URT's assumptions about uncertainty may lose their explanatory power when applied to this context, and the definition of uncertainty itself may need to be problematized.

Some of the characteristics that set online dating environments apart are: 1) the reduced availability of nonverbal cues at the early interactional stages, and the preeminence of text-based communication; 2) the abundance of profiles to choose from; 3) the limited ability to seek or validate information about potential partners; and 4) the need to reconcile competing goals within any given interaction.

It must be noted that with respects to primary goals, daters in this sample were homogenous, as all explained they were looking for a long-term relationship. Thus, as long-term goals framed daters' discussion of their secondary goals and of their overall experience online, the results presented in this section should be interpreted based on this premise. Since this protocol did not focus on goals explicitly, secondary goals - such as ensuring smooth communication - were generally inferred from responses to questions regarding uncertainty and coping, and thus from daters' discussion of communication, coping, and uncertainty-inducing interactions.

The theoretical perspectives by Brashers (2001) and Babrow (2001) suggest that a full understanding of uncertainty can be obtained only by abandoning the long-standing assumptions that uncertainty has only one stable meaning, that it is negative, that it is other focused, and that

reduction is the only response to it. A study testing some of Brashers' assumptions in the online dating context found support for the idea that daters do not always desire more information (Corriero & Tong, 2016).

This study attempts to understand what constitutes the subjective experience of uncertainty for online daters by using sensitizing concepts derived from Brashers and Babrow with regards to the meanings (problematic integration, information structuring) and the sources of uncertainty (self, other, relationship), as well as the coping strategies (appraisal and reappraisal). As much as possible, an attempt is made to reconcile different theoretical perspectives, and show how they contribute to illuminating different aspects of the same phenomenon. In this chapter, I examine how online dating environments affect the sources and meanings of uncertainty, its appraisals, and the strategies daters employ to cope with it. I present findings in the order of the research questions advanced in Chapter 1.

RQ1: The Multiple Sources and Meanings of Uncertainty

In contrast to Berger and Calabrese's (1975) homogenous view of uncertainty, Babrow (2001) argues that uncertainty is multidimensional and complex, and that it has infinite sources or objects - the things we are uncertain about - and multiple meanings, or variations in its nature. Brashers (2001) similarly defines uncertainty as "multilayered" in terms of its sources. In particular, he noted that "individuals in new relationships may question their own and their partner's definition of the relationship, the potential for long-term commitment, or the appropriateness of suggesting sexual intimacy" (p. 480). Brashers identifies uncertainty about the self, about the other, about the relationships, as well as about other features of a context, as potential sources of uncertainty.

A similar perspective had been proposed earlier by Douglas (1990), who maintained that in the context of interpersonal interactions, different “domains” of uncertainty exist. In particular, Douglas identified own and partner’s behavior as well as own and partner’s feelings as four distinct domains and found that levels of certainty/uncertainty could be inconsistent across domains.

Given the nature of online environments, where reduced cues and asynchronous interactions may increase self-awareness (Joinson, 2001), and where lack of common ground may prompt daters to greater cautiousness (Gibbs et al., 2010), it appeared reasonable to expect that a source or dimension of uncertainty revolving around the self would appear, in addition to the more commonly investigated “uncertainty about the other.” Thus, Brashers’ (2001), and Douglas’ (1990) categorizations were used as sensitizing constructs in the interviews and in the analysis.

Babrow’s (1992, 2001) conceptualization of uncertainty as problematic integration guided the investigation into the meanings of uncertainty. Uncertainty however was not defined a priori, and its meanings were derived based on participants’ own explicit definitions, as well as inferentially based on what they focused their attention on during the interviews. Babrow’s concepts of “tractability” or “malleability” of uncertainty were used to characterize daters’ perceptions regarding their own ability to cope with uncertainty, communicatively or otherwise. Given the experiential nature of the uncertainty construct, no attempt was made to distinguish the objective and subjective dimensions of tractability.

The sections below examine the sources and the meanings of uncertainty that emerge from daters’ experience while interacting with others on online dating websites and apps. Within each theme, multiple sub-themes have been identified that correspond to different facets of the uncertainty construct. It must be noted that given the broad conceptualization of uncertainty presented above, the differentiation between sources and meanings relies more on the prevalence

of one facet over others rather than on mutual exclusivity. Additionally, no attempt is made to distinguish between different types of uncertainty (e.g., ambiguity, ambivalence).

RQ1a- Sources of Uncertainty

Uncertainty about the other. Previous research has generally focused on uncertainty about the other as the focal concern for online daters. According to Gibbs et al. (2010) “online dating sites often bring together strangers who have no prior relationship with one another, and the lack of shared physical context and nonverbal cues can create greater uncertainty about others and complicate the process of forming relationships.” Their study showed that daters were especially concerned about personal security, privacy, and recognition, and that these concerns predicted how frequently they engaged in uncertainty reduction strategies.

This attention on the “dangers” of online dating reflected an early emphasis on how computer mediated communication could enable outright deception through the construction of an online persona that could differ substantially from the offline person (Donath, 1998) - a phenomenon that has come to be known in the popular media as “catfishing.” However, subsequent evidence has shown that daters are generally truthful, and that small misrepresentations of self are more common than outright, boldface lies or deception (Hancock, Toma, & Ellison, 2007).

The themes identified by the daters in this sample in relation to other-uncertainty support findings from previous research pointing to concerns around self-disclosure and safety, as well as around others’ self-presentation or misrepresentation. They also highlight how daters - both women and men - were mostly concerned about forming a psychologically accurate impression of a potential partner, rather than worried about the safety risk posed by a dater misrepresenting

himself or herself. According to Haselton and Buss (2000), minimizing error and maximizing outcome benefits is key to the evaluation of potential mates.

The following sections will discuss the three major themes related to uncertainty about the other that emerged in this sample: *safety, uncertainty about a dater's self-presentation (or misrepresentation)*, and *uncertainty about a dater's goals and motives in the interaction*.

Theme 1 - Safety. Although the daters I interviewed did mention safety, they were not typically worried about it. The fact that safety was mentioned but was often not problematic seemed to reflect daters' learning arc within the online dating process, with safety concerns being very salient in the beginning and becoming less relevant with the accumulation of experience. Most daters ultimately recognized that being cautious about disclosing personal information and taking some precautions when meeting someone for the first time would be sufficient. In the early stages of an interaction, risk could be mitigated by being selective about what information to disclose and when. For example, Lucy did not have a problem discussing her experiences with a potential date, but she was careful not to provide them with any detail that could identify her:

Lucy: Yeah. I mean, I, I've been very open about, I'll share whatever. I have no problem doing that, and I [am not concerned about safety] because I don't tell people where I work. I don't tell people where I live. Um, I don't even like let them know what kind of car I drive until later on.

Rose would abandon an online conversation if the man proposed to meet at his home, based on an inference about his intentions and the recognition that meeting a stranger at his home could be a safety risk, and most women reported they chose to meet in public places, a simple strategy that allowed them to be less concerned about safety. Anastasia explained that while when she had first started dating online she used to worry about safety and identity issues, she had later come to

recognize that other daters were just like her, and that “normal precautions” would be enough to keep her safe.

Anastasia: They were just, like, people doing the same as me, going online to meet other people, so, um, yeah, I stopped being worried about that aspect. Um, maybe I should be more worried, I dunno. But, um, I take the normal precautions, I feel like, I wouldn't meet anyone not in a public space in public view in the daytime, um, so...

However, not all daters were so nonchalant going into a date. For example, Sam would take some preemptive measures, which included scouting the meeting venue if possible, and alerting a friend as to her whereabouts.

Sam: So, you know, if we do go to this place because I've never been there, I would at least look it up. I might go in once before the date just to kind of get an idea, which I realize makes me sound a little bit overly paranoid, but it helps me feel comfortable to know, you know. [...] Um, I don't like the idea of showing up in a totally unfamiliar environment and then, you know, if this person has nefarious intentions then I wouldn't be, um, so uncomfortable. I also generally will text a friend and say, "Hey, I'm going on a date with someone I met online. This is where we're going. Um, I'll text you once I'm done."

Men, on their side, acknowledged that women may be worried about safety:

Mark: I really just have to feel comfortable, and I want to make sure they feel comfortable too, 'cause I'm acutely aware of the dangers of women dating, you know, like just meeting guys... I don't want to be put in that situation or make someone feel uncomfortable-

Daters' cautious management of self-disclosure to cope with their uncertainty about the other and preempt safety risks is in line with Gibbs et al. (2010), who posited that “the increased privacy risks as well as the affordances of asynchronous interaction in online dating may necessitate an extra step of verification before participants are willing to self-disclose above and beyond what they reveal in the profile” (p. 74). Indeed, daters in this sample avoided disclosing information they considered sensitive until any they had addressed potential uncertainty about safety. However,

daters also recognized that uncertainty about the other could not be completely resolved, and that communication was an imperfect coping tool (Babrow, 2001), so their efforts did not imply necessarily a complete reduction or resolution of uncertainty; rather, it could be enough that uncertainty was made *acceptable* - for example, by making sure a friend was informed about their date.

In a broader sense, this is partly consistent with findings by Gibbs et al. (2010), which pointed to the role of uncertainty reduction strategies as a mediator of self-disclosure. However, as will be discussed in RQ3, the nature of online dating environments severely limits the adoption of reduction strategies - with the exception of interactive ones - and forces daters to employ a wide range of other strategies that do not necessarily involve communication including reappraisals, contingency rules, and attributions in order to cope with uncertainty and decide what and when to disclose, and whether to pursue a given interaction.

Theme 2 - Uncertainty about a dater's presentation (and misrepresentation) of self.

Uncertainty about how other daters self-presented in their profiles or in their messages was a key theme with regards to other-uncertainty. While the possibility that others would not be truthful or honest was mentioned by five out of the 13 people I interviewed, daters tended to be more concerned about subtler misrepresentations, both intentional and unintentional, which they attributed to factors including the desire to impress and the lack of self-awareness.

Intentional misrepresentations. Daters in the sample frequently expressed being uncertain about a potential partner's honesty, and about the accuracy of his or her self-presentation. However, concerns over intentional misrepresentations were not as salient or similarly worrisome for all daters, possibly as a consequence of their different online dating experiences.

For example, Rose was extremely concerned about being lied to or being deceived, as a result of having encountered as many as six “catfish” in the years she spent dating online. This is how she summarized a conversation in which she confronted a potential date about his dishonesty:

Rose: [...] and found out his name and he told me he had two kids, and um, when I actually Googled him, it came- come to find out it was this famous Facebook guy who does these rants and stuff about politics. When I confronted about him- confronted him about it, because a lot of the story didn't jive. Oh, he's like, " Oh no. That's- that's me. It's me." No, it honestly can't be because not everything matches up. This person's no longer in the military and you're saying you're still in the military. I just- I was like, you can just [...] not talk to me anymore and I was done with it.

However, daters in the sample generally did not encounter outright deception, and were not excessively concerned by the possibility of being lied to. Anastasia for example explained that the initial worries she had when she started dating online turned into the realization that the people she met were usually not too far off from what their profile showed.

Anastasia: I- I- I know that people can misrepresent themselves like intentionally or grossly. Um, initially, initially when I signed up for, um, dating websites I was really worried about that but, um, I think gradually I stopped being worried 'cause the people that I would meet they were, they weren't anything, like, far off from their profile-

Instead, daters’ experiences of and concerns around misrepresentation revolved generally around forms of intentional misrepresentation that could be considered more benign, hinging on selectivity in profile self-presentation and messaging rather than on outright deception. For example, Mark pointed out it would not be wise to get attached to a stranger online because their messages could be crafted to obtain a reaction, rather than being a truthful representation of self.

Mark: It's not the smartest thing to do to get emotionally attached to somebody that is, for all intents and purposes, a fantasy, you know, 'cause you never met them in person. They're

just, you know, talking and they could always be saying something that ... just know what to say, the right words to make you have a reaction.

And while intentional misrepresentations could be benign, stemming from the desire to impress rather than to deceive, they nonetheless created uncertainty and could prompt a dater to either be more suspicious or even back out of the interaction altogether. Mark continues:

Mark: If I feel like, uh, you're embellishing to, for a reaction. Like, um, this one girl that, uh, I, I matched with and she basically opened with, uh, "Oh, I'm probably going to, you know, go play a round of golf this weekend." And with this ... which is odd, you know, that you're going to open with that, number one. [...] So I asked her, right, I don't know if she thought that maybe I didn't play it or if she thought that would impress somebody- but I do play golf. I took a year of golf at college. So I asked her, I was like, "Oh, you play? Are you any good?" And she goes, "Are you any good?" And I said, "Uh, I took a year in college," and then she changed the subject.

Steven explained often being uncertain about the honesty and accuracy of others' self-presentation, assuming that misrepresentation could be due to a desire to impress or to be more appealing:

Steven: Um, I guess the bigge- ... I mean, I don't know. I suppose the big issue is, like, is this person going to be what ... like, how they say they are or are they gonna be, um, you know, like ... are they the same they are online as they are in person? [...] Like, um, if I feel like they are ... like, I don't know. I guess, like, if they're lying or if they're playing up some part of themselves to make themse- to make them appeal more to, like, me as a person?

Unintentional misrepresentations. Daters were often uncertain about what degree of intentionality they could ascribe to a dater's self-presentation, and were ready to entertain the possibility that others' misrepresentations might be unintentional. For example, Julie explained that while she used daters' photographs to try and draw inferences about the person's character, she wasn't always sure if she could assume the other person actually intended to signal something:

Julie: And I guess the initial feeling is that if you've got somebody who is very drawn looking in their photograph, I am uncertain which is that just because he liked that photograph and that's what he posted or is that some of representation of who that person is. [...] So this is basically, you're, you're asking a question of whether the person is sending a message by using that specific photograph or if it's just a, almost a random piece of information. I like a picture of myself and I will post it or, am I sending out a message to potential daters that I am like this.

Similarly, noting that her uncertainty about a potential partner would not be limited to issues of honesty, but also of accuracy, Zoe remarked she was unsure how much self-awareness she could ascribe to the other person.

Zoe: Cause sometimes I think people are being honest, but they're not being accurate, right? And so, it ... I don't know how self-aware they are.

The idea that a misrepresentation may not be intentional, but rather due to a gap between a potential match's perception of self and the assessments made by others is encapsulated in what Ellison, Heino, and Gibbs (2006) define as the "foggy mirror" phenomenon. The concept captures the possibility that a dater's self-presentation may be inaccurate not due to a deceitful intent, but as a result of a "foggy" perception of self.

Julie: But there is some uncertainty because some people call themselves athletic and toned but you look at the picture. [...] Okay. So this person thinks they are athletic and toned. They appear that they're probably 50 pounds overweight so, which piece of information there is accurate? Is it an old picture or is that just the way that they think of themselves. So that might cause some uncertainty.

Overall, the potential for unintentional misrepresentation makes daters' uncertainty even more problematic, since it requires daters to weigh a potential partner's selective self-presentation against warranting elements in their profile or behavior (DeAndrea, 2014), distinguish between cues that are given and cues that are given off (Goffman, 1959), and establish what degree of intentionality should be ascribed to a potential partner's self-presentation.

The women daters I interviewed also described experiencing other uncertainty when a potential partner appeared too keen on making a certain impression, both through their profile and through their behavior during an ongoing interaction. Daters described this with expressions including "trying too hard," or "feels fake." This kind of behavior could be considered either intentional or unintentional misrepresentation, depending on the motivation behind it, but

generally daters did not ascribe a deceptive intent to it. Nonetheless, they were more likely to abandon the interaction than continue it. Zoe, for example, explains that it rings false to her when a potential dater who has no Latino heritage tries to speak Spanish to impress her.

Zoe: Like, sometimes men will read that I'm Latina, on my, um, profile, and then they'll try to say something in Spanish to me. And like, some men, the- will do it because they speak Spanish, 'cause this is Orlando, but some of them, it's clearly like they put something in a Google Translate (laughs) to try to put it to me, and that's just kind of like ... I didn't write anything on my profile in Spanish, so I'm not ... not trying to, to have ... you know, these particular connections. And it just always feels a little bit like they're trying to ... it fe- it rings false to me. So it rings false that he would, um, he would use those words when he has no identity or experiential reason to.

Similarly, Tamara decided not to meet a perspective dater after some consideration because she felt he was trying too hard.

Tamara: Um. Okay. So I felt like he might have been trying too hard in the beginning. Like commenting on something that I wrote, and trying to show me that he liked something that I liked.

An explanation of daters' reaction to their perception that a prospective date is "trying too hard" may be found in the fact that daters (not only online) want to interact with someone who feels true, not with someone who is trying to project a perfect image of self (Wotipka & High, 2015). Individuals who go out of their way to impress, or to please, and who are perceived to present selectively, may thus be deemed not "real" and discarded from consideration.

Overall, this analysis suggests that while uncertainty about the other remains at the forefront for people who date online, daters are less concerned about safety, privacy, and outright deception, and more about forming an accurate impression of the person, on the assumption they are likely to encounter daters just like themselves." The decreased concern for safety and privacy issues may be linked to online dating's coming of age, and to the fact daters have become savvier when interacting with strangers online, both because of cultural exposure to the phenomenon and

as a result of their own personal experiences dating online. Based on the analysis I conducted, it appeared that greater experience with online dating led to greater confidence in one's own ability to cope with uncertainty and reduced anxiety about interacting online and meeting offline.

Uncertainty about the self. *Uncertainty about the self* identifies any doubt or concern referring to the dater's own motives, behaviors, cognitions, and feelings. After the other, the self was the second most frequently occurring source of uncertainty daters cited, with only one dater who did not mention it at all, and multiple daters focusing on it as a pivotal concern in their online dating interactions. The theme appeared more frequently in female daters' interviews ($n = 9$); when male daters ($n = 4$) discussed it, it was often in positive terms (i.e., lack of uncertainty).

Three major sub-themes emerged from daters' discussion of self uncertainty, typically focusing on daters' decision-making process. These themes were also discussed more at length within each individual interview, suggesting that they are focal aspects of self uncertainty for daters.

Theme 1 - Closedness/Openness. Daters tended to use screening parameters to weed out candidates more easily (see RQ3); however, they also reported a tension between *closedness* (i.e., applying "preset" criteria) and *openness* (i.e., the need/desire to be open to potential partners), modifying one's desired preferences or standards on the basis of the potential partners encountered in the pool of available daters.

Zoe: Um, I feel a lot of uncertainty about the, like what are the thresholds or the requirements to even start engaging with somebody, right? So, I mean, as a woman with a PhD, who's 37, right? Like, I don't need to date another person with a PhD, but I start to, you know, wonder, do they have to have a college degree or not? Like, what are ... so I start to feel really uncertain about the thresholds in terms of that and being open, and not automatically eliminating people because of categorization, right?

Six female daters (out of nine), and two male daters mentioned this (out of four); however, a major difference was apparent. For female daters, the tension between their selection criteria and

openness to the diversity of daters online co-occurred with uncertainty about their own judgment. In discussing their doubts about being too picky and the possible need to “open up,” females often mentioned self-doubt, or uncertainty about the accuracy of their own judgment. By contrast, men tended to lack the element of self-doubt, and explained they opened up to avoid being “judgmental” or to give the other person “a chance.”

Mike: I mean, so, if I do compromise, let's say I do compromise. Uh, now I'm like "Okay, let me, let me give this person a chance." You know, I'll give them a chance, and then I'll go through like, I'll start talking to them, and then that serves as like, a spinning process. And you know, if they're too boring [...] I'm not, I'm not even gonna waste my energy. I'm just gonna move on because I know that this may not work out.

Multiple factors could contribute to the tension between closedness and openness, but the pervasiveness of such tension among the female daters I tentatively ascribe to two factors, while keeping in mind that this small sample does not provide sufficient ground for solid generalizations.

First, women may still be socialized to be relationship ‘caretakers,’ or ‘social–emotional experts’ (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991) and thus may consider relational accommodation normative. Within an existing couple, accommodation is traditionally defined as an individual’s willingness to inhibit destructive behaviors and to engage in constructive ones (Finkel & Campbell, 2001; Rusbult et al., 1991). In the online dating context, where couples have yet to form, accommodation may be conceived as a dater’s willingness to downplay the other person’s undesirable traits and focus instead on the most pleasing ones. Women who decide not to be accommodating (i.e., not to downplay the other person’s defects) may feel uncomfortable as they disregard societal expectations toward accommodation.

Secondly, women may also be more concerned than men about being single, and thus worried that being too demanding could hinder their ability to find a partner. As Spielman et al. (2013) point out, multiple factors, including insecurity and decreased self-esteem as a consequence

of past rejections may contribute to daters “settling for less,” or relaxing their standards for a mate. Another useful construct is Spielmann et al.’s (2013) own *fear of being single*, which was found to predict daters’ willingness to settle for less in mate selection during a speed dating event. In the context of initial online dating interactions, a dater’s fear of being single may be a factor fueling the tension between openness and closedness and contributing to the uncertainty about whether to adhere to one’s own ideal standards or to compromise.

A third possibility applies to cases in which the man initiates, and the woman gets to decide whether she could be interested - even if the man does not correspond to her standards. Knowing that the man is interested suggests a positive relational outcome, removes some uncertainty, and thus may become a factor that trumps ideal preferences, or at least that suggests a reevaluation of those preferences. This, in turn, may lead to self-doubt.

Theme 2 - Confidence in one’s own judgement. As noted above, together with the tension between closedness and openness, daters also frequently mentioned uncertainty about their own judgment - or their right to judge others and be picky. This aspect of uncertainty was almost exclusively reported by female daters, who often questioned many aspects of the way they evaluated others, from their judgment’s accuracy, to whether they had a right to be “picky” when vetting potential matches. For example, Zoe explained that her past history had made her uncertain about her ability of judge accurately what would be good for her:

Zoe: [...] particularly in the area of dating. I, I do not trust my own judgment most of the time, with regards to whether or not something will work, or whether or not it's the right choice. Um, I think because of my relationship history, and maybe making some bad decisions about partners in the past, and, um, just generally not ... like, i- it's a such a different context for me because, um, professionally, or in other areas of my life I feel generally very confident in my ability to make a decision and do something and don't second-guess myself a lot and usually find that I make the right choices ... and in relationships with men, so not in friendships or other relationships, but romantic relationships I'm a lot less certain about whether or not I'm, um, making the right choice. Yeah.

This lack of confidence would lead in some cases to women daters choosing to continue interacting or go on a date with someone despite their instinctive or gut reaction telling them not to do so; however, more often than not, when women in this sample reported pushing themselves against their instinct, the outcome corroborated their initial assessment of rejection.

Lucy: 'Cause I just thought, well maybe I'm being over ... I'm being overly critical about it, you know? Like, he's asking questions and trying to be engaged, and I'm, you know ... I thought I'm annoyed if they don't ask questions, now I'm annoyed 'cause he's asking too many questions. I'm being difficult, right? It was kind of my, um, analysis of it. So I tried to give it a shot, but it didn't work.

However, this self-doubt was not common to all female daters. Sam was more comfortable with the need to have confidence in her own screening system, despite the possibility of “missing a chance.”

Sam: Whereas now I've kind of come to the conclusion if I don't understand the first paragraph of your profile, then to me you're not worth my time. Um, I ... and I realize that that probably prevents me from meeting some people who might actually, um, I might actually like if I were to meet them in real life over the ... versus the app, but, um, I've decided that that's an opportunity cost I'm willing to take.

Confidence in one’s ability to judge others was also discussed in terms of one’s ability to “read” and interpret the other person’s behavior. This uncertainty tended to appear at later stages in the interaction, and stemmed from doubts about the other person’s motives and perception of self, but it could also be linked to questions around the best course of action with the other person. Both female and male daters in the sample mentioned it, highlighting its different facets.

Zoe, for example, explained that her uncertainty hinged both on doubts about her own ability to “decode” the other person, and from parallel concerns about their honesty and truthful representation of themselves. By contrast, Lucy was more concerned about her ability to gauge how others perceived her even after a full conversation:

Lucy: Um, but I'm also still not always good at reading how people perceive me. So [uncertainty] would still be high.

Mike was very confident in his ability to “see through everyone’s bullshit too quickly,” whereas Steven explained that his doubts about his ability to interpret others’ behavior contributed to his negative appraisal of uncertainty.

Steven: Okay, for me, I'd say [uncertainty has] a negative [value] because I don't think I read social ... I don't think I read social situations especially with dating very well. So uncertainty, like, adds a lot of variables for me to think about and consider... And so that, like, that's just anxiety-inducing.

Overall, female and male daters placed different emphasis on the aspects of uncertainty about the self discussed in Theme 1 and Theme 2. The tension between how close or open they should be towards daters who did not correspond to their ideal mate preferences, as well as doubts about the accuracy of their own judgement were discussed more frequently and in greater depth by female daters in the sample.

This may reflect women’s perception of the stigma attached to singlehood. According to Budgeon (2015), “despite increased acknowledgement of women’s right to autonomy, choosing to remain single continues to be, as it has in the past, interpreted as a problem for women.” The societal expectation for women to be in a relationship may in turn lead a woman to question her own right to be choosy or picky, prompting her to second-guess her instinct, and to be more accommodating and open in her pursuit of a mate (or at least try to be).

Lucy: So, in talking to, you know, friends, and like my therapist and stuff about dating, they're, they're always saying, "You should open yourself up to more different kinds of men," right?

By contrast, men in this sample did not appear to doubt themselves as much - or preferred not to disclose it. Mark and Mike were the two respondents who acknowledged a tension between closedness and openness in selecting others, but they did not mention any lack of confidence in their own judgment as a result of this tension.

Mike: Like, you know, like, in that instance, yes I second guessed myself, 'cause I was like hey, could I have made this work?" But then, you know, I kinda like, slapped myself mentally and said "Hey, probably couldn't, you know? You would, you would either hurt her, or either you would have to significantly change who you are. And the person that changed for the other person would probably be bitter, you know, throughout the relationship, and it's just unhealthy.

The men in this sample displayed more confidence in themselves, in their judgment, as well as in their right to be picky than women did. Men's different approach to uncertainty may indicate a greater degree of cultural insulation from expectations to be partnered, and thus less self-induced pressure to be accommodating or open to find a mate. However, Spielmann et al. (2013) also pointed out that both men and women experience the stigma attached to singlehood, and their study showed that fear of being single drove decreased selectivity in mate selection independent of sex. Thus, the patterns found here may be simply due to the small sample size and to the limited number of men interviewed. Furthermore, it is also possible that male daters experienced the same degree of self-doubt as women, but that they preferred not to disclose such doubts especially since they were being interviewed by a woman.

Theme 3 - Knowing what you want/like. A third theme that related to uncertainties about the self reflected the different states of a daters' knowledge about his or her own preferences in terms of *the ideal characteristics of a partner or relationship*. The reality of the dating pool available to each dater will potentially be incongruent with his or her ideal preferences, requiring them to accept trade-offs or prioritize those preferences or characteristics that really matter to them.

For example, in discussing his interaction with a woman he had just met, Mark explained that her appearance was not what “he was known to like,” but that her words attracted him nonetheless.

Mark: Like if I was, if I was to guess, she'd probably have like, uh, I'd say, easily 100 tattoos on her body. Um, and she has, uh, gauges in her ears... And it's not, I guess, not necessarily, uh, the physical look that I would be known to go for... but I don't think that mattered, but if it was, if there was anything that made me feel uncertain, it was that. It was, uh, not my, not the average girl that I would be attracted to, but I, like I said, I wasn't necessarily attracted to her physically. I was attracted to her words.

Mark’s statement highlights how a dater’s certainty in his or her preferences can be challenged in the context of online dating by the need to interact with real individuals, who may only possess some of the ideal characteristics that a dater is looking for.

Uncertainty about what one really wants or likes is not limited to the first stages of the process, but it can also occur later in the interaction. For example, Linda highlights how her initial uncertainty about what the other person is truly like could transform into uncertainty about what she wanted:

Linda: And I think, that's kind of, obviously, at the beginning and then if you- if you end up meeting with the person or go on a date with the person and then I think- then I think it transform into more like, "Oh, okay. Uncertainty about like, oh, would you be able to like this person? Do you like this person? Um, like, do you have chemistry with them? Do you have ..." You know, that sort of, thing. As opposed to uncertainty just about like, "Oh, is this guy actually five, nine of are they actually five, four?" You know, or something like that.

This uncertainty was also expressed in terms of doubts about one’s own feelings about the other person:

Aram: I mean, uh, girls might be different, girls might know right away [if they want to date someone]. Um, I definitely, I'm just not that type of personality in general. Like I'm always, like, tend to go with the flow. Like, if it's cool, I mean, you know, I don't wanna say no.

More broadly, uncertainty about what one likes or wants could go beyond a matter of preferences, and challenge a dater's very desire to be in a relationship, as both Tamara and Aram explained.

Aram: And if I get to talk to somebody and, uh, they seem interested to me in the first place, or interested in me in the first place, I don't know how emotionally available I'm gonna end up being. Especially if, you know, the connection is not, like, not like the strongest thing in the world. But, like, who am I to know that if, you know, if, if we went on a couple more dates that it would get stronger, you know? So I, I'm not sure about my emotional availability.

Uncertainty about the relationship. A third major source of uncertainty is relational; not pertaining to the self or the other in isolation, but linked instead to the interaction. According to Knobloch (2010), “relating is difficult when people are unsure about involvement; however, courtship is also a period when people expect to experience doubt as a ‘byproduct of diagnostic mate selection’” (p. 79).

As in any communicative context--online and offline-- relationships between people are developed through communicative exchanges that allow the interactants to form impressions of each other and decide on whether the specific interaction is worth pursuing (Miller & Steinberg, 1975). Since communication is integral to relationship formation but also to the experience of problematic integration, both as a cause and as a way to cope with uncertainty (Babrow, 2001), it is not surprising that among the daters I interviewed relational uncertainty was tightly connected to the role of communication in terms of 1) *the nature of the information exchanged*, and 2) *modality-specific communicative behaviors*. These were the main themes that emerged from my analysis, and I will review them in the sections below.

Theme 1 - The qualities of information. In their seminal piece, Berger and Calabrese (1975) highlighted the centrality of communication in the initiation context, positing that the information obtained through the first interactions would allow interactants to reduce their uncertainty. The first axiom of URT assumed a linear and inverse relationship between

communication volume and uncertainty, such that as the volume of communication increased, uncertainty would decrease (p. 102)

However, in his PI theory, Babrow (2001) insists that communication is indeed integral to the experience of uncertainty, but that as much as it can “provide imperfect coping resources” (p. 556), it can also create new uncertainties. Babrow also writes that among the numerous forms of uncertainty individuals may experience, there may be “concerns about the qualities of available information, such as its sufficiency (e.g., clarity, completeness, and volume—too little or too much to manage), or its validity (e.g., freedom from error, source expertise or trustworthiness, ambiguity, applicability, consistency)” (p. 558). In Chapter 1, this aspect was shown to be related to the maxims of quantity and quality established by Grice’s (1975) cooperative principle.

The analysis I conducted, although limited by the small sample size, revealed indeed that increasing the volume of information was rarely enough to quell a dater’s uncertainty, and that a perspective informed by Grice’s (1975) and Babrow’s (2001) theories provides a more convincing explanation of daters’ experience of uncertainty. Violations of Gricean maxims were a primary source of *relational* uncertainty for daters, and supported Babrow’s view that uncertainty may be caused by the perception that the information available is insufficiency or not valid. Daters reported feeling uncertain due to an ill-paced conversation, too many or too few questions, and most obviously by what can be considered a clear insufficiency of information and a supreme violation of Grice’s (1975) cooperative principle: absence of feedback by ghosting.

At the very first stages of an interaction, when daters screened incoming messages or weeded through profiles, absence of communicative or self-presentation effort was a very salient source of uncertainty. In particular, women in the sample (all but one) frequently complained about receiving first messages that failed to provide sufficient ground to start a conversation.

Lucy: Um, well the first one um, good morning. No effort. And um, I mean spelling is incorrect, but that's whatever. Typo or he just doesn't know how to spell. Um, that, that is what it is. But no effort in saying 'my name is', 'how is your day?'. Nothing. And I like effort.

By contrast, the women I interviewed were pleasantly surprised when they received a message that showed a greater communicative effort, and were more inclined to respond.

Zoe: Um, and so, like his first message, I liked because it was longer than usual ones. Most of the times their first message is, "Hey," or, "Hi," or, "What's up?" [...] And he actually, um, said things and pointed out things that I had written in my profile. Yeah. Like, I could tell he'd actually read it. Um, and so, you know, he comments on ... I say something in there about how I'm pretty sarcastic, and he, um, mentioned that like sarcastic people are some of his favorite people, and he can be a little sarcastic so that could be fun.

The fact that more women commented on effort than men may be because men are still widely expected to initiate, and so the difficult task of opening a conversation falls almost exclusively on them. However, among the men Steven also discussed communicative effort, suggesting that this may be a concern for men as much as it is for women. Based on a woman's willingness to send a first message and on the communicative effort of it, Steven drew inferences regarding her interest and availability.

Steven: I think because she messaged me, like, first- a pretty, like, decent message, I thought, "Okay, she will put effort into it." [...] Um, I think women who message first, generally if you respond to them, they're willing to have a pretty lengthy conversation with you and you can, like ... they will give you their phone number.

The balance between too much and too little communication was a crucial point for daters, especially when it came to gathering information about the other during a conversation. While failing to ask enough questions could make a conversation difficult to sustain, too many questions could also cast doubts on a budding relationship, especially when no space was left for Zoe to respond - a violation in terms of both quantity and quality.

Zoe: Um, so one of the things I- I became more uncertain about over time, when we first started talking, um, he asked quite a few questions, which at first was nice, 'cause I find that, um, men don't ask a lot of questions in general. And I actually get annoyed with that. So at first, it was kind of like a refreshing change, but then it started to feel like I was answering a questionnaire, that he was just asking so many questions that I didn't have time to ask questions in response. He would send three or four questions at a time...

Mike similarly expressed dislike for being subject to a barrage of questions that would make him feel like he was being interviewed, explaining he often felt that the women he talked to wanted to know everything “right now,” while offline it may take months to get to know a person.

Mike: Just, and uh, like trying to, trying to figure you out, or like, see what you're about too quick. But, uh, almost like, some, sometimes it's got like an interview thought to it. Uh, yeah. Like, "Oh you know, what do you do, what do you have, how many kids do you want? How do-" It's just like, too quickly, like, you know, this stuff, like a regular person you know all ... That you meet, uh, you know normally, outside of online, it takes time, takes like a few months, you know, maybe you know, maybe sometimes like a year, who knows, you know? But then uh, like they wanna know right now. Then uh, it almost, like I said, feels like an interview, and it feels like uh, being judged.

Daters also pushed back against questions they perceived as inappropriate or untimely, especially when it came to disclosing information that felt too intimate or personal to be shared at the very early stages of an interaction. Susan for example explains that the questions she received on eHarmony could make her suspicious if she perceived them as inappropriate.

Susan: So, I, there is uncertainty in that. I'm, I'm uncertain--what does that mean? Why would you ask that question? It makes me suspicious. And then, "Do you consider yourself physically affectionate?" So, that to me, that tells me that's very important to him, otherwise he wouldn't ask it and if that's the first question you're gonna ask me then that's a little too much. That turns me off. That right away you're gonna ask about physical affection. You don't even know me, you've never met me. That would be like a stranger in a bar saying-"Hey, what do you think about physical affection, is that important to you?"

At later stages, when daters exchanged messages more regularly or went out on a date, concerns over the quality of communication became even more critical. Mike provides a good example of how violations with regards to the quality of communication could cause uncertainty concerning the viability of a relationship during a first date:

Mike: Maybe, maybe. No, but then after like, you know, like the tenth question, like trying to ... I'm trying to build a conversation, but then all she would do is just regurgitate the same thing back to me and I'm like, "Alright, you're just, you're just weird. I, you have never spoken to a person or something? I don't know." But I'm like, I, this isn't gonna go anywhere. This isn't gonna go anywhere, yeah.

Not surprisingly, daters considered similar violations quite serious, and they often coped with this unacceptable uncertainty by transforming into the certainty they would not pursue the interaction further. As suggested by Berger and Calabrese (1975), “early in a relationship it is crucial for the interactants to convey information evenly and at a fairly rapid rate and to disclose information which is at about the same intimacy level. Violations of one or more of these rules raise the probability of dissolution of the relationship” (p. 105).

Daters may also be self-reflective with regards to their own violations of cooperative principles and their meaning. For example, when Mike felt disappointed by the fact his prospective date did not share his passion for music, his replies to her became shorter and shorter, and he felt “it wasn’t right.”

Mike: I was still talking about music and she goes, "You're speaking a foreign language to me."

And that was like, all right, you know, that was it. And, uh, she wrote, you know, tried writing again and we talked, but I was, you know, like it wasn't right. Like if she wrote, uh, two sentences, my answer was like one word or two words, you know, like that and, um ... yeah.

According to the Altman and Taylor’s (1973) Social Penetration Theory (SPT), the relational development process from nonintimacy to intimacy is generally systematic and predictable, and people are “tuned” to work through the different stages of intimacy through gradual and mutual self-disclosure. In line with SPT, daters appeared to desire an interaction that developed

organically, that felt natural, where personal information was disclosed at a pace that is neither too fast nor too slow (see also “Maintaining Uncertainty” theme, below).

While violations might be due to a lack of competence communicating online, such as in the case of individuals who subject their interlocutor to a barrage of questions, they present more frequently when daters are less interested, and thus less intent on conveying a good impression to a potential partner. Finally, violations of sufficiency and validity principles may even be intentionally used as cues when daters want to signal disinterest.

Theme 2 - Modality specific communication behaviors. A second category of relational uncertainty centered around modality-specific aspects of communication enabled by the affordances of different channels. Even though text-based communication is often said to be stripped of nonverbal cues, chronemics emerged as a powerful driver of uncertainty for daters, while the distance afforded by online communication enabled ghosting, defined by LeFebvre (2017) as a “technologically based practice of dissolution.” Additionally, the typical progression of the online dating process also required multiple modality switches, each potentially introducing new uncertainty and integration dilemmas.

Time lags. Daters frequently mentioned feeling uncertain about the relationship as a result of the time lags - the delays between a message sent and a response received - in a given online exchange. This type of uncertainty is dependent on the affordances of the text-based communication that characterizes online dating websites and apps, but also text-messaging more in general. The asynchronicity that sometimes accompanies text-based message exchanges appeared to amplify daters’ uncertainty when time lags between messages stretched beyond what daters were comfortable with.

Rose: Oh yeah, definitely the lag [contributes to anxiety] and when I do, like, if it's been a little while, if there's one person that I'm really interested in and it's been a while, I try to

send messages and then, I get really anxious. Am I texting them too much? Do I come off as crazy? Or that- that's the other anxiety, so I just, I stop myself from text messaging them anymore than I already have.

Since chronemics (such as a time lag) are the only nonverbal cue available in text-based online communication, and communicators adapt to the cues afforded by each modality (Walther, 1992), online communicators may use the time lags between responses (or absence thereof) to form impression of the other person (Walther & Tidwell, 1995; Walther and Parks, 2002) and draw inferences about the ongoing interaction. If time lags are used to form impression of others in initial online dating interactions, they may increase uncertainty in different ways. First, daters need to decide whether to interpret a time lag as a meaningful cue; secondly, if they do find it to be important, uncertainty could arise if it is interpreted as lack of interest from the other person.

Lucy, for example, deals with the uncertainty caused by a longer than desired response latency by assuming that the time lag is not intentional nor meaningful, and by postponing a serious consideration of the implications.

Lucy: Um, it's uh, it was a holiday yesterday, so that's okay. And a lot of people don't like to message in the morning. And it was a holiday yesterday, and I'm assuming he's working today. Um, so if I don't hear anything from him tonight that's when I'll probably have some kind of feeling about it. [...] Yeah, because I mean I'm understanding. People work. People, most people aren't going to want to wake up at 5:00 in the morning to message somebody unless they already know that that's acceptable from them. Um, and then I'm assuming he went to work today.

Even when daters reckon the time lags may not be intentional, as in Linda's case, uncertainty may still characterize the interaction, and cast doubts on its potential to develop into a relationship.

Linda: it was just, we were pretty bad at responding to each other. Yeah. Like, there was- there was gaps and things like that and so I don't think ... I think that probably, yeah, increased the level of uncertainty that either side had for each other or anything [...] it's just like, "Well, okay, this guy seems pretty interesting" but like, you know, with the- the- the response time for everybody like, if it's low, then you wonder, "Okay, are they maybe not into this?" Or maybe they, you know, found something more interesting or better in that case.

In a study of email latency in organizational communication, Kalman and Rafaeli (2010) found that response latency interacted with the reward value of the respondent, such that latency was not as meaningful when the receiver considered the respondent low-reward. Kalman and Rafaeli also concluded that online silences are problematic because they require interpretation and they may not have an immediate explanation, leading thus to a deterioration of the relationship (p. 62).

In line with conclusions drawn by Kalman and Rafaeli (2010), time lags appeared to generate considerable uncertainty and thus to disrupt the interaction often beyond repair, *assuming the dater felt invested in the conversation*. However, the deterioration of a budding romantic relationship need not be traumatic, and could be experienced as a simple fading out of the conversation into a complete lack of response.

Ghosting. Among the behaviors afforded by mediated communication, ghosting caused probably the single most intractable uncertainty confronting daters, since daters who discussed it explicitly seemed at a loss on how to cope with it. LeFebvre et al. (2017) define ghosting as a “technologically based practice of dissolution, where disengaging initiators avoid direct confrontation, and the discussion of the relationship state, and utilize technological absence to evidence their relationship exit” (p.122). According to LeFebvre et al. (2017), “ghosting may create ambiguity and uncertainty in noninitiators wherein they are unable to achieve closure after the indirect breakup. [...] Noninitiators therefore must decide how to proceed when sensemaking the dis-engagement in an attempt to reduce uncertainty” (p. 6).

Daters reported becoming “ghostees” at various stages of the interaction, and often ghosting was initiated as - and interpreted through - an extended response latency. Zoe explained that after a first date, her uncertainty was not necessarily linked to who initiated the follow up, but

rather to doubts about whether the message would be met with inexplicable silence from the other end.

Zoe: Like, if it's gonna be trying to plan a next date, or if it's just gonna be ... if there will be a, "Hey, I had fun. Let's do it again," or if there will be nothing, right? 'Cause this is really common now, the whole, like, we just pretend like that never happened and no communication at all.

As LeFebvre et al. (2017) explain, one of the most problematic aspects of ghosting occurs “for [ghosting] noninitiators who may have already begun to engage in proactive IIs [imagined interactions], their outcomes might be highly discrepant as the initiator may have prematurely ended the relationship without the noninitiators knowledge (p. 17). In other words, the ghostee may erroneously believe the relationship is developing, whereas the ghoster may have already entered the dissolution process. Rose offers an example of this discrepancy:

Rose: And um, communication I thought was pretty good. We connected. And then, all of a sudden ... he stopped talking [...] So, and he's like, "Well, it's not you." Like, if I asked him, "Hey, what's going on?" After he stopped talking to me, he's like, "Well, I thought you knew it was over already." [...] That was the- something new to me.

Steven offers an interesting glimpse of the ghoster’s perspective, in line with LeFebvre et al.’s (2017) findings that individuals may enact ghosting for its convenience and when the interaction has lost its appeal (i.e., negatively valenced interaction). In this case, the convenience lies in the fact that ghosting allows Steven not to resolve his uncertainty about his potential compatibility with the other person, thus reducing his emotional and cognitive effort with coping.

Steven: My biggest hangup with giving out phone numbers is if people text me, I text them back, um, for a little bit and then I either, like, lose interest or I think, "Oh, no. I don't know if this person's really for me." And I just, like, stop talking to them via text message, then I feel sort of guilty because I feel like, "Oh, I've made this exchange with this person. I should

follow through on it." [...] Um, yeah, so I don't know. On some level, like, I think I occasionally engage in my pet peeve of, like, ghosting, where I just won't, like, talk (laughs). I just will stop talking to the person, but I think ... I don't know. I'd like to think my ratio of doing that versus having it done to me is decent so I don't feel that bad about it.

Among the daters I interviewed, the relational and other-focused uncertainty linked to the inability to explain the other person's behavior, and the other person's refusal to provide a resolution to the interaction, often compounded to affect a dater's confidence in her own behaviors and triggered further uncertainties about the self and the right course of action.

Rose: what gets me uncertain is like, do I still try to communicate with this person, or is that just gonna drive him to not want to talk even more? Is it just they want me to be more interested? I've been told well, men love to be chased. Well, I chased you and it's like, if you continue to chase them, they're never interested. I feel like it's like a cat and mouse game like, when do you stop trying to chase them or make them chase you more?

The example above supports at least in part LeFebvre et al.'s (2017) assumption that "uncertainty in this context by noninitiators constitutes a lack of confidence about how to proceed (Berger & Bradac, 1982; Berger & Calabrese, 1975)" (p. 6). However, Babrow (2001) suggests a more nuanced reading through his idea of *impossibility*. According to Babrow (2001), impossibility refers to an event with zero probability - something that cannot happen - and "one difficulty is that there is a difference between sensing that something is an impossibility and demonstrating or proving it so. At the most fundamental level, this distinction embodies the epistemological problem of proof" (p. 120). In the case of ghosting, ghostees are generally aware they are being ghosted and that the relationship has zero probability to continue, i.e. it is impossible. However, as shown by Rose in the example above, ghostees who are invested in the relationship through imagined interactions (LeFebvre et al., 2017) may deny the dissolution on the basis of a lack of proof.

If a ghostee valued the relationship he or she thought was developing, ghosting creates what Babrow (2001) calls "valued impossibilities (e.g., impossible desires)," which "are given

attention commensurate with the value at stake; that is, impossible value gives rise to PI. The greater the positive value, the more problematic its impossibility.” Thus, ghosting creates not only uncertainty about the self, as discussed by LeFebvre et al. (2017). Potentially, it also creates problematic integration regarding the relationship and the other, and this uncertainty will be all the more intractable as the ghostee values the interaction that the ghoster has unilaterally decided to dissolve.

RQ1b: Meanings of Uncertainty

Not surprisingly, due to uncertainty’s fluid and multilayered nature, daters at times struggled to define its meaning, or what it meant for them to feel or be uncertain. In line with Babrow’s (2001) theorizing, multiple yet interrelated meanings emerged from this analysis, supporting the view that uncertainty can be varied in terms of its nature or dimensions, and confirming the applicability of problematic integration as a broader definition of uncertainty encompassing different meanings and forms. Within this broader definition, three distinct themes emerged in this sample: *uncertainty as an information structuring dilemma*, *uncertainty as an instinctive reaction*, and *uncertainty as “not knowing.”* The following sections will explore each of the three based on the frequency of their occurrence.

Theme 1 - Uncertainty as an information structuring dilemma (IS dilemma). In his conceptualization of uncertainty as a process revolving around the problematic integration of expectations and probabilistic evaluations, Babrow (2001) posited that “numerous forms of uncertainty arise out of the way that we experience the information we have about the world” (p. 558). In particular, Babrow pointed out that uncertainty can arise out of the need to structure information, which could either refer to ordering “a series of interdependent choices, particularly when these decisions depend on uncertain outcomes “ (Babrow, 2001, p.558) or to the “integration

of a particular belief with other beliefs or values” (p.558). This is what I have previously defined in earlier chapters as information structuring dilemmas (IS dilemmas), which are a supposedly a particular form of problematic integration. Julie offers a compelling explanation of online dating in terms of an IS dilemma, going as far as saying that pulling the pieces together to form a mental image of the other person is what “online is all about.”

Julie: I think that's basically what online is all about. Is that you try to pull the pieces together off of someone's profile but that's not necessarily an accurate representation of that person and that's when I might reach out with an email if, if, if those pieces appeal to me. It's like I want to learn more and so I might email that man to say, "You know, enjoyed reading your profile, um, uh, you know nice pictures or, you know, whatever" and then you kind of wait to see if you get a response and if you do then there is an exchange to find out more information.

Daters’ experiences within this sample overall supported the idea that IS dilemmas provide a useful frame to understand the meanings of uncertainty in online dating, with all but one dater mentioning an IS dilemma. Babrow (2001) states that information structuring dilemmas are a *dimension* of uncertainty rooted in the need to organize or structure information, beliefs, and values, although he provides no explanation of what difference exists between IS dilemmas on one side, and PI on the other.

Some dilemmas revolved narrowly around incongruent or contradictory information, which may cause daters to become uncertain about the other person’s claims and identity. Seven daters in the sample (~54%) recounted experiences that fell into this category.

Zoe: Um, so, for instance, like in his ... I try not to be too picky about things like typing errors, 'cause it's in an app, but if it's over and over again of making a, a grammar error, then I start to wonder about that. But his grammar he use- he uses a lot of, um, British phrases and words and spellings, and then when I talk to him he is not British, and he has never lived in the UK, or anywhere where they use British English. And so I thought that was a little odd, um, and I kind of asked him about it and he said he's an Anglophile, um, that he just really likes all things British. And I just ... I found that really interesting. He's a black man who has grown up in the United States, um, but who uses these British affectations in his communication. And I- it just was like, just odd enough for me to kind of

be like, "Well, that's ..." you know. He never... even lived in a place where that's used. It's strange to me.

In other instances, dilemmas referred to information defined in a broader sense, to encompass not only the bits of information to be found in daters' photos and profiles, or disclosed in communication exchanges, but also broader knowledge about one's own expectations and evaluations. These elements may overlap and interact in more complex, nonlinear ways compared to narrower IS dilemmas. Lucy's account of her frustrations with the online dating process and of her uncertainty about whether it is truly worth it provides an example of a *broad* IS dilemma stemming from the awareness that uncertainty is caused by beliefs, values, and information that are at odds with each other.

Lucy: And, and it's um, is what my final end worth- worth what I'm going through. I think, I think, I think everything ... I, in the whole idea, everything I deal with, with the guys, when I find the person ... because I've, I've felt love before. That love, I think, is worth dealing with the nasty messages, the, the, all the feelings I get: happy, sad, frustrated. Um, I think it's, I think in the end it'll be worth it.

Lucy's uncertainty about pursuing online dating is rooted in contradictory beliefs: On one side, the belief that she needs to pursue online dating in order to find a partner; on the other side, the belief that she deserves more respect and attention than what she gets from the people who message her online, as well as her expectation that people should be nice to each other.

Aram also provides an example of how uncertainty about the online dating process has its roots in a fundamental IS dilemma.

Aram: Um, kind of, you kind of start to doubt yourself on whether you're doing, making the right choice in the first place in even trying this, um, with a person that you don't know and that you've never met, and that, um, that you only barely kind of know on the surface.

Here, the dilemma stems from what Aram's belief about what qualifies as a meaningful date (i.e., meeting a person you know more than superficially) and his rather tenuous belief that online dating is one of the avenues he needs to pursue to find a partner.

Dilemmas can also involve expectations and evaluations, and require daters to decide how to weigh the different pieces of information available to them. The account below is an example of an IS dilemma requiring Anastasia to decide whether to assign more value to evidence "showing" a person's attributes or to what he's "telling": the image he is portraying in his messages (Ellison et al., 2006).

Anastasia: And I was like, "Oh, he's like thinking about what I said [in my profile] and like, I love Roomie." Um, but then I said, "But he looks crazy," and the name that he gave himself, I dunno. [...] Um, so I said, "Well, he looks a little crazy. Try to avoid that." And his name for himself, like, I don't think it's attractive to call yourself Devil.

Anastasia's dilemma revolves around two contradictory evaluations: on one side, her appreciation of her interlocutor's remark, which showed attention to what she had written, and possibly the ability to create some common ground; on the other hand, a dislike or suspicion for the name he had chosen for himself - "Devil." Not only did she have to attempt an inference about the significance of each evaluation individually, but she also had to "order" them to decide which weighed more. It must also be noted that evaluations involve expectations; in this case, Anastasia's negative evaluation of the dater's name stemmed from the expectation of what a "normal," or neutral name is. Faced with the task of figuring out what the implications of the name "Devil" were, Anastasia preferred to back out of the interaction.

Overall, daters appeared uncomfortable with uncertainty stemming from IS dilemmas that would prevent them to form a congruent impression of the other person. In Sam's case, she decided

not to respond to a message after viewing the sender's profile because she could not decipher how he presented himself.

Sam: He's very artistic and deep thinking. He calls himself nerdy or geeky. Uh, excessively interested in science [...] Just, I, I don't mean to be rude, but really, you know, he can solve a Rubik's cube in about a minute and he's good at picking documentaries. Like the stuff about how many instruments he plays are really interesting, um, and I understand ... So he does say his humor is dry and sarcastic. Um, so which ones again, um, now I'm confused. Are these things that he's saying about being artistic and deep thinking is this like a meta joke about some of the more ridiculous profiles that are on OkCupid, or is it, um, is he being sarcastic with those things and is he actually normal-ish? Or is he, you know, kind ... Is he actually this person who thinks that this is, you know, something that will attract another woman? So I, I don't know. So for that reason I never responded just because I couldn't- I couldn't figure out if he was serious.

The decision not to pursue interactions characterized by inconsistent or incongruent information refers to the *tractability* of uncertainty. Perceiving uncertainty as *intractable* means the dater feels he or she does not have the means to cope with it and to make it acceptable, or that the daters feels that making uncertainty acceptable would be too costly with respect to the benefits gained. Thus, intractable uncertainty can cause a dater to disengage from an interaction either due to 1) a conscious or nonconscious threat appraisal, based on the physiological reaction to a stressor (see Theme 2 below) and/or 2) a rational cost/benefit evaluation of the time and energy required to render uncertainty tractable (Babrow, 1992). For example, the abundance of choice daters experience online may be enough to lead them to discard options that are too cognitively taxing (e.g. a profile that presents inconsistencies; red flags in a low-value mate).

Theme 2 - Uncertainty as a gut reaction. Seven out of 13 daters in the sample discussed uncertainty in terms of an instinctive reaction, using words such as “doubt,” “hesitation,” or “alarm bell.” Interestingly, uncertainty was not defined negatively, as the *lack* of something (i.e., information) as it has often been discussed by communication scholars, but rather as a *positive*

quantity; an instinct, a feeling, or a gut reaction; in short, an internal signal that something may be off.

Mark: Um, um, uh, bad instincts maybe, like, uh, instinctually, instinctually, something that instinctually gives you pause, you know, like if they say something and you're like, "Wait a minute. Hold on. That doesn't, you know, that doesn't give me the warm and fuzzies," so, uh, that's basically uncertainty as I, as I would ... playing, I guess, you know, a lower, lowest common denominator, I guess I could get more deep into it, but, you know, I think that's, that's how I basically define it.

Mark went on to describe uncertainty as a protection mechanism of sorts:

Mark: you know, you can, you definitely have to be aware of what you're getting yourself into and if you don't have, you know, if you're naïve or not certain or don't have that part of your brain working to where you can spot or feel uncertainty, it could potentially get you in, uh, some sort of trouble.

This description of uncertainty as a mechanism or “part” of the brain that alerts to a potential “threat,” and that could be triggered by the perception of a misalignment between *what is* and *what ought to be* reflects views of uncertainty that exist in the neuropsychological and in the stress and arousal literature. According to these views, uncertainty can be understood as a “discrepancy” between an individual’s cognitive map (based on prior experiences) and the actuality of a given situation. Hirsh and Inzlicht (2008) explain that the septo-hippocampal system can detect “mismatches between expectations and observed outcomes” and that when the information is incongruent, emotional arousal can be heightened, quickly redirecting attention to the incongruent information (p. 962).

In line with the above interpretation of uncertainty, Mike, Julie, and Zoe discussed uncertainty in terms of “red flags” that would potentially go up when they started gathering more information about the other person through interactions, and that would potentially cause an instinctive reaction to withdraw from that same interaction.

Mike: But then, I had, I had a red flag, and warning signs throughout, 'cause she would text me, I'm sorry, she would text me at like uh, at like 11 pm-ish, uh ... Like, it would always be around at night. And I'm like ... But then she explained to me how she was like a night owl, like, sleeps mainly during the day, and is up at night. And I'm like, you know, this is kinda weird but alright. You know?

Uncertainty thus becomes a “sort of wariness,” a feeling that alerts an individual to the potential of a negative outcome, albeit poorly defined.

Zoe: Um, I think the way that I would describe the feeling of uncertainty in online dating, is almost like feeling wary about something, right? Like just kind of, um, it's negative for me, I guess it's what I'm saying. Like, the uncertainty is not something where I feel like, oh, I'm uncertain and it's because it's full of possibilities, and really optimistic. It's more of a wariness, more of like a negative uncertainty that, um, comes back to weighing that costs-benefit of even being dating with a new person at all.

Mike interrupted an interaction soon after a first date in which he felt like he was “talking to a robot” because the girl would only “regurgitate” his questions back at him. The dynamics of the conversation generated high uncertainty, and the importance he attributed to communication made the uncertainty unacceptable, prompting him to disengage.

Mike: And I'm like, wow. You're, you're just that weird. Like, like, like, everyone ... You know, I have my, you know, I have my own quirks, you know? But I'm like, this person is just that weird. Like, literally. And I'm like, uh, no. I don't think this is gonna work out. And you know, I let her know, but then she would text back saying "Oh, I think it won't work out", you know, and then the neediness came up. And then continuously like, " Hey, how are you doing, hey, how are you-" And then I'm just like, I blocked the number. I can't, I can't do this.

The experiences described by Julie, Zoe, and Mike were shared by several other respondents in the sample.

Theme 3 - Uncertainty as “not knowing.” Uncertainty defined in terms of a lack of knowledge (Berger & Bradac, 1982; Berger & Calabrese, 1975) or as a discrepancy between actual and desired knowledge (Rains & Tukachinsky, 2015; Fowler & Afifi, 2011) has been a hallmark of traditional theories of uncertainty. Four daters in this sample offered “not knowing” or “the unknown” when asked to define uncertainty. Interestingly however, the “unknown” or “not being

in control” described by the daters I interviewed seemed to take on a different meaning, more consistent with what Babrow (2001) defines as “ontological uncertainty,” which refers to one’s conception of the nature of the world or some aspect of the world” (p. 558).

Lucy, for example, describes this meaning of uncertainty as follows:

Lucy: Um, just the never ending un- the unknown. The when is this cycle gonna stop? When am I gonna find what I'm looking for? Um, it's ... nothing is, nothing is guaranteed in life except for death. So I think you're never guaranteed.

Steven goes deeper in his analysis of what he defines as uncertainty, by tying his “inability to know” to the potential outcomes of a set of interrelated events, in a way that ties explicitly into Babrow’s (2001) view of uncertainty as problematic integration, involving both ontological and epistemological dimensions.

Steven: So I guess how I'd define it is I would say, uh, the inability to know most of the potential outcomes. [...] Yeah, I guess it's like, okay, like, for a dating app, what I would like to know is, uh, would this person be in a relationship with me? Would they sleep with me? Uh, would they find me attractive? Would they think that I'm, like, interesting as a individual? Would they be honest with me? [...] Uh, would they be direct? You know, um, I'd rath- ... like, I'd like to know all those thin- ... If I knew all those things, I'd feel much better.

What is remarkable in these definitions of uncertainty is that their adherence to the traditional views of uncertainty as “not knowing” is purely formal; rather than referring to lack of knowledge that can be solved through reduction strategies and information-seeking, daters are more concerned with uncertainty as an ontological dimension of the world of they experience, within the online dating context and beyond. They are aware this uncertainty cannot be resolved since it is intrinsic to the nature of the online dating environment, and they are also aware that any attempt on their part to reduce it once and for all are destined to failure.

Conclusion

The analysis of the interview data supported the application of the interpretive framework offered by Babrow (1992, 2001) and Brashers (2001) both with regards to the sources and the meanings of uncertainty. First, daters reported experiencing multiple sources of uncertainty, and noted how these uncertainties coexist, overlap and may “bleed” into one another, supporting the view that uncertainty is multilayered and fluid.

Aram: Um, I think that [uncertainty is] kind of two head, right? Like one of them is completely internal, and things that you think about yourself, or, I don't know, things about yourself, pretty much. Like, yeah, that uncertainty comes from, you... So, yeah, like I said, it's two heads. So one of them is completely internal, and it's about you, personally, about me personally. And so, like that uncertainty comes with feeling like am I, am I, you know, cool enough? Am I good looking enough? [...] And, uh, the other one has to do with the longer term compatibility with the other person. And that has to do with, you know, her personality, and our compatibility.

Fluidity also meant, as proposed by Douglas (1990), that uncertainty could be high in one domain and low in another. For example, Aram also explained that when he becomes more certain about his interest for the other person, he may also become more uncertain about his own availability, suggesting that different stages of the interaction may be characterized by the preeminence of a different source of uncertainty, and that different sources may overlap and coexist in a way that challenges finite categorization.

Aram: And if I get to talk to somebody and they seem interested in me in the first place, I don't know how emotionally available I'm gonna end up being [...] Um, the emotional availability thing doesn't come until, you know, either on the date, which is rare, though, because like you can, I can talk to somebody and still have a good time [...] and not have to worry about, you know, marrying this person. But afterwards, for sure. It's more so at the end of, at the end of the interaction.

Secondly, daters' accounts also support Babrow's (2001) conceptualization of uncertainty as an integrative dilemma that involves reconciling information, beliefs, and values, and that is “often unresolvable in any completely satisfying way” (p. 563). As new information is gained during the first communicative interactions, a previously acceptable state of uncertainty could become all of

a sudden unacceptable, and solutions to integrative dilemmas were at best provisional, requiring constant reevaluation as the interaction progressed.

Applying the logic of PI, which assumes fluidity in the meanings of uncertainty, also allows to explain why daters struggled to define it univocally, and why they often discussed uncertainty implicitly by talking about how they became more *certain* through decision-making or communicative interactions. According to PI's logic, uncertainty and certainty are paradoxically intertwined to the point that they cannot be truly separated, since neither of them is a stable state, and each implies the other. An example of this paradox is when intractable uncertainty is solved by transforming it into certainty. This coping strategy does not involve a true resolution of a dilemma, but rather the removal of the object of uncertainty itself; since integration is problematic only as long as we value the object of uncertainty (Babrow, 2001) by assigning zero value to a potential match, certainty all of a sudden replaces intractable uncertainty, and the match is discarded. This scenario was the only one in which uncertainty was nullified once and for all.

The fluid nature of uncertainty and of its meanings also implied that within any ongoing interaction, the possibility of dissolution remained in the background, as daters continually reevaluated what they experienced; thus, communication assumed an ambivalent role as both a tool to cope with uncertainty and a cause of new dilemmas (Babrow, 2001), potentially leading to the dissolution of a budding relationship rather than to its solidifying.

Among the different meanings of uncertainty that emerged from the data, the most unexpected finding regarded daters' definition of uncertainty as a "red flag." This is notable in three ways. First, they point to a dimension of uncertainty that may have its grounding in a biopsychological mechanism as suggested by Hirsh and Inzlicht (2008). This mechanism would trigger a threat response in the presence of subtly incongruent information, concurrently inducing

stress and anxiety. In terms of appraisal, this view would appear to support theories of uncertainty, such as Berger and Calabrese's (1975), Gudykunst's (1995), and Fowler and Afifi's (2011), that emphasize negative appraisals of uncertainty, as opposed to Brasher's (2001) and Babrow's (2001) views, which insist that uncertainty is in itself neutral.

However, it is important to note that daters' experience of uncertainty as an instinct or a gut reaction radically differs from Berger's (1975) and Fowler and Afifi's (2011) views in that it suggests uncertainty is not just the cognitive and rational perception of a lack of knowledge, but rather that it implies a psychological mechanism hinging on physiological reactions that may occur below the threshold of consciousness and that may combine cognitive and affective components (Blascovich, 1992; Hirsch & Inzlicht, 2008; Lazarus, 1991).

The second notable point is that these experiences suggests a nonlinear relationship between information and uncertainty that contradicts the axiomatic claim of URT that gathering more information will reduce uncertainty about another person. While new information can resolve uncertainty, as URT predicts, it can also increase it, or introduce elements of concern previously absent. This is in line with Babrow's (2001) conceptualization of uncertainty as problematic and linked non-linearly to communication. According to Babrow, "communication is integral to the experience of PI and its transformation" (p. 555), and yet, at the same time, "communication itself, however, is frequently a source of PI" (p. 555).

Third, the connection between dater's accounts of uncertainty as a red flag (a gut reaction or a doubt) and the neuropsychology and the stress and coping literatures also suggest an explanation for why daters may decide to disengage abruptly when uncertainty passes a certain threshold. According to Monat, Averill, and Lazarus (1972), uncertainty is a key causal variable affecting appraisal and coping in the context of anticipatory stress responses, and uncontrollable

and unexpected threats - threats characterized by a great degree of uncertainty - have also been found to produce greater anticipatory anxiety and physiological response than do controllable and predictable threats (Dickerson & Kemeny, 2004).

It is also important to note that the experience of uncertainty as a red flag or a gut reaction does not contradict the relevance of PI and information structuring; but that on the contrary it follows logically from the conceptualization of uncertainty as problematic integration. This is because IS dilemmas refer to the process of reconciling potentially contradictory elements - available and unavailable information, expectations, beliefs, and values - in a way that is ontologically similar to the neuropsychological process illustrated by Hirsch and Inzlicht (2008) and discussed above. In other words, red flags may arise when daters perceive new information as incongruent, when the information contradicts their existing beliefs or values, or when they fail at attempts to structuring new information in a way that makes sense. This interpretation is also supported by the fact that some daters explicitly reported inconsistencies, misalignments, anomalies, and incongruencies were the cause of their hesitation; what - in Zoe's words - made them "hit pause."

RQ2: Uncertainty and appraisal

As discussed in Chapter 2, a theoretical rift separates the major theories of uncertainty. This rift divides scholars who define uncertainty as an intrinsically negative experience bound to induce emotions such as fear, anxiety, discomfort and consequent attempts at reducing said uncertainty (e.g., Berger, 1975; Fowler & Afifi, 2011), from other scholars who posit that uncertainty is neither intrinsically negative nor positive, but rather appraised by the individual's considerations of factors such as goal relevance and goal congruence (i.e., Brashers, 2001;

Babrow, 2001), as well as tractability - i.e., the ability for an individual to cope with it. These three sensitizing concepts guided the analysis presented here.

Brashers (2001), Babrow (2001), and Kramer (1999) all posited that variations in an individual's response to uncertainty may be linked to the individual's goals. According to Brashers (2001), uncertainty is evaluated in terms of *goal relevance* - Does it relate to my goal? - and *goal congruence* - Does it facilitate or hinder my goal? In a way, goal-related considerations overlap with the set of antecedents that Berger and Bradac (1982) proposed to explain *when* individuals would engage in uncertainty reduction, and which included incentive value, deviance from expected behavior, and anticipation of future interaction.

The *perceived tractability of integrative dilemmas* refers to an individual's perception that a given IS dilemma or problematic integration is "malleable" or can be coped with (Babrow, 1992). Such malleability relies on recalculating subjective probability estimates, altering external circumstances that determine probabilities, or ambiguating probabilities to decrease the perceived problematicity of a given integration dilemma (p. 118). Intractability implies a subjective recognition that a given dilemma cannot be coped with, or is too costly to make malleable.

While goal-related considerations and tractability affect appraisal valence, the stress and arousal literature (Lazarus, 1991), as well as Brashers' own UMT, predict that appraisals will in turn generate corresponding emotions – negative emotions will follow from threat appraisals, and positive emotions will follow from opportunity appraisals. However, in this sample emotions were not at the forefront in daters' recollections of the uncertainty-inducing situations they experienced online; almost invariably, the discussion of emotions followed the investigator's probes, and often lacked depth. This could be due to multiple causes. First, lack of emphasis on emotions could be due to recall bias, and to the fact that all but the most intense emotions may have dissipated over

time. Secondly, daters may have intentionally or unintentionally tried to be emotionally detached – at least in the first stages of any given interaction – to avoid being disappointed. Mark, for example, explained that until the FtF meeting the other person is nothing but a “fantasy.” Additionally, the online dating context prioritizes rational decision-making due to its focus on choice and alternatives, and this could have led to the preeminence of cognitive processes over emotional ones.

Theme 1: Uncertainty appraisals. In the interviews I conducted, it appeared that daters did not always find it easy or immediate to access or label their appraisals of uncertainty; as a result, their discussion of emotions linked to uncertainty almost invariably followed a probe - rather than being offered spontaneously - and was characterized by little elaboration. This is not surprising, given parts of the appraisal process may occur nonconsciously (Blascovich & Berry Mendes, 2000) and thus may not be readily accessible, or not accessible at all.

Generally, negative appraisals were more frequent, but the possibility of a recall bias should not be discounted; if integration is not problematized - for example because investment is still low - it may remain below the threshold of attention (i.e., not salient) and may not even be labelled as “uncertainty.” Thus, daters may be biased toward recalling situations colored by a stronger physiological or emotional responses - which are typically negative. Also, the lack of emphasis on emotions may reflect a predominance of the cognitive dimension of problematic integration, which is not surprising if we consider that the online dating context is in many ways primarily a decision-making environment.

Negative appraisals. Negative appraisals of uncertainty were often linked to a negative outlook regarding the very process of online dating, and dating more generally. When asked to discuss about their overall experience of uncertainty while dating online, daters also reflected

holistically about the experience, suggesting that for some of them uncertainty was pervasive and intrinsic to the process itself, as discussed in RQ1b. Aram for example describes uncertainty as not “a good spot to be in” in relation to his search for a partner, suggesting he considers the process a moment of extreme vulnerability from an emotional standpoint:

Aram: I mean definitely feel emotions about when I'm feeling more uncertain, yeah. It's not, for, for me it's not a, it's not an exciting feeling, I think it's more of a negative feeling for me, because it's like, it's like what, what am doing [...], you know? It's like why, you know, because, like, you're looking, you're looking to, you're looking to, uh, you know, hopefully connect with somebody, and get to know somebody. But when you're not even sure, um, if the other person feels any sort of way back towards you, it's a kind of a shitty feeling. And like it's not, um, it's not the best spot to be in.

Similarly, Lucy associated uncertainty to feelings of sadness and frustration in light of her negative online experiences, and in light of the difficulty of finding a partner online. She contrasted this with the ease with which two of her previous relationships had started offline.

Lucy: I know just the whole online dating also kind of makes me sad that like it's, it's that hard to find somebody. Like it's a sad feeling of, of ... the first two guys I dated just fell into my lap. Like, and like it happened so easily.

Anxiety was the most common emotion daters described, especially in situations characterized by high goal relevance, such as a modality switch from online conversations to an offline date.

Steven: Uh, so usually it's the day of, like, the date, I would say, is when I start, like, getting ... I'd get, like, more nervous. I'm like, "Okay, this isn't just, you know, texting the person. This is actually meeting them. What if I'm different than how I present myself or what if I'm not like these things. Oh no, like, what if I misrepresented myself or, you know, like, what if they are, uh, you know, what if they- don't like how I look in person, you know?"

Anxiety could also be the byproduct of intractable uncertainty, and of the need to “figure it all out,” like Andrew explains: “you could probably sum it up as a little bit of anxiety, cause I have to figure like all of this stuff out.”

Positive appraisals. Anticipation, curiosity, and excitement were the most common positive emotions daters reported, but usually positive appraisals occurred only once major doubts and concerns had been clarified, uncertainty was not perceived as intractable, and also usually when the dater had started developing an interest for the other person.

Sam: I find that having some uncertainty for me generally means that, um, there's a level of interest there, 'cause some of that uncertainty is do I really like this guy or am I just, you know, enamored with his photo or whatever, that sort of kind of figuring out what my feelings are. That's, that's the good uncertainty in dating.

Although this was infrequent in the sample, positive emotional responses could manifest early in the interaction, for example during initial message exchanges. However, daters were generally more likely to report positive emotions at later stages, especially when the interaction had solidified, and potentially when plans had been made for a modality switch from offline to online.

Aram: Um, that being said, you know, if you get to the, the date part of it, and, and you know, you've gotten her phone number, and like, and about to, like, take her out for, for whatever. It, that's when it kind of, I think, is a little more exciting. Um, but then again, it's not as uncertain at that point, too, so.

Excitement and curiosity sometimes could also stem from opening up to new experiences, in line with Knobloch and Solomon's (2006) characterization of relational uncertainty:

Lucy: Excitement or curiosity of the whole maybe, this is a new situation. Maybe I can be okay with it. Just recently have I started being okay with possibly dating someone that had, has kids. I'm still kind of no on it, but if I read into it and everything else is like yes, yes, yes, all good. He has a kid. Okay, well let's just touch base. What's the relationship look like with the mom? How long have you been sing- like away from her? Does mom have interaction? How often do you see the kids? Um, so that's kind of exciting that I'm now more open to the idea of dating someone that has kids.

Among the daters I interviewed, Mark offered the most positive take on uncertainty, explaining that the feeling of uncertainty in a developing relationship is a good thing:

Mark: ...but the feeling of uncertainty itself in, uh, developing a relationship is a good thing, you know. [...] You know that, you know that there is something there and you have, I guess, butterflies or you want to try a little bit harder to impress that person or, you know, put your best foot forward rather than just doing whatever.

Reappraisals. Positive appraisals also followed from a reappraisal, which is both a response to uncertainty and a way to cope with it through a change in the evaluative orientation toward the object of doubts (Babrow, 2001). However, appraisal and coping are often impossible to distinguish empirically (Lazarus, 1991) because the appraisal process is iterative and “individuals continuously reappraise the situation. What may begin as a threatening situation for an individual may become less threatening or even challenging, and vice versa” (Blascovich & Barry-Mendes, 2000, p. 54). For simplicity, reappraisals will only be discussed here, although they also constitute a coping mechanism (Babrow, 2001) hinging on a reevaluation of the object of uncertainty. Since uncertainty is problematic to the extent that we value (positively or negatively) what we are uncertain about” (p.563), changing the evaluative orientation toward the object can help modulate uncertainty and cope with it.

In the interviews I conducted, reappraisal appeared to drive most positive responses to uncertainty. For example, Sam explains she has “trained herself” to appreciate a certain kind of uncertainty, after realizing that it is a clue signaling how interested she might be in a prospective date.

Sam: I guess to a level I've trained myself to be okay with the uncertainty because there's like anticipation or there's uncertainty and anticipation, um, where, you know, if I'm kind

of looking forward to this date and I'm like, oh, what's going to happen? Then that's a good thing. That means that I'm, you know, interested and I want to pursue it. If I'm totally certain then I think, well, I guess in my experience the only time I'm totally certain is when I know I don't want to pursue anything.

This example illustrates how Sam's initial appraisal of uncertainty was negative, and how her desire to find a partner through online dating led her to reappraise her state of uncertainty in a way that would allow her to find her experience less unpleasant or anxiety-inducing.

Among the daters I interviewed, two major themes related to reappraisals emerged. One involved reframing the online interactions as "low stakes," or "not a big deal," to maintain emotional detachment; the second hinged on interpreting uncertainty as a transformative experience that could lead to growth and personal development.

Regarding reappraisals as "low stakes," Aram explained that he preferred certainty, and that uncertainty would make him feel somehow anxious or nervous; however, since he considered uncertainty unavoidable in the online dating context, he also made an effort to put things into perspective and thus minimize emotional responses.

Aram: Yeah, I mean I prefer to [be certain], for sure. Um, but, it's kind of, it's kind of what you get yourself into with, with doing things like this. Like you're not gonna be fully sure about anything, so you kind of just have to go for it. I think I, I would say I'm less uncertain than the average person. Like, especially on, in these situations. Like, what do I have to lose, you know? And that's kind of what I tell myself sometimes, that it's like really, in the grand scheme of things, even though I'm not sure of anything, like, I'm, it's not a big deal. (laughs) You know?

A second type of reappraisal hinged on viewing the experience of uncertainty as transformative, (Babrow, 2001). For example, Susan explains that for her uncertainty is something to "work through," and that albeit painful, the process of resolving uncertainty can lead to growth.

Susan: [...] my system doesn't have to be the same as anybody else's to work through uncertainty, whether it's this or anything else. I'm okay with that. I don't have to answer to

anybody else. [...] But it has to be, it has to feel right for me, so, um, I don't wanna stay in a state of uncertainty. That's uncomfortable and doesn't, no, it's not a positive thing I don't think. But I'm okay with working through it. I think there's value and growth in working through it, come to a resolution or an answer for yourself on the other side, for myself.

Despite her many disappointing experiences interacting with potential partners online, and her negative appraisal of uncertainty, Lucy takes pride in having been able to overcome the challenges posed by a highly uncertain and fluid context and in having become more confident in herself as a result.

Lucy: Um, I think for someone that doesn't look for inner growth and constructive criticism, they will not survive in this kind of um, this kind of world. People are mean. People are harsh. It's really given me a backbone um for myself. I don't allow people to talk to me like I used to.

Similarly, Rose admits that the emotions she associates with being uncertainty are mostly negative; however, she also thinks that dealing with the uncertainty of online dating has made her a stronger person.

Rose: I- I mean though, I guess the one positive is it made me a stronger person. Um, [...] 'cause I'm still resilient and still trying to go at it. Even with the- the unsuccessful tries I've had, I haven't given up, but yeah.

Susan, Lucy, and Rose offer thus perfect examples of what Babrow (2001) defines a “transformative approach” to coping with uncertainty, which consists in reframing it “as a test (e.g., of character, faith) and an opportunity for self-exploration” (Babrow, 1992). As mentioned earlier, reappraisal (like appraisal) is indistinguishable from coping (Lazarus, 1991; Babrow, 2001), and the examples provided above well illustrate the challenge of drawing any empirical distinction between them.

Conclusions

The daters I interviewed predominantly experienced uncertainty as a negative state, a place they did not want to inhabit, and mentioned anxiety, frustration, sadness as emotions linked to it. However, I would argue that this does not necessarily mean that uncertainty is negative; rather, it may simply mean that “uncertainty” is a word that daters use to describe lack of knowledge, or structuring dilemmas, only *when they perceive them as negative*.

In his model of arousal regulation, Blascovich (1992) distinguishes between a cognitive state of uncertainty associated with a threat or challenge evaluation and the subsequent physiological arousal and affect response (defined here as appraisal), but he also reminds us that affective processes can occur in parallel with cognitive ones, and that both can be nonconscious, such that the subject may not even have any awareness of such processes but only experience their end result - arousal and the associated affect response (Blascovich & Berry Mendes, 2000).

Thus, it is possible that when I asked people to describe their experience of uncertainty, they may have recollected only situations linked to a threat evaluation or to the ensuing negative emotion and therefore “salient” for attentional processes (see the discussion of Hirsh & Inzlicht, 2008, on page 33). This recall bias could have determined the prevalence of negative experiences of uncertainty among the daters I interviewed.

However, it remains to be explained what factors influence the appraisal in the first place. Although the small sample size of this study should discourage bold generalizations, the data analyzed here suggest that an effort to answer this question can be made by using the three concepts presented in the introduction to this section: goal relevance, goal congruence, and perceived tractability of PI dilemmas.

Combining these three concepts may allow to understand how uncertainty is evaluated and appraised, and thus when uncertainty becomes *salient* for daters, with salience defined in terms of

attentional orientation (Hirsh & Inzlicht, 2008). In turn, salience is key to understanding how daters are more likely to respond to uncertainty. Figure 1 below combines the concepts to try and systematize daters' accounts about their perceptions of uncertainty and their appraisals of it. Within Figure 1, there are two dimensions of goal relevance (y-axis) and tractability of integrative dilemmas (x-axis). Both dimensions are evaluated on a high-low continuum, and goal congruence is listed within each quadrant. Combining these three evaluative conditions, the (a) salience of uncertainty and (b) daters' projected responses to either continue or end interaction with a prospective romantic partner, are provided. It is also important to note that not all the possible combinations represented in the table were observed in this sample.

[Figure 1 here]

The first important point when trying to understand daters' responses to uncertainty is that not knowing, or integrative dilemmas more broadly, do not always lead to the feeling of "being uncertain" (i.e., salience of uncertainty). When asked about their perceptions of uncertainty at different stages of the process, daters sometimes noted that they were not concerned by not knowing, or by not having completed the puzzle represented by the ongoing interaction with another person; in other words, the cognitive dimension of uncertainty did not generate an emotional response.

In particular, uncertainty appeared not be salient unless daters felt "invested" in the relationship; this tended to occur in the later stages of an interaction, when daters felt more involved due to repeated interactions and increased familiarity. During the early stages, especially if the interaction only took place in the app or via text, uncertainty did not appear as a problematic experience. For example, Aram explained that texting or chatting in the app would not elicit in him any emotional response or feeling he would label as "uncertainty."

Aram: No, I don't, I don't feel those physical things [feelings of anxiety, excitement, emotions in general] when we're just like texting, or chatting on the app, like I don't feel uncertain, it doesn't actually trigger any of those other feelings. It's more of just, you know, a text game.

This situation corresponds to quadrants 5 or 6 in the table above, which indicate that uncertainty may not be salient at all or at most moderately salient. Potentially, the only reason why daters discussed uncertainty at this stage is because they were being asked explicitly during the interview. Why would this be the case? Firstly, goal relevance is low because Aram has not invested anything in the interaction and has no expectations about it; secondly, as a consequence of low relevance, issues of congruence will be mostly disregarded. Since Aram does not even feel uncertain, no emotional appraisal ensues, and uncertainty is not salient. If he had not been asked about it, Aram may even not have singled out that moment within the interaction as worthy of notice. Zoe echoes Aram's sentiment, and describes a first message as "just opening the door," with uncertainty only becoming a recognizable feeling as she starts becoming more curious about a potential match.

Zoe: I don't think I feel uncertain when I receive a first message. Um, again, I think the uncertainty usually comes after at least a few exchanges, where I'm waiting to see ...if they're able to engage and reciprocate in terms of asking questions, and, um, if I can tell what kind of interest they have. You know, like if they are just looking for a one night stand, or if they're actually trying to meet somebody. Um, the initial message to me is just opening the door, and I don't ... sometimes I don't respond. [...]But if I, I do, um, the uncertainty usually comes a few messages in for me.

In sum, at the very early stages of an interaction uncertainty may not "be a thing" (i.e., not be salient) since low goal relevance - due to low investment or inexistent attachment (see Eastwick & Finkel, 2008) - will render both goal congruence and tractability of integrative dilemmas unimportant. However, at later stages of the interaction, a dater's investment in the get-to-know-

you process tended to increase goal relevance, which in turn rendered daters more sensitive to any perceived goal incongruence and/or to the tractability of integrative dilemmas. Either of these could then trigger a threat evaluation, potentially leading to a discontinuation of the interaction. Mark offers a good explanation of how investment affects his response to a situation in which something “doesn’t feel right.”

Mark: Um, it depends. I take note [if something doesn't feel right]. I take note of it and I either proceed with caution or I totally back out. You know, it depends how invested I am, 'cause if you say something and it, you know, I feel hesitant immediately, I could back out at no ... you know, there's no wonder like of what if or is this real or not real. But if you're like, you know, a few days in the conversation, and you say something was iffy, then you would probably proceed with caution and just have this in the front of your mind, you know, that this is maybe, it may not be what it seems, but let's do a little more investigation.

Mark’s account corresponds to quadrants 2 or 4, where uncertainty is highly salient due to high goal relevance combined with goal incongruence (e.g., doubts about compatibility), and therefore either moderately unacceptable (quadrant 2) or completely unacceptable (quadrant 4). Depending on how invested he feels, Mark could back off (quadrant 4), or proceed with caution (quadrant 2).

Goal relevance can also be heightened by the prospect of a modality switch, when daters would feel more was at stake on multiple fronts, and uncertainties about their own safety or about their actual interest for the potential partner would suddenly have concrete implications.

Sam: But then that's, I think, where the real uncertainty starts to come in. Okay, you know, a day or two days before the date do I actually want to go through with this? Do I want to meet him? Did I choose a good venue?

Interestingly, the decision to avoid pursuing a given interaction may occur not only in the scenario represented by quadrant 4, but also in the one represented by quadrant 8, and described by Sam in her account of her decision not to respond to an initiation message.

Sam: Are these things that he's saying about being artistic and deep thinking is this like a meta joke about some of the more ridiculous profiles that are on OkCupid, or is it, um, is

he being sarcastic with those things and is he actually normal-ish? Or is he, you know, kind ... Is he actually this person who thinks that this is, you know, something that will attract another woman? So I, I don't know. So for that reason I never responded just because I couldn't figure out if he was serious.

The low goal relevance that characterizes this stage of the interaction indicates that Sam's decision not to pursue may be due less to a threat appraisal and ensuing emotions (as seen in quadrant 4), and more to a "cold" cost-benefit analysis, where the perceived intractability of an integrative dilemma hinges on the cognitive effort to form a cohesive impression of her match. On the backdrop of a choice-rich environment, the cognitive cost involved in making her uncertainty tractable triggers the rational decision not to pursue, even though the situation need not represent a "threat" in narrow terms. This in turn suggests that considerations about the salience and the acceptability of uncertainty should not only take into account the well-known threat/challenge axis, but also "cold" cognitive evaluations about allocation of time and resources.

Finally, the idea of *dialectical tension*, defined as "contradictions or discursive struggles," or "oppositions that affect or constitute relating" (Baxter & Scharp, 2015, p.1) may be useful to understand how daters moved across quadrants when appraising uncertainty, grappling with the fluidity of their own evaluations of what it mean to be uncertain at any given moment. Since certainty is regarded as incompatible with uncertainty, the tension is inherent in the fact that one negates the other, while at the same time neither is absolutely desirable or undesirable.

Sam: Um, so I, I really think it's a double-edged sword where you ... sometimes you really have to listen to it and say, okay, you know, this person is not right for me and then other times you have to kind of ignore it and say, okay, I'm feeling uncertain, but that's probably a good thing and it might mean that this person is right for me.

According to relational dialectics, "people possess competing desires for certainty and uncertainty in their relationships," and such "desire for predictability versus novelty may depend on the

situation” (Knobloch, 2010, p. 85). Sam summarizes well this tension between acceptable and unacceptable uncertainty, and the consequences that it may have on her:

Sam: I've even heard, you know, friends who are married talk about, you know, I'm not sure, like, why did he do this? What, what was going through his head? Like that sort of uncertainty happens in relationships and I think that's a good thing. Um, but I think if you have uncertainty about someone's character or you're not sure what their intentions are, um, then I really do my best to trust my gut and assume, you know, if I, if I'm worried that this person is not who they say they are, then that's the kind of uncertainty that I cave to.

Mark offered a similar take:

Mark: I don't know if it's one of the other. I think it could be both- depending on, depending on, you know, what you're uncertain about. Um, I guess if you're uncertain if this person likes you back, um, and you're anxious or insecure, it could be a bad thing,

Conceptualizing the space in which daters move in terms of quadrants also implies that there may be a threshold separating situations in which uncertainty is deemed acceptable from situations in which it is considered unacceptable. Rose’s account below is a perfect example of how integration can suddenly become problematic as a result of new information: a misplaced word, which triggered new uncertainty in Rose both about her match and their compatibility.

Rose: And then, the reason why I stopped communicating with him is he had made a comment after I said good morning, he said, uh, you're sexy and that was like a turn-off to me because that made me feel like that the only thing he was interested in was [sex] per se. [...] And we still hadn't learned a lot about one another that I just was turned off and thought he only wanted like something more than ... just a relationship. Like he just wanted to hook up and that be that.

This example also illustrates well the paradox intrinsic in the very experience of uncertainty, whereby unacceptable or intractable uncertainty may be transformed into certainty as the ultimate way to cope with what cannot be solved. Daters seemed ready to inhabit, more or less comfortably, the space characterized by fluid, multilayered uncertainty, *provided the uncertainty remained within acceptable limits*. The sudden appearance of major intractable dilemmas, particularly in

high stakes domains - such as for example concerns about a dater's (their own or others') goals and motives, or the inability to form a coherent impression of a potential match - seemed to push daters out of the space of *acceptable uncertainty* toward *unacceptable uncertainty*. Such unacceptable uncertainty daters would not want to reckon with, or realized it could not be solved, and this paradoxically would lead them to the certainty that the interaction should not be pursued further.

RQ3: Coping with uncertainty

As discussed in previous chapters, the major different theories of uncertainty focus on different strategies communicators employ to “deal” with uncertainty. URT's (Berger & Calabrese, 1975) main claim is that individuals confronted with uncertainty in interpersonal contexts will attempt to reduce it through information-seeking. Relying on this framework, Gibbs et al. (2010) found that online daters do indeed use information-seeking strategies, in particular interactive ones (Ramirez, Walther, Burgoon, & Sunnafrank, 2002), to reduce their uncertainty.

By contrast, Babrow (2001) and Brashers (2001) both maintain that uncertainty reduction is only one of many potential responses to uncertainty, including information avoidance, reappraisals, adaptation to chronic uncertainty, ambiguation of probabilities or changes in evaluative and/or probabilistic orientations. This analysis conducted here drew on their theories, assuming that daters would adopt multiple different strategies in addition to information-seeking, and Babrow's and Brashers' categories were used as sensitizing concepts to guide the development of codes and themes.

In the section below I will review the main themes that emerged with regards to the strategies daters employed to cope with uncertainty and to make it more “tractable” or acceptable. However, it is important to remember that coping strategies can also cause new integration

dilemmas (Babrow, 2001). Although reappraisals are to be considered among the strategies used to cope with uncertainty, they will not be presented here since they were discussed in the section dedicated to RQ2. In sum, given the iterative nature of the appraisal-coping process and the difficulty of distinguishing among its different stages, the categories outlined here by necessity imperfect, in that they do not accurately represent the fluidity of the uncertainty process.

Theme 1: Accepting uncertainty. According to Brashers (2001), individuals may have to accept “chronic uncertainty,” and there is little doubt that the online dating context is characterized by such conditions of chronic uncertainty. As I explained in Chapter 2, the online mate selection process is a process characterized by the *need to make decisions under conditions of uncertainty* because the options are too many to maximize certainty for all of them, but also by text-based communication that limits daters’ ability to decide easily how they feel about a potential match. For example, Linda thought uncertainty is a result of the peculiar dynamics of online dating, in particular the absence of face to face interactions.

And so, I think, it's- it's a pretty high level of uncertainty, if you think about it. Um, but like, you have to be ... I feel like you have to be willing to accept that because that's how online dating is, right? This isn't ... You don't have that real life interaction at first and so, the level of uncertainty beforehand is- is gonna be high...

Acceptance of uncertainty can be found not only in Brashers’ UMT and in Babrow’s PI (2001), but also in Kramer’s (1999) MRU, which predicts that if reducing uncertainty is costly, tolerance can be developed. Indeed, the daters I interviewed appeared to have interiorized uncertainty as an intrinsic characteristic not only of online dating, but sometimes also of dating tout court.

Lucy: no matter where you meet somebody, you're always gonna have uncertainty. As um, I could go out to the bar and meet somebody, and I'm gonna have- [...] Uncertainties about

them. Are they gonna take me home? Are they gonna steal me? Are they gonna be nice to me? Are they gonna ... are they the one that's for me?

Similarly, Zoe explains that dating - both online and offline - is a “numbers’ game,” implicitly recognizing the only certainty she can have about her eventual success is just a probabilistic expectation that for every bad conversation she has, a good one may happen. While she does not mention uncertainty explicitly, Zoe’s perspective well exemplifies the very idea of problematic integration proposed by Babrow (2001), in that she articulates her dating experience in terms of probabilities and beliefs that can easily destabilize each other.

Zoe: A lot of people talk about how online dating isn't very organic, and I don't know that any dating is all that organic. ...since leaving college, I would say, I guess pretty much all the relationships that I had started from an online dating, so I haven't actually met, um, anyone that I've dated for a long period of time, or, or in a relationship with in just my everyday experience. And I do think the process does sometimes feel artificial or forced ... And finding that initial rapport and kind of back and forth, can be really difficult I think. So I think that is part of it, um. I think the trying to balance ... it's a numbers' game, right? So in order to have like one reasonable date, I probably have to have several, you know- conversations and then several bad ones, right?

Similarly, in discussing her reasons for dating online, Susan explains that for her the uncertainty that characterizes online dating is not unlike the uncertainty associated with meeting someone by chance.

Susan: And I was thinking I would just wait and meet someone. Just by chance, but then I thought what's the difference meeting somebody by chance than meeting someone online. You still have to meet the person and then get to know them- And then learn to figure out who they are and if you can trust them [...].

The fact that many daters considered uncertainty intrinsic to relationship initiation tout court - and not just of online dating - ties back into the meaning of uncertainty as ontological “not knowing”

explored under RQ1, suggesting that to an extent, individuals may consider uncertainty to be a pervasive and unavoidable experience, no matter the context.

Theme 2: Maintaining uncertainty. Within a context characterized by chronic uncertainty they had to come to terms with, daters at times showed a preference for “maintaining” uncertainty by avoiding to seek additional information in the context of an ongoing interaction, as posited by UMT, and partly substantiated by quantitative studies including Rain and Tukachinsky (2015) and Corriero and Tong (2016).

However, a preference for uncertainty was only found when uncertainty was perceived as benign and acceptable (see Figure 1, p. 117). This generally coincided with uncertainty that was goal congruent (i.e., in line with a dater’s goals), that was not highly goal relevant, and that was moderately tractable. For example, uncertainty about a dater’s relational motives (highly relevant) that could not easily be solved or coped with (highly intractable) would generally prompt daters to disengage. By contrast, uncertainty that was perceived as “natural” within the normal get-to-know you process did not elicit negative appraisals. It is important to note that daters did not try to remain in a state of uncertainty by *actively avoiding* information, but rather that they would let uncertainty follow its course and persist or “dissipate” naturally because of an organic, “normal” conversation.

Linda: So you have like, you have age, location, ethnicity, height, religion, occupation, education and then like, like, some blurb on like, what they like or- or whatever, you know? Um, so that information you- you already have and so, um, I guess when I first started chatting it's- it's a little bit more casual at first. Not so much like, direct questions 'cause at least you have some general information about the person. [...] Um, and then he talked about how he was moving to a different city. Um, and then- and then I asked him, "Oh, that's a nice area. So is that where you work?" Or something and then it kind of-... you know, that sort of, information goes in, but not ... I guess not like, super interview-y, but just more like a normal conversation.

The example above shows that even when daters could theoretically seek more information by asking direct questions, they often chose not to do so, thus effectively *maintaining* uncertainty.

This suggests the need to consider daters' broader goal hierarchies within the online dating context when trying to understand which strategies they may adopt - and when - to make uncertainty acceptable. While ensuring smooth and coherent communication and coping with uncertainty can be both considered secondary goals (Dillard et al., 1989; Caughlin, 2010; Kramer, 1999) with respect to the primary goal of finding a partner, secondary goals often constrain if, and how, primary goals are pursued Dillard et al. (1989), and secondary goals can conflict with each other in terms of relevance. In the case above, Linda abstained from very explicit questions to let the conversation flow "normally" and not to make it "interview-y," indicating that her goal of ensuring smooth and coherent communication trumped her desire to know more about the other person right away.

Daters also abstained from exchanging too much information online if they thought it would leave them with nothing to talk about, thus making a first offline date awkward. As noted above, people prefer gradual and reciprocal amounts of disclosures with interactive partners during the relational development process (e.g., social penetration theory, Altman & Taylor, 1973; see p. 22).

Zoe: Like, he just listed all these questions, and I was just like, oh my God, I said, "Do you wanna save any questions for the date?" You know, like, there's kind of... you know, you want enough to feel comfortable going into... something with somebody, but you also wanna have topics left... um, to ask.

A dater who volunteered too much information in their profile or in their messages could also elicit a negative response that could be explained through the idea that communicators in initial encounters prefer symmetric disclosure, in which information is exchanged at roughly the same

rate (Berger & Calabrese, 1975). For example, Sam reacted negatively to a potential date who offered too much unsolicited information, leading her to feel he was “desperate” to connect.

Sam: Um, a while back I dated a guy whose messages were all, like, one or two paragraphs, which usually I tend to ignore just 'cause it's a lot of reading and it's [...] it's also just ... it seems very desperate. I'd much prefer, you know, the short, simple messages where there's, um, like one or two things I could respond to [...]

By contrast, she recalled enjoying another profile that provided “just enough” information.

Sam: Um, so I like that. I really like that his profile is very much, you know, here's some things about me, but not like kind of like an essay about his entire life.

While “just enough” information may be highly subjective criterion, nonetheless daters appeared to all rely on some standard for what constituted the “right” amount of information.

Zoe: Or I usually try to ask enough questions, you know ... so there's some people how will say, "You're really cute. Do you wanna go get a drink?" And, to me, at this point in my life, I need a little more information, right? Like, I'm not ready to just say, "Yeah, you're ...also attractive. Let's get a drink." You know, but I also don't need to answer a questionnaire to go out with them. So, it really is like this weird tension of always trying to figure out what I need to know in order to actually make a decision to go out with somebody. Um, and you know, whether, you know ... how much information you want, how much is, is enough, and, you know, how much is too much. Because I always want the experience of actually having a conversation with someone, you know? So I always feel like I just need enough to know that we could have a conversation and that I wanna actually have a conversation instead of just answering a series of questions back and forth in an app forever.

Theme 2: Avoiding emotional involvement. Another common strategy daters employed to cope with uncertainty hinged on avoiding emotional involvement until later stages of the interaction. Lack of emotional involvement could be either an intentional strategy to cope with uncertainty, but also a natural inclination stemming from one’s own previous experiences, preferences in interpersonal interaction, diffidence toward the online dating process, and individual

differences. For example, Linda explains how she is not particularly bothered by uncertainty in the early initiation stages since you cannot “fall in love by looking at this person’s app.”

Linda: you know, it's not- not the biggest deal either way. I mean, if you connect and then, you know, you don't actually have a conversation, you know, so be it. You know, it's not like you can- you can fall in love by looking at this person's app or something. So I think there's like, a low-level of effort.

The tendency among daters to delay emotional involvement and keep investment low may also contribute to explain why positive emotions related to uncertainty were rarely experienced in the early phases of a developing interaction.

Linda: Um, I don't know. To be honest, I feel like, I- I usually keep those things fairly in-check. Just because I know things can change so much when you actually meet the person. So even if, like, you had a good conversation and you really like their photos, I feel like, until you actually meet them, I don't feel terribly invested. Although, I do feel ... You know, you do feel uncertain about it as in like, "Oh, okay. Is this person as cool as they might be or maybe not?" You know, that sort of, thing, but not like, "Oh, I'm really ..." I don't think I've felt like a huge level of excitement sometimes about some of these.

Mark similarly explains he remains extremely guarded until he has had a chance to meet a potential partner in person, recognizing that it is otherwise impossible for him to truly know whether that person is real or just a “fantasy.”

Mark: Yeah. I don't attach emotions to anything until like there's a physical meeting. It's very rarely that ... I'm not necessarily an emotional person in general and, um, I think it's probably stupid or not ... No, I shouldn't say stupid. It's not the smartest thing to do to get emotionally attached to somebody that is, for all intents and purposes, a fantasy, you know, 'cause you never met them in person.

Delaying involvement may also allow daters to reframe uncertainty in positive terms and enjoy the process more, by lowering their expectations for the overall interaction.

Aram: Um, I don't think that I initially, or that I don't think I immediately go to, you know, liking the person or not, um. I think that, but I do think that the conversation would be positive whether it goes anywhere or not, you know? You can have, you can just have a - a conversation with the person, and, and it will still make you feel good without, you know,

having to take them out for a date, or, you know, like going out with them. So, um, so yeah, definitely I think right now in my own head, like it's more positive than anything.

Theme 2: Decision-making heuristics. Even if they accept uncertainty as intrinsic to the online dating process, daters are still required to continuously solve integration dilemmas in order to advance their goal of finding a mate online. Daters are also aware that forming impressions in an online environment, relying on a limited set of cues, is an imperfect process, and often realize they won't really know whether they are interested in someone until they meet offline, in person. Anastasia voices the common paradoxical realization that uncertainty is a "part of the process [...]" 'Cause you really can't know the person until you meet them."

However, the literature on choice overload suggests uncertainty could be overwhelming during the selection process (Iyengar & Lepper, 2000), when daters need to decide who they could potentially be interested in and who is unlikely to be a compatible match. Given the large amount of profiles available on any given website or app, each providing different information that is not always directly comparable, daters often acknowledge they can be easily overwhelmed and they cannot "talk to everybody." Among the daters I interviewed, five explicitly mentioned the potential of being overwhelmed by the need to process vast amounts of information.

Choice overload (Iyengar & Lepper, 2000) appeared to be a concern for daters in two ways. Firstly, it could refer to the sheer number of profiles available as indicated by Iyengar and Lepper (2000); secondly, to the amount of cognitive effort required to process the information presented on or associated with each profile, as suggested by Lenton, Fasolo, and Todd (2008), as well as Payne (1976). Additionally, Iyengar and Lepper (2000) had also drawn a connection between uncertainty and choice, highlighting how increased uncertainty and difficulty to decide what constitutes a good option could be among the costs associated with processing a large number of

options. Julie's account summarizes how abundance of choice and abundance of information directly shaped her experience of uncertainty:

Julie: [If there was too much contradictory information] I don't think I'd want to even go there because this isn't making sense and there's too much uncertainty here that I don't really want to take time to figure it all out because there's so many profiles that come into your mailbox that you can be overwhelmed by that.

In a way that echoes Weigel's (2016) idea that love and dating require "labor," especially on women's side, Zoe explains that clarifying uncertainty about the potential compatibility with a match, deciding whether to meet with a stranger, and the meeting itself, "feel like work for me."

Zoe: And so, if I do decide that I'm willing to expend a little bit of time on a date, then it bec- I start to think more carefully about whether ... what the cost-benefit analysis is, right? If we have any connection at all, if I think that even if we aren't gonna date it will be a reasonable ... you know, we- I'll have a drink, it will be a two-hour conversation with somebody who's interesting or if I think it's gonna be miserable. Because no matter what, it does feel like work for me. It's not ...it's not completely easy. I'm not somebody who just loves to talk to strangers all the time. And so it is expending a little bit of, of energy. So I start to weigh that, and that's when I start to question.

So how can daters cope with the uncertainty associated with choice and information abundance? In his study of decision-making, Payne (1976) found that when faced with a complex decision task requiring to weigh multiple alternatives, each endowed with different information dimensions, participants employed decision strategies "designed to eliminate some of the available alternatives as quickly as possible and on the basis of a limited amount of information search and evaluation" (p. 366). Within the dating context, Lenton and Stewart (2008) found that "as the number of options increased, participants self-reported lesser use of a comprehensive choice strategy and greater use of heuristic choice strategies." This result was also supported by Lenton and Francesconi (2010), who found that in a speed-dating event daters adopted heuristic-like choice strategies when faced with a higher number of options. Lenton and Francesconi also pointed out

that the *time* spent to make a choice is among the “highest costs incurred in mate choice.” In a similar way, the daters I interviewed reported adopting decision-making strategies that relied on heuristic assessments in order to address the uncertainty that characterizes the selection process while at the same time minimizing the emotional labor, the cognitive effort, and the time required by that goal.

In particular, all daters I interviewed discussed explicitly or implicitly some sort of *cognitive shortcut* to 1) select profiles for more careful screening before an interaction; 2) quickly discard non-optimal candidates within an ongoing interaction, while 3) avoiding excessive cognitive effort or emotional labor. In many cases, potential matches were discarded without daters considering all the information associated with them; this in turn suggests that, in line with the literature reviewed above, daters in the initial stages of an interaction were not intent on maximizing their certainty (i.e., reducing their uncertainty to zero), but rather that they were willing to employ “imperfect strategies” in order to cope with uncertainty and be able to make decisions.

Daters did not always explicitly identify decision-making heuristics as a coping strategy, suggesting that in some cases they had less awareness of the role heuristics played with respect to uncertainty. However, in some cases daters had come to realize that having a “method” to “work through” their uncertainty could help them arrive at a decision. For example, Susan recounts devising a system to sort through profiles that would allow her not to stay in a “spot” of uncertainty:

Susan: Well, I didn't ever really think about this, in terms of that particular word, uncertainty, but I can see what it has done for me, the feeling that I was feeling that I didn't know was uncertainty, but that's what it was made me create this system in my mind of sorting... Because I didn't want to stay in that spot where I had, I had six matches and they're just staring at me and what does that mean, and, and, you know, looking at a profile five times and trying, and trying to figure out who this person is.

Julie similarly mentioned having a list of criteria to quickly weed out matches on Match.com:

Julie: And kind of in my mind had priorities that I set up. If you have five or four main priorities. That you're looking for in an individual, if the profile didn't ... Anyone of those pieces wasn't there or it wasn't the right piece, then I just move on to the next person.

The two types of decision-making heuristics on which daters in my sample relied more consistently were: 1) Screening parameters and deal-breakers, and 2) contingency rules. These heuristics allowed daters to quickly discard undesirable candidates while at the same time minimizing the need to fully resolve their uncertainty by processing all the information associated with any given profile. It is important to note that although this kind of decision-making heuristic can lead to certainty (i.e., the interaction won't be pursued) it is not a true reduction strategy in URT terms since uncertainty is not reduced through additional information, but rather eliminated through the removal of the possibility itself. This implies that coping occurs intrapersonally through a change in the evaluative orientation toward an object of uncertainty (Babrow, 2001), rather than interpersonally through communication.

Screening parameters & deal-breakers. Screening parameters and deal-breakers are criteria based on evaluations of *static* attributes presented by a dater, usually through a profile or a picture. These criteria are usually employed to quickly discard undesirable options, before any interaction even takes place. The idea of screening parameters and deal-breakers overlaps considerably with what Lenton and Francesconi (2010) define QEA cues - cues that can be “quickly and easily” assessed, as they do not require an interaction (or if they do, they do not require complex “integration” efforts, to use Babrow’s term). It must also be noted that attributes can also be revealed and thus evaluated at later stages, through communicative interaction, prompting a quick re-assessment of the relationship itself.

In general, screening parameters tend to represent simple mate preferences. Age, location, and marital status were among the most common criteria mentioned by the daters I interviewed. Interestingly, as many as six daters cited spelling as something they paid attention to when evaluating a potential match.

Mark: And, you know, I think, when you write, your grammar is an extension of yourself... and you should take pride in, you know, being able to spell things correctly.

As opposed to screening parameters, deal-breakers represent stronger preferences daters felt less inclined to compromise on, and indeed daters tended to flatly discard any potential match who failed to meet a deal-breaking criterion. Religion, political affiliation, use of drugs, number of children were among the most common deal-breakers among the daters I interviewed.

Zoe: Yeah. Like, I, you know, I am somebody who cannot date somebody who voted for Donald Trump. I just, I can't even go to a first date with them.

Julie was enjoying her conversation until her match started talking about his “hippie days.”

Julie: And um, I talked about where I was and then when he started talking about when he was back in the hippie days or something I thought, "Nah. I don't think this (laughter)." Or whatever it was it's like, no, I can tell he was probably you know, smoking pipe back then. And that's where they used to go and that sort of stuff and those were things that's like, you know, that was uncertainty in terms of, "I wonder if he's still like that today?" Um, but it wants, it wasn't something that I felt was, I was gonna pursue.

Ethnicity was infrequently mentioned as a deal-breaker. Sam, who is Indian, explains she stays away from other Indians because of the gender role expectations they may have.

Sam: Yeah. Um, I think just over the years I've gotten really good at weeding out, um, the [Indian] immigrants, (laughs). On the other hand I realize, my parents are immigrants, I grew up around immigrants and I don't really necessarily have a problem with immigrants. Um, I just think with online dating I've noticed that there tends to be sort of a “date an Indian girl who was born in America and then go and marry an Indian girl who's born in India” sort of a mentality. So, um, maybe it's wrong to stereotype them that way, but I absolutely do.

Profile information that indicated a potential match had a lifestyle or values inconsistent with one's own also often led to the profile being discarded:

Mike: Uh, then uh ... Then you look at, I also look at like, similar interests. Uh, I look for similar interests, something that, you know, that I can like, uh, you know, that we could kind of like, anchor down on? Like, you know, outdoors, food, you know? You know, if somebody says you know "I like to drink all day", I'm like, oh, immediate pass.

In sum, screening criteria and deal-breakers help daters cope with uncertainty without engaging in more effortful coping strategies while navigating through a multitude of online profiles. However, daters on the receiving end of these quick screening strategies at times reported feeling uncomfortable and pushing back, especially if the screening occurred in the context of direct interactions. This discomfort appears to be directly linked to daters' preference for "organic" and "natural" conversation, as well as to a dislike for being judged, and suggest that while screening may be a successful strategy to cope with uncertainty intrapersonally, prior to an interaction, it may prevent relationship formation if used *interactively*, i.e., during interpersonal interactions.

Mike: One of the, one of my most recent experiences, she was like uh, "What do you do for a living?" And I was like "Oh, I'm an auditor." And she was like "What kind of auditor?" And I'm like "Oh, I do this, this, and that." And uh, just felt like I was being judged too much. You know, like everybody has their hidden agendas, and for me, it's ... I'm able to see through all that, I'm like "Uh, you're looking for something. And you know, you're not trying to get to know the real me, you're trying to check a box or something." And uh, I don't appreciate it.

Steven also explained that this "checklist" approach was something he considered a byproduct of online dating, and less likely to happen in relationships initiated offline, in "real life."

Steven: It's just, uh ... I think that what ends up happening is people are more about, checklists of things online, like you should have X, Y, and Z... and A, B, C... If you don't

have these, I won't talk to you, whereas in real life, I think if people are attracted to you, they are definitely more open to a poss- ... like, different things.

Steven also provides a puzzling example of the “checklist approach” taken to its extreme:

Steven: And as I'm walking to get this date with her, she texts me. She's like, "Oh yeah, how tall are you by the way?" And I was like, "I'm 5' 10"" And she goes, "Yeah, I'm not gonna go on a date with you." And I was like- I was like, "Alright." And, like, the weird thing was she wa- she was, like, 5 ... she was, like, 5' 5" to 5' 7" or something like that. So it wasn't like ... I was still taller than she was and I was like- I was like, "Alright, um, and, like, you know, have, like, a good day." And that was, like, the end of that interaction.

Contingency rules (IF-THEN algorithms). Contingency rules are IF-THEN “algorithms” daters create on the basis of their communication preferences or past experiences, which help daters evaluate their potential matches’ behaviors during ongoing interactions. Thus, as opposed to screening parameters, these evaluations occur dynamically over the course of interactions in which daters are involved. In some cases, contingency rules are more procedural, but almost all daters interviewed in this study (11 out of 13) mentioned relying on some type of contingency rule to guide their behavior.

Some of the most interesting decisional “algorithms” related to inferences daters made regarding a potential match’s goals and motives, usually relying either on the content of a message, or on the timing of a message. For example, women tended to discard messages that did not show any effort on the sender’s part, often without even checking the sender’s profile. This rule was generally based on an assumption that a lack of effort indicated a potential match was not serious about finding a relationship. For example, Lucy explains she “used to talk to everybody” and that the decision to stop doing so came with the realization she was simply wasting her time.

Lucy: I, I have, I used to talk to everybody. No matter what. Even if they put just like that, or said hi, or wrote me a paragraph, I would talk to everybody. And then they just came, became so consuming of my time. And I ended up just getting a lot of people that would

just end up like talking, talking, and never wanting to go on a date. And I'm like I'm here to date.

Paradoxically, an overly elaborate self-presentation or message could prompt the application of a similar rule and lead to the same outcome as too little effort. The rule described below by Sam regarded her estimate of the cognitive effort required to make her uncertainty tractable given the contradictions and ambiguity in a potential match's profile.

Sam: I'd look at all their pictures. I'd look at all their questions, and then slowly it became too tedious and time consuming and I also kind of learned to recognize certain patterns [...] Uh, maybe a year, two years ago I would have just messaged him and said, "What do you mean by this? I don't understand." Whereas now I've kind of come to the conclusion if I don't understand the first paragraph of your profile, then to me you're not worth my time.

Recognizing that for certain profiles, uncertainty could be made malleable only through an intense cognitive effort on her part (estimate of a probability), Sam reduced to zero the value she would assign to those profiles, thus removing the very cause of her uncertainty. Since "uncertainty is problematic to the extent that we value (positively or negatively) what we are uncertain about" (Babrow, 2001, p. 563), a contingency rule of this type allows daters to cope with uncertainty by changing the evaluative orientation they hold toward the object of their doubts.

The timing of a message could also lead to a negative perception of the sender, and thus prompt the dater who received the message to withdraw from the interaction. According to Walther and Tidwell (1995), chronemics are used in text-based, online communication to form impression of senders in terms of personality attributions. In the interpersonal context I explored here, chronemics - in particular the timing of a message - were often used to make inferences about the sender's dating goals, rather than about their personality. Through her experience, Lucy had come to associate late night messages with non-committal sex goals:

Lucy: Don't message me at 1:00 in the morning. Like, at least sometime between like 6:00 or 5:00 when you got out of work. And midnight, I'm fine with a message between then. I'm

okay with them during the day too. But it's like if I get a message at 1:00 in the morning, I'm not gonna respond back. [...] And I'm, I probably am limiting myself with that, but with five years of experience with it, 90% of the time when they message me at that time ... so I mean the 10% that could be something legitimate, they can message me back at an appropriate time and say, "Hey sorry. That was a late message". Whatever.

More fluid contingency rules may be used when daters need to evaluate whether the interaction is proceeding in a way that aligns to their goals in relation to a potential partner's behavior. For example, Mike explains he is extremely busy, and that as a consequence, his time availability is limited, even if he is interested in pursuing a given relationship. In his case, the rule governing his evaluation is spelled out explicitly: IF a potential partner can't understand that his availability is limited, THEN he "couldn't care less." Having this rule clear allows him to cope with any uncertainty associated to the situation by reducing the value he attributes to the relationship.

Contingency rules can also be more procedural and function used as a blueprint to navigate the online dating process; for example, they can help daters decide how to proceed in an interaction, and whether to switch channels at any given moment based on how the interaction has developed up to that point. For example, Sam devised a rule governing how much time she would spend communicating online before a first date based on experiences in which she found herself having little to discuss on a date, or not remembering what had been said online:

Sam: And then I also find, you know, there are like a couple moments where he was like, yeah, remember I told you this thing and I didn't really remember because he had told me two or three weeks ago and, you know, (laughs) there had been so many messages after the fact. So now I kind of as a general rule if I've been talking to someone for like a week, 10 days, two weeks at the max, at that point it's either stop talking or figure out if you can meet them in person.

These examples illustrate how contingency rules are different from pure screening criteria in that the daters' judgment relies on a more complex *behavioral* evaluation and is often the product of exposure to repeated interactions. In other words, daters 1) come to recognize behavioral *patterns* through experience; 2) form a probabilistic evaluation for those patterns; and, 3) devise a general

rule to apply when they encounter that pattern. Being based on a dynamic evaluation of a person's behavior or of an interaction, contingency rules also allow daters more flexibility than a more simplistic screening criterion or deal-breaker.

Theme 4 - Information-seeking strategies. According to Ramirez et al., (2002), four types of information-seeking strategies are used by communicators to “reduce” their uncertainty in online environments. These are interactive (questions, direct interactions), extractive (checking records, Googling), passive (unobtrusive observation), and active (acquiring information from another individual). However, in their study of self-presentation in online dating, Gibbs et al. (2010) found that while daters “engaged in a variety of uncertainty reduction strategies, including some with high warranting value, such as checking public records and using Google to search for self-presentational discrepancies,” interactive strategies such as direct questioning were reported as being the most commonly used. The authors explained this finding in light of Tidwell and Walther's (2002) assumption that direct strategies “are most amenable to CMC due to its lack of traditional identity cues” (p. 90). Below I will discuss the information-seeking strategies daters employed to cope with uncertainty based on the categories proposed by Ramirez et al. (2002).

Interactive information-seeking. Direct interactions were the primary strategy daters used to cope with uncertainty, in line with the centrality assigned by Babrow (2001) to communication in the experience of uncertainty. However, as shown in previous sections, and particularly in the discussion of relational uncertainty (p. 19-23), it must be noted that interactive information seeking had to be balanced with face concerns (see Knobloch & Solomon, 1999) and with the communicators' general preference for organic, balanced conversations (Berger & Calabrese, 1975) that followed Grice's (1975) cooperative principle. Thus, while direct communication was used to gather information, this does not necessarily imply heavy reliance on explicit questioning.

Full text-based conversations or phone conversations were the most typical contexts for interactive information-seeking. Organic conversations allowed for greater subtlety in the acquisition of information as interactants often volunteered it, without necessarily being asked. For example, Tamara explains that the way a potential match talked about his ex-partner provided her sufficient grounds to revise her evaluation of the person and resolve her uncertainty about him by removing him from her pool of candidates.

Tamara: Oh yeah. It gets pretty certain after the texting too. It gets pretty certain, I get certain about them. Yeah. Like um. I was talking to someone who had a child, and we started texting, and he lived kinda far away, and then he started saying some negative things about his ex, and then I knew right away I didn't want to be with him. Didn't want to even meet him.

Although daters engaged in information-seeking strategies - including interactive ones - to cope with uncertainty, all reported that the novel information acquired as a result could paradoxically increase their uncertainty or render it more intractable, rather than malleable. For example, Mark explains how a glimpse of the other person's character and interests acquired through a text-based exchange suddenly cast a shadow of doubt on the interaction, forcing him to re-estimate probabilities about compatibility and revise his evaluation of the person (i.e., how desirable is this person?).

Mark: Okay. So she asked me about what I was doing... and, um, I sent her a picture of uh, a screenshot of my computer screen. I was, um, working on some music production stuff. And she wrote, "Sweet baby Jesus, that looks like signals from outer space." And I thought to myself, first of all, sweet baby Jesus sounds a little, you know, dated and then, "That looks like signals from outer space," I, I, just kind of thought to myself that I don't think that we would get along or we'd work out, like if we were in a situation together in the same room and I was working on music and she wouldn't understand, you know, what I was doing or if I was programming and she wouldn't understand what I was doing. And I don't know if I can, would have the patience to explain things to her. So that was when I, my first unsure. And I think she could tell 'cause I didn't write her back for like two days.

The examples above show that among the daters I interviewed, uncertainty did not necessarily decrease as a result of increased communication, in contrast with what posited by URT (Berger & Calabrese, 1975). Instead communication often led to greater uncertainty, as new aspects of a potential match were revealed, in line with Babrow's (2001) contention that communication can both resolve and cause uncertainty.

Interestingly, daters tended to focus their attention on instances when additional information "destabilized" probabilities and values in a way that increased the intractability of an integrative dilemma and paradoxically resulted in a decision to disengage from the interaction.

Julie: Um, it wasn't until I talked to him that it really, um, that I made the decision that, "No. I don't ... I'm not interested." [...] it was just the way that he, he jumped around a lot. I'm gonna be honest with you, he jumped around a lot in kind of the conversation. There was a lot of hesitation. And he had had, when we talked about, you know, career and so on. He had had multiple different jobs. ...And, you know, and those were red flags and it's kind of like, "No. You know, I'm not interested."

With few exceptions, rarely did daters focus on instances when additional information appeared their uncertainty. This may be explained in light of my previous discussion of uncertainty appraisal (p. 36), in which I suggested that positive resolutions of integrative dilemmas - albeit provisional - may be less salient, and that given equal goal relevance of uncertainty, attention is only directed to instances in which there is a perceived goal incongruence, or the intractability of a dilemma requires too much cognitive effort.

Extractive information seeking. Although Gibbs et al. (2010) found some evidence of reliance on extractive information-seeking strategies in their study of uncertainty reduction in online dating, the daters I interviewed rarely mentioned extractive strategies, and typically reckoned it is useless to try and find out information outside of the dating platforms or apps. Upon

being asked, only Sam and Julie reported having sought information about a potential match outside the platform in which they were communicating.

Uh, occasionally I have [searched for information]. I usually wait until after the first date to do that. Because you can do that with Tinder. It's really easy because it carries a line with some information that's on Facebook, too, so you can do a search on Facebook.

However, the daters I interviewed generally did not rely on extractive strategies. This may be due to two reasons. Firstly, the lack of traditional identity cues (Tidwell & Walther, 2002) is a barrier to extracting information through any kind of online (or offline) search.

Julie: But there is no names. There is no anything else. So there's no point in going- You can't [match him]. No. You can say he's a guy. He's name you don't know if it is- f his name is really Charlie and he lives in Ann Arbor and it's not worth going on. Until you have a last name, it's like, it's not worth the time to sort of-

Secondly, information online can be available but “locked down” and thus not really accessible.

Sam: Um, but I've also found that, you know, most people, especially young people, have all of that stuff really well locked down. Uh, I know someone can find my Facebook, but not find out anything about me.

Furthermore, daters also expressed the desire to be able to trust the other person as an explanation for why they would not engage in extractive information-seeking strategies. In this case, any desire to reduce uncertainty is superseded by the competing goal of establishing trust as the foundational basis of a relationship.

Anastasia: I should be able to trust, like, their word about who they are and I- and why do I need to know more information like past addresses or I dunno what else you can find. Um, so no, I haven't done that.

Passive information seeking. According to Ramirez et al. (2002), passive information-seeking relies on “unobtrusive observation” of the target individual in his or her own environment. For instance, in an online setting, passive information-seeking behaviors could be enacted within a social network, assuming both individuals have an account and are friends or follow each other. However, there were no such instances reported by the daters I interviewed, and the information-seeking method more akin to a passive strategy relied instead on exploiting the features of a given online dating app or website (“system features”).

Five out of 13 daters mentioned system features, with four discussing OkCupid’s match percentage, and two mentioning Tinder’s links to third-party apps such as Spotify, Instagram, and Facebook. Below I review OkCupid’s match percentage, and explain on which basis it can be categorized as a passive information-seeking strategy.

System Features. The online dating website OkCupid provides a match percentage, which is based on how daters have responded to an extensive list of questions. The questions can be very specific and touch on topics that reveal a person’s values, religious and political leanings, beliefs about relationships and gender roles, sexual preferences. The match percentage is calculated by OkCupid based on how closely a potential match’s responses align with those of a dater (see, OkCupid, 2017).

Partial reliance on this kind of system feature is in line with results by Tong, Corriero, Matheny, and Hancock (2018), who explored daters’ willingness to use two different forms of algorithmic technology to assist in the online process of mate selection on a online dating website: *Decision aids* help daters narrow down the pool of potential matches, but leave the final choice to daters themselves-- Match.com’s search filters and OkCupid’s “match percentage” (i.e., similarity score) function as decision aids that help daters reduce the dating pool, but still require daters

search through the narrowed field of profiles and make several independent decisions. By contrast, *delegated agents* “select optimal matches on behalf of users” and limit daters’ decision making autonomy - platforms such as eHarmony give their users pre-selected partners that match on specific selection criteria. Tong et al. (2018) found that most daters were almost always willing to use a decision aid; it was only when confronted with a larger choice set (i.e., a large numbers of profiles to choose from) that daters were more inclined to delegate their choice to the matching algorithm.

OkCupid’s match percentage is similar to a decision aid, as it offers daters a way to filter matches and thus simplify the selection process, but leaves the final decision in their hands. My analysis shows results similar to what found by Tong et al. (2018). While daters did not rely on the match percentage completely, they factored it in their decision-making process:

Sam: [I consider OkCupid’s match percentage] especially when it's really low, you know, if it's like 70, which I don't care so much, 60-70, but when it's like really low or really high, that always catches my attention because 20% match means that out of the vast majority of things, we don't agree. And a lot of the questions are, you know, like do you believe in gay rights? Or questions about preferences regarding sex, um, or regarding gender roles in a relationship, things like that. So I don't necessarily look at what we disagreed on, but if it's a 20% match, that kind of indicates to me this is probably not someone I'm interested in.

A certain diffidence can be inferred by Zoe’s account, in which she reports looking at OkCupid’s match percentage, but trying “not to take it too seriously,” partly due to the fact the number could be skewed if the respondent had only asked a few questions.

Zoe: This one has the, um, percentage of matching answers to all of the questions. And I do look at that. I try not to take it too seriously, 'cause obviously it's just a ... there are so many different questions on there, but I usually try to at least look. [...] Um, most of them, I find that I get messages from people in between 60% and 70% is where I think that's reasonable, and the ones that are like under 50 I usually think are maybe not great. But I usually try to look, um, too, 'cause sometimes it'll say you only have 30% match, but they've only answered two questions

Interestingly, the match percentage in itself was considered less important from an uncertainty standpoint than the original questions, suggesting that daters partly accepted the idea of a decision aid, but wanted to retain control on the decision-making process. As Lucy noted, “I mean, I'll read through them, but then on the percentage itself I don't look into.” Since reliance on a decision aid is also influenced by an individual’s trust in recommender systems (Tong et al., 2018), a dater’s awareness of how the match percentage was calculated could potentially increase their willingness to rely on it at least partially in their selection process.

All the daters who mentioned the match percentage reported reading through the questions, and this is where their behaviors reflected passive information-seeking strategies. Since the target answers the questions outside the context of any specific interaction, a dater who reads the target’s answers is performing “unobtrusive observation” by monitoring the target’s behavior (or self-reported behavior) without being present within an interaction, and thus without introducing any “demand” bias. Additionally, since the target cannot predict who will read the answers, deliberately manipulative self-presentation is less likely to happen. By contrast, within an actual interaction, the target may answer the partner’s question in a way he or she thinks will positively influence the dater’s impression of self.

Indeed, daters appeared to consider the responses truthful, and also appeared to weigh some questions more than others, using them to gain insight into a potential match’s values and beliefs.

Sam: in the past I've had like 80%, 90% matches, but then there's like a question about do you think homosexuality is a sin? Anyone who says no to that is an automatic I'm not interested in dating them just because, you know, [...] So there's a couple of questions like that. They really do tip off the balance.

Theme 5: Modality Switches. One last strategy daters adopted to cope with uncertainty hinged on changing or integrating new communication *modalities* (“modality switch”; Ramirez et al., 2014) to add cues and thus gain additional information to form a better impression of a potential match. Since online dating generally implies a progression from online to offline, daters may switch at a minimum once - from messaging within the app to an offline encounter - but possibly even two or three times, and in different order depending on each individual’s communicative preferences. Modalities richer than text, like phone, video chat, or FtF meeting will add new cues that have the potential to confirm or disconfirm a dater’s impression of the other person (Ramirez et al., 2014), and thus to resolve some dilemmas. It is important to note that in general daters did not explicitly identify switching modalities as a coping strategy; rather, the relevance of modality switches as a coping mechanism was inferred by their behaviors, suggesting daters’ only partial awareness of how different modalities contributed to the impression formation process, and of how uncertainty could be managed by leveraging channel affordances.

While daters relied on modality switches to cope with uncertainty, Ramirez et al. (2014) showed that modality switches, in particular from text-only to FtF, have the potential to cause uncertainty-inducing expectancy violations that will then negatively impact relational outcomes. Indeed, this is corroborated by Julie’s account of a switch from email-based conversation to a phone conversation.

Julie: And so that's what I did but there were others who, um, we exchanged because we had some things in common. You exchange maybe four or five emails and you say, "Okay. Let's have a phone conversation." And then after the phone conversation there were too many uncertainties or sort of flags that went up that I thought, "Hm, I'm not interested in pursuing this any longer." So I did not.

However, switches could sometimes produce the desired effect of reducing uncertainty and thus of increasing a dater’s comfort in view of a FtF meeting:

Anastasia: Um, I would say it depends on the, the person 'cause some people I'd feel like if we've had good conversations and like on the, you know, have talked on the phone and I feel more comfortable meeting them versus someone sometimes, you know, just a couple hi's back and forth and they're like, "Let's meet up," and I'm always like, "Well, actually I'd like to converse a little bit more." So, I dunno if I'm convinced, like, to meet them before I feel like I have some kind of a feel for how they are, um, then I'm usually more nervous, well I am more nervous than if I feel like we've been chatting a little longer.

Although daters may have been unaware of the mechanism that made transitions from long online interactions more unsuccessful through an increased likelihood of expectancy violations (Ramirez et al., 2014), many nonetheless expressed a preference for limited online interaction time, citing as a reason the impossibility of truly “knowing” someone until the FtF meeting, and thus the potential for prolonged online interactions to be wasteful of one’s time and energy.

Julie: But that was, I don't know, kind of surprising but it was kind of like, " No. Let's just cut to the chase. I'll meet you for coffee." I'm not sure why. [...] I did that. But, um, I don't know, there was something in his profile that I thought, "No. This looks all okay."

However, the timing of a switch was in itself a potential cause of uncertainty, and had to be “negotiated” to prevent it from casting doubts on the proposer’s motives - and potentially from disrupting the interaction.

Tamara: I just got more and more uncertain as I started to talk to him more. We were talking about the kind of dogs we had, and then he said, "Would you like to have coffee, or tea, or lunch, or a drink? Nothing serious. I find out how to connect with people through the screen of my phone." And whenever that happens, I sort of shut down. Yeah. This early especially, and with someone older, I don't know. I just feel like, I'm not gonna meet you just because you want to meet me. Like, there's no connection, why would I meet you? And then he wrote, "Hi, I hope I didn't scare you. I'm very straightforward and direct." [...] But then, then he came back a few, like a few, couple weeks later. And then he says, "I don't want to rush anything, if you prefer we can still text on this site until you feel more comfortable."

As Sam highlights, there may be a “sweet spot” between moving too fast or too slow across modalities, and finding someone who “wants to move at the same pace” may be as challenging as finding someone who has the same interests and values.

Sam: Sometimes I feel like I'll find someone who I really like, but either they want to move way too fast or things are moving too slow. So then I lose interest (laughs). Um, and so I, I think it's timing is an issue, and then finding someone who wants to move at the same pace is also an issue, so.

Not surprisingly, the most significant and most widely discussed modality switch was the one from text only to a FtF meeting; in line with findings by Ramirez et al. (2014) the transition from online to offline could have quite dramatic effects, and could also often lead to the dissolution of a budding relationship through an expectancy violation, a consequent increase in uncertainty, and a reassessment of the relationship itself.

Mark noted that in terms of uncertainty, meeting in person was akin to starting the initiation phase all over again: “it [uncertainty] certainly goes back up 'cause now it's like a different phase. It goes from fantasy to reality... and you're more ... you become uncertain all over again”. Interestingly, Mark approached his online exchanges with pragmatism, and he did not have a preference for prolonged online interactions; he could agree to meet in person after a day or two, or after a week, or two weeks. His admission that uncertainty generally (independent of time) increased for him with a modality switch from online to FtF seems thus consistent with Ramirez et al.'s (2014) contention that expectations can be violated even after short online interactions, thus causing an increase in uncertainty rather than a reduction like they had initially hypothesized.

The information gained consciously and nonconsciously through a physical encounter was key to resolving the most immediate concern a dater had: Whether or not the other person could truly be a match. In particular, an offline meeting was essential to dispel most of the uncertainty about a dater's own attraction toward a potential match, and about the quality of the communication.

Linda: Once you meet them you're kind of, you're like... "Oh, okay. Are you genuinely attracted to this person? Did they- did they look better or worse in the photos?" You know, that sort of, thing. Like, you know, you see, number one, if there's any sort of, physical attraction there and then, um, what was it? I think we had lunch and so then, you know, you obviously see whether, or not you have conversational chemistry with the person, right?

During an offline first date, daters often reported relying on a heuristic assessment rather than on a rational evaluation of the other person, and an intuitive perception about the other person guided them in the resolution of some dilemmas and uncertainties. This intuitive perception was defined differently as either “chemistry,” or “clicking,” or “feeling a connection.”

Aram: ...and while I had a good time with her, and like it was a good thing, I just didn't really feel like enough of a connection to kind of do it again, so.

Zoe: And then, we just we didn't click or communicate well on the date. And think, I probably had enough information to know it wasn't going to be great, but I was trying to be open.

In a study of college dating, Peretti and Abplanalp (2005) found that for students in the study, “chemistry” involved physical attractiveness, similarity, spontaneous communication, reciprocity, warm personality, and longing. Many of these dimensions are potentially difficult to assess online, even assuming a potential match is presenting truthfully, and it is not surprising that daters preferred to tackle offline any uncertainty relating to these dimensions. Biologically, human perception is built around sight, and mating relies heavily on the hormones that are responsible for attraction and bonding; thus, from an evolutionary point of view, it there is nothing like a physical encounter to reveal daters’ mutual attraction (see for review, Maner & Ackerman, 2013).

Although a first date was a powerful way for daters to cope with their uncertainty, and to discard zero value matches, meeting in person did not eliminate doubts and concerns regarding

how to communicate after the date, or uncertainty regarding a desirable potential partner. For example, Zoe is unsure how to communicate with a person she is not interested in pursuing:

Zoe: I think I still do experience some uncertainty about the post- date communication ...Like, um, whether I think I have some uncertainty about whether or not somebody will contact me, or if I could maybe contact them, you know, li- and obviously depends on how well it went. So like even this date I went on Monday night that was not great, and I knew that I didn't wanna go out with him again, or- and I also didn't really wanna continue talking to him, but I still felt uncertainty about whether or not like I needed to tell him that ...or whether I could just not say anything. And then, whether or not he was gonna text me, or try to see me again. So it's like a relief to me that he had not contacted me. I don't feel rejected. It's not negative at all that he hasn't contacted me. I had more uncertainty about if he did, wha- how was I gonna handle it?

Lucy's account exemplifies well the pervasiveness of uncertainty in budding relationships, and how any resolution can rarely be more than a temporary relief when the object of uncertainty is highly valued:

Lucy: Yeah, if they agree to meet up with me [I have some certainty they are interested]. Because getting a guy to meet me on a first date is hard (laughs). So um, but getting them to meet me again- Is, that's where my uncertainty is gonna go back up for them.

In conclusion, this analysis found support for the expanded perspective on coping with uncertainty proposed by Brashers (2001) and Babrow (2001), showing how daters relied on multiple strategies to cope with uncertainty, rather than solely on information-seeking for the purpose of reducing uncertainty. In particular, it was clear that to form a complete understanding of how daters will cope with uncertainty it is necessary to account for 1) the fact that daters are often driven by conflicting goals (Babrow, 2001; Dillard et al., 1989; Kramer, 1999); 2) that access to information can be limited in terms of quantity and/or quality, but also 3) that accessing and processing information, as well as direct communication itself, can at times be too costly.

With respect to goals, the quality of communication emerged as a primary concern for daters; this goal of achieving an interaction that feels natural, organic, and balanced often

conflicted with the desire to cope with uncertainty by obtaining information through more “aggressive” interactive strategies such as direct questioning. As my analysis showed, daters tended to negatively evaluate those individuals who disrupted the “natural” flow of a conversation, and the goal to maintain communication quality would often be considered superordinate with respect to other secondary uncertainty-related goals (i.e., information-seeking).

As mentioned in the introduction to the results section, daters’ primary goal within this sample was to find a long-term romantic partner. In considering the hierarchy of goal relevance as a whole, resolving or coping with uncertainty was treated as a secondary goal, and to a certain extent daters showed the ability to adapt to imperfect information, accept perduring or chronic uncertainty, and become comfortable with shifting probabilistic evaluations, in order to attain their primary goal. This held true unless uncertainty became so salient that coping with it becomes the primary goal, and even lead to a decision not to pursue a relationship, as discussed previously.

In relation to information and communication more broadly, this analysis has also highlighted how a decision-making environment characterized by abundance of choice such as online dating may determine a shift from *interpersonal* coping strategies, revolving around communication and information-seeking, to *intrapersonal* coping strategies including decision-making heuristics and reappraisals. Intrapersonal strategies involving decision-making heuristics may have a higher margin of risk (i.e., chances of discarding a good match), but they may be more efficient since they do not require daters to interact interpersonally or seek new information. This coping strategy rests on an evaluative shift toward an object of uncertainty (i.e., a potential match) whereby the value of a given match is set to zero, thereby removing uncertainty at its root (Babrow, 2001).

Overall, this analysis shows that applying Babrow's (2001) problematic integration theory and Brashers' (2001) UMT allows to account for the specificities of the online dating context and for the preeminent role of communication as both a cause of uncertainty and an imperfect way to cope with it. By problematizing the relationship between information, communication, and uncertainty through the recognition that at times "information simply may not be available" (Babrow, 2001, p. 561) or may be too costly to obtain and process, both theories also allow to account for the ways in which daters cope with uncertainty at the intrapersonal level, thus leading to a better understanding of how daters arrive at complex decisions under conditions of perduring uncertainty.

CHAPTER 5: SUMMARY OF RESULTS, IMPLICATIONS, AND LIMITATIONS

In the previous chapter, I presented the results of the analysis I conducted, highlighting the major themes that emerged with regards to each of the research question posed by this study. In this chapter, I will summarize the main findings for each research question, and subsequently discuss their implications, directions for future research, and limitations.

Summary of Results

Sources of uncertainty. In accord with research on relational uncertainty (Knobloch & Solomon, 1999), this study found that at least three major sources of uncertainty exist for online daters: the self, the other, and the relationship. Although conceptually distinguishable, these three sources often bleed into each other, and they are copresent, suggesting that uncertainty is indeed fluid and multilayered as proposed by Brashers (2001). This fluidity underscores the perceptual nature of uncertainty, which can also explain the complexity and the challenges of operationalizing uncertainty and distinguishing its facets empirically.

The most interesting finding with regards to the sources of uncertainty relates to the importance of the *self* in the online dating context, where previously uncertainty had been interpreted as other-focused (Corriero & Tong, 2016; Gibbs et al., 2010). One potential explanation for this lies in the CMC context where daters meet and interact. While the context will not fundamentally alter psychological and interactional processes that occur offline (Walther, 1992), it can heighten self awareness (Joinson, 2001), thus making the self more central in the experience and regulation of uncertainty.

Furthermore, the online dating contexts are all characterized - to different degrees - by the need to select appropriate matches among a multitude of profiles. This aspect is absent in traditional offline initiation contexts, where commonly people meet potential partners one at a

time, in a more organic way. The importance of decision-making in online dating and the affordances of text-based communication can contribute to the prominence of the self; since daters will spend relatively less time interacting, and more time screening and selecting potential matches, or pondering on the messages exchanged up to that point, the focus of their attention may shift from the other to their own thoughts, feelings, and decision-making.

A second interesting finding relates to potential gender effects, as uncertainty about the self - especially with regards to the dialectics between openness and closedness, and confidence in one's own judgment - appeared more pervasive among the women in the sample. Given the small sample size, it would be inappropriate to draw bold conclusions; however, I have tentatively hypothesized that women may be more subject to self doubt regarding their right to be picky, as well as about the accuracy of their own judgment, if they are sensitive to societal pressures toward finding a mate. As indicated by Budgeon (2015), singlehood still carries a stigma for women, and this may in turn amplify their fear of being single (Spielmann et al., 2013), thus leading them to question their own judgment and creating the tension between openness and closedness that female daters reported in my study.

However, the dialectical tension between closedness and openness could be unrelated to gender, as men could simply be less inclined to share their self-doubt than women are. If so, doubts about closedness and openness and about one's own judgment could alternatively be explained in relation to the abundance of choice characteristic of online dating settings. To select mates in a large pool, daters may not be able to maximize their certainty for each, and they may thus need to employ quick and dirty rules (heuristics), as well as predefined criteria to weed out the least interesting matches (Lenton & Stewart, 2008). However, by applying these decision-making strategies daters may find themselves unable to establish any connection, and this in turn may lead

them to question their mate selection standards and reaffirm the need to be more flexible and open - which implies greater certainty through more careful, comprehensive screening, but also greater cognitive effort.

In this sense, uncertainty about the self could be highly contextual, being heightened by negative environmental feedback (inability to find a mate) and dampened by positive feedback. If that is the case, the relevance of uncertainty about the self in this sample could be a byproduct of sampling itself, since this study included daters who were actively dating, and as such had not had yet the success they had hoped for. Thus, they may have also been more inclined to self-doubt, as opposed to daters who had been successful in finding a partner.

Other-uncertainty is not a new concept, and given the relational nature of this setting its relevance is not surprising. However, it is important to note that daters' relative lack of concern about safety or gross misrepresentation by others seems to reflect online dating's coming of age and daters' increased "literacy" in the use of the platforms. Female daters were generally satisfied with simple precautionary measures such as meeting in public places, not disclosing identifying information too soon, or alerting a friend about their whereabouts before going on a date. Most daters also reported a similar developmental arc, with safety concerns more salient at the beginning of their online dating experiences, and growing comfort with the process as they realized they were interacting mostly with other people like themselves.

Experiences of gross deception were very rare in this sample, and thus daters were mostly concerned about the fine boundaries between intentional and unintentional misrepresentation. In a sense, unintentional misrepresentation could make uncertainty even more problematic than intentional misrepresentation, since it transforms uncertainty from a unidimensional, other-focused, and relatively tractable experience, to a more nuanced integrative dilemma (Babrow,

2001) that cannot always be made tractable through additional information, and where doubts about the self and about the other are inextricable.

Not surprisingly, communication was central to the experience of *relational* uncertainty; however, the relationship between communication and information on one side and uncertainty on the other appeared more complex than posited by URT (Berger & Calabrese, 1975), and more in line with theories that problematize uncertainty (Brashers, 2001; Babrow, 2001). The amount of information exchanged or acquired was rarely related to uncertainty in a linear fashion, as information and communication could both decrease uncertainty and increase it. What often mattered more than volume were the quality of the information, and the quality of communication overall.

When daters felt that their expectations with regards to what constitutes a “natural” interaction were violated, they often would feel more uncertain, and they also seemed less inclined to think that their uncertainty could be resolved. This indicates that communicative goals are central for daters to the point that they can trump uncertainty-related goals, and that interactive information-seeking strategies are subject to an implicit, or socially-normative “etiquette.” The importance of communicative goals can be explained by the fact that communicative behaviors may be used by daters to make inferences about a potential match’s personality, as well as about overall compatibility. Thus, violations to the communicative etiquette could lead to disengagement if daters felt that such violations betrayed a misalignment in terms of relational goals.

The context also appeared to affect daters’ experience of relational uncertainty by enabling uncertainty inducing events and behaviors through the affordances of online, text-based communication and the nature of the online dating process. First of all, asynchronicity could become a driver of uncertainty when the lags between messages stretched beyond the limits of

what a dater was comfortable with, leading daters to doubt the other person's interest and the potential for the interaction to succeed. In a relational context rarefied by physical absence, and characterized by abundance of choice, daters were also aware that maintaining the communicative momentum of any given interaction was often key to the transition from online to offline, and this may have made them even more sensitive to the uncertainty created by time lags.

Time lags also carried the implicit threat of potential ghosting by an interaction partner, and the two experiences did not appear to be qualitatively different, since both were uncertainty inducing only insofar as the dater cared about the interaction, and both caused uncertainty through the same mechanism. While ghosting can also happen in relationships that have fully transitioned offline, it remains primarily an online-based dissolution strategy (LeFebvre et al., 2017), and indeed daters tended to associate chronemics-driven uncertainty to the online context.

The mechanism by which time lags and ghosting create uncertainty may be a violation of Grice's cooperative principle (1975), whereby communicators expect an interaction partner to provide information that is both sufficient and accurate. Both time lags and ghosting represent failures to communicate cooperatively, which will leave daters struggling to explain the other's behavior, but also often uncertain about their own.

The consequences of time lags and ghosting may be particularly negative when the dater who is on the receiving end of delayed responses or ghosting fails to interpret the "cues" correctly, or refuses to accept the impossibility of the situation on the basis of what Babrow (2001) would call a "lack of proof." This denial may in turn induce a strong cognitive dissonance that can be appeased only at a great emotional and cognitive cost, leading to an extremely frustrating experience of uncertainty that will also reflect very negatively on the online dating process.

Finally, relational uncertainty can be heightened by the online dating context as the process relies on modality switches for relationship progression, and such switches offer multiple opportunities for expectancy violations and thus increased uncertainty. Together with chronemics, modality switches represent context-specific causes of relational uncertainty that are absent in offline initiation contexts, and their relevance for daters' experience of uncertainty and for the uncertainty process as a whole suggests that the context does indeed matter, and that it may have profound consequences on relationship formation through heightened perceptions of uncertainty.

Meanings of uncertainty. With regards to the meanings of uncertainty, this study found that uncertainty was defined as an information structuring dilemma, as an instinctive reaction, or as "not knowing." The presence of these themes - all accounted for by Babrow's PI - has some major implications. First, it shows that uncertainty has multiple meanings that can be copresent - i.e., that it can be defined in multiple ways (Babrow, 2001), within the broader definition of uncertainty in terms of problematic integration. This may contribute to explain the challenges of operationalizing uncertainty in quantitative studies, and establishing it as a predictor of subsequent perceptions of behaviors in a univocal way. Second, these three themes also point to the fact that the existing models and theories of uncertainty need not be mutually exclusive, and that they can be considered as tackling different facets of the same construct.

In line with Babrow's PI theory (2001) information structuring was a key meaning of uncertainty that emerged from daters' accounts, as could be expected given the information-rich nature of online environments. Piecing together information, ordering it hierarchically, deciding which elements are relevant and which were not are some of the challenges that daters faced when they tried to make uncertainty tractable or malleable. This process could be further complicated when values, beliefs, and probabilities were injected in the dilemma, resulting in what I called

“broad” IS dilemmas. It is important to highlight that the integration process did not appear to be always performed consciously by daters, but that it seemed to become more salient as it required more cognitive effort or uncertainty was more goal-incongruent.

The second theme - uncertainty as an instinctive reaction - relates to the first insofar as intractable structuring dilemmas may be caused by information in the environment that violates expectations and cannot be reconciled with other information, values, or beliefs, resulting in a threat appraisal. In other words, while the first theme encapsulates the cognitive meaning of uncertainty, this second theme could be considered its biopsychological equivalent. While this second reading, informed by Hirsch and Inzlicht (2008) and Lazarus’ (1991) research, appears to contradict Babrow’s (2001) claim that uncertainty is not intrinsically bad, and confirm theories that link uncertainty to anxiety (e.g., Fowler & Afifi, 2011), that is not necessarily the case. This point will be explored in more detail in the section dedicated to uncertainty appraisals, but suffice here to say that it is possible that uncertainty that is more benign - for example because it is more tractable, or less relevant - may remain below the threshold of attention (see Hirsch & Inzlicht, 2008) and thus may not be accessible when daters were asked to describe their experiences of uncertainty. Thus, uncertainty may not be inherently negative, but positive or neutral uncertainty may simply fail to capture our attention or failed to be labeled as “uncertainty.”

Lastly, it is interesting to note that when daters in this study discussed uncertainty in terms of “not knowing,” they did not refer to epistemological uncertainty - the lack of knowledge central to URT - but rather to what Babrow (2001) defines as “ontological” uncertainty, or the uncertainty that relates to the nature of the world and of experience itself. To an extent, daters seemed to consider uncertainty as intrinsic to the dating process itself, and more broadly, to life. As I will show later, this in turn had profound consequences on daters’ approach to coping, since it shifted

the emphasis from solving or reducing uncertainty *interpersonally* to more acceptance-based, *intrapersonal* strategies.

Uncertainty appraisals. Negative appraisals of uncertainty were far more common than positive ones among the daters I interviewed, and in line with theories of stress and arousal regulation (Blascovich, 1992; Lazarus, 1991), they were accompanied by different negative emotions, especially anxiety and frustration. Positive evaluations of uncertainty were less common, and generally linked in this sample to what is known as a “reappraisal,” or a subsequent reevaluation of uncertainty that can also be considered part of the coping process.

As I tentatively suggested in Chapter 4, the prevalence of negative appraisals does not automatically invalidate Babrow’s (2001) and Brashers’ (2001) contention that uncertainty is not inherently negative, but it points to the complexity of describing an experience that is characterized by theoretically different stages of appraisal, reappraisal, and coping that are so far undistinguishable empirically (see Lazarus, 1991), and that can occur consciously and nonconsciously. Blascovich and Berry Mendes (2000) remind us that cognitive and affective appraisals can co-occur and that they can take place below the threshold of awareness, in such a way that individuals may not even realize they are appraising uncertainty - and even less so that they are integrating it in within their preexisting web of beliefs and values (Babrow, 2001) - unless the appraising process redirects their attention, possibly due to a stronger emotional response or more effortful cognitive processing.

If this is the case, situations, people, or events characterized by more benign or tractable “uncertainty” may not even bubble to the surface of daters’ minds, resulting in a prevalence of negative recollections. However, this interpretation leads to another problem: If some situations characterized by unknowns or dilemmas are processed nonconsciously and do not induce a

cognitive or affective response, should we still call that uncertainty? If uncertainty is indeed perceptual (Brashers, 2001), does it even exist if it is not consciously perceived?

By the very definition of uncertainty as problematic integration, or IS dilemma (Babrow, 2001) or as a perceived incongruence between expectations and actuality (Hirsh & Inzlicht, 2008), or again as the anticipation of ill-defined threat (Lazarus, 1991) it would seem that what we *call* uncertainty carries an implicitly negative connotation. By contrast, if something we don't know or we can't explain does not capture our attention, it may not be labeled at all. This would imply that uncertainty is indeed intrinsically negative, because what is positive or neutral would not even require conscious labeling and processing. How can this then be reconciled with findings that indicate that uncertainty can be evaluated positively?

One possibility is that positive evaluations of uncertainty may be mostly *reappraisals*, or revaluations forced by situations in which uncertainty is intractable but must be accepted as a given, or again appears to lead to the most convenient state of things. For example, a dater may want to know more about a potential match, or may be alerted to some incongruences in the way they present themselves, and so forth. This may trigger a feeling of uncertainty associated with a state of arousal, but the dater may also tell herself that to know everything right away would spoil the pleasure, and thus come to reappraise uncertainty as slightly positive. However, since appraisal and reappraisal cannot necessarily - not yet?- be empirically distinguished, paradoxically Babrow's and Brashers' contention that uncertainty can be appraised positively remains true, even if the positive evaluation is not the primary response, but only the secondary appraisal.

To conclude, I am inclined to think that the perceptual, conscious experience of uncertainty implies a feeling of discomfort or dissonance that can potentially be made positive through reappraisal; however, I also think that determining whether uncertainty is intrinsically negative is

not possible until we can empirically measure and distinguish cognitive and affective responses that occur below the threshold of consciousness.

However, I would also argue that reappraisals cannot transform just any uncertainty into a positive experience, and therein lies another potential limitation of Brashers' and Babrow's theoretical approach. Based on my analysis, in Chapter 4, I proposed that a combination of factors derived from Babrow (2001) and Brashers' (2001) theories will determine a dater's perception of what is *acceptable* and what is *unacceptable* uncertainty. Depending on whether uncertainty is relevant to a dater's goal, whether the state of uncertainty hinders or facilitates that goal, and whether it is tractable, uncertainty will be considered more or less acceptable. Situations in which daters feel their primary goals are at stake, or situations that can be untangled only through intense cognitive effort (intractable dilemmas) will likely be considered unacceptable, and prompt the dater to disengage from the interaction.

What emerges here is the paradox that has been mentioned multiple times throughout the analysis: uncertainty that is intractable, and that potentially hinders core goals, will often be resolved by transforming it into its opposite: certainty. In other words, if uncertainty becomes unacceptable, it may be resolved forcedly by assigning zero value to the situation, person, or interaction that cause uncertainty, thus transforming uncertainty into the certainty that the situation, person, or interaction is of no interest to the dater. Uncertainty is not "resolved" in the traditional sense; rather it is made irrelevant thorough a change in the daters' evaluative orientation toward the person or situation that caused it. This highlights to another finding of this study, which points to the fact that *interpersonal* coping strategies can be sometimes complemented or supplanted by *intrapersonal* coping strategies that do not rely at all on interpersonal communication. This finding will be discussed in more detail in the section dedicated to coping.

While Babrow (2001) and Brashers (2001) propose that uncertainty can also be appraised positively, such cases were limited in this sample, and generally involved situations in which major uncertainties had already been solved or coped with. For example, the uncertainty regarding a potential match's real intentions or values was not tolerable for long, but daters seemed more often inclined to accept the uncertainty that characterizes first interactions and courtship, including not knowing what the other person is thinking, figuring out the potential for reciprocal interest, untangling one's own feelings, and so forth. However, it is worth noting that daters were not *actively* seeking uncertainty, but rather abstaining from seeking additional information, and rather letting it emerge more organically within the context of a given interaction.

Positive reappraisals were sometimes reported, but they were more likely to happen when daters felt they did not have any choice - for example, when the only choice was between accepting the uncertainty of online dating environments or abandoning online dating altogether. In these cases, uncertainty was considered unacceptable and linked to negative emotions, but given that daters also judged it to be intrinsic to the process, they had no other choice than reappraising it to make it somehow acceptable.

Finally, it is important to highlight that the prevalence of negative appraisals observed here may be a product of daters' relationship goals. Corriero and Tong's (2016) study suggests that sexual goals may lead daters to actively seek uncertainty, as ambiguating information and probabilities may enable them to pursue their goal more easily. By contrast, when daters are seeking a relationship, they may desire more information to evaluate a potential partner's fit, and thus they may be more likely to appraise uncertainty negatively, and less inclined to tolerate it. Given the limited sample size and the qualitative nature of this study, I cannot draw a real conclusion regarding the link between relationship goals and appraisals, but the results presented

here complement well Corriero and Tong's findings, and suggest an interesting direction for future research.

Coping with uncertainty. One of the major contributions of this study to the interpersonal uncertainty literature rests in the confirmation that responses to uncertainty are more varied than what proposed by URT, in line with Babrow's (2001) and Brashers' (2001) theories. In particular, this study suggests that the nature of the online dating context - where information is not always accessible, and where the abundance of date choices makes maximizing uncertainty very impractical - may increase reliance on *intrapersonal* coping strategies. In contrast to *interpersonal* coping strategies (such as interactive information-seeking and communication more broadly), intrapersonal strategies rely on cognitive and affective processes that take place *within* the individual, and that allow daters to make uncertainty tractable without necessarily seeking any additional information or communicative interaction.

Accepting uncertainty, adopting different decision-making strategies, or reappraising uncertainty were commonly reported by daters in a way that highlighted how they considered uncertainty to be a chronic state, rather than an episodic experience, within the online dating context, but also more broadly in life. The relevance of heuristics is particularly interesting because it aligns with the literature on mate selection (Lenton & Stewart, 2008; Lenton & Francesconi, 2010) and it also shows that to truly understand daters' responses to uncertainty and uncertainty's relational consequences, the characteristics of the context cannot be ignored.

URT-based studies of interpersonal uncertainty have generally assumed one-on-one interactions, and while this may be appropriate in the context of offline initiation, these interview data demonstrate how the same is not true in online initiation contexts. Once we account for the complexities of mate selection in a choice-rich environment, and for the occurrence of

simultaneous interactions, the URT-based assumption that certainty needs to be maximized for any given interaction becomes less tenable, and the relevance of information-seeking is subsequently reduced.

It is possible that recourse to these two different types of coping strategies - interpersonal and intrapersonal - may depend on the stage of any given interaction. For example, in the early stages of an interaction daters may rely more heavily on strategies that will allow them to cope with uncertainty internally, first and foremost noncompensatory decision-making strategies that maximize efficiency and reduce cognitive effort by limiting the need to seek and/or process information. This is because at an early stage, involvement is generally low, and daters may be unsure that it is warranted to invest time and effort in maximizing uncertainty about any given potential match.

By contrast, at a relatively later stage (even after a few messages), daters may feel that more involved interpersonal coping strategies - including interactive information-seeking and modality switches - are warranted. Since this study did not explicitly seek to distinguish between different stages of the initiation process, the potential for intrapersonal and interpersonal coping strategies to be applied at different times in the process remains speculative. However, I believe this would be a worthwhile direction for future studies, as it may add nuance to our understanding of uncertainty and coping by explaining not just which strategies exist, but why they may be more or less useful depending on each stage of the initiation process.

Among interpersonal coping strategies, the modality-switch from online to offline was the single most powerful strategy for daters to cope with uncertainty, and its occurrence at later stages of the process seems in line with the hypothesis I proposed above regarding the use of interpersonal versus intrapersonal strategies. Daters often reported that they could not really “know” until they

met a potential match in person, but at the same time, they would not meet in person until they knew enough to dispel some concerns, and have a good sense of potential compatibility.

Herein lies another paradoxical aspect of uncertainty in the online dating context: Uncertainty cannot not be fully solved until an offline meeting occurs, but that same uncertainty often prevents the offline meeting to occur in the first place, resulting in a constant tension about communicative interactions that is only found within the online dating context. In this sense, the context truly shapes daters' experience of uncertainty and potentially affects relationship formation by problematizing one of the major strategies to solve uncertainty: face to face communication.

Implications for Theory

Although research on uncertainty has recently made progress with Babrow's (2001) and Brashers' (2001) theories and studies drawing from them, our understanding of the process and of the experience remains limited by a number of factors, including the frequent refusal to entertain uncertainty's multiple meanings, neglecting the role of the context in shaping goals and defining and constraining coping strategies, as well as an imperfect understanding of the cognitive and affective processes underlying the perception of uncertainty due to the limitations of current empirical measurement.

This study makes some steps toward overcoming some of the limitations described above, in particular by widening the definition of uncertainty and shedding some light on the appraisal and coping process, but also by emphasizing the way uncertainty permeates the experience of online initiation and courtship, and pointing to the complex influence exerted by the context on this experience and process.

As a whole, the data analyzed here shows daters had complex understandings of uncertainty and of its sources that went well beyond the traditional conceptualization of uncertainty

as other-focused “not knowing.” Daters acknowledged the existence of multiple sources and multiple meanings of uncertainty that would often overlap and transform into one another, rendering uncertainty pervasive to their online dating experience. This study’s findings suggests that uncertainty should not be treated as a monolithic concept in future studies of interpersonal communication. Instead, researchers should make an effort to account for self, other, and relationship as interrelated sources of uncertainty, possibly investigating how a given context increases the importance of one or the other. For instance, in online dating contexts (as opposed to offline) there may be greater relevance of the self as a source of uncertainty because the emphasis is shifted from interaction, and communicative, interpersonal coping strategies, to mate selection and decision-making, which are primarily intrapersonal and do not rely as heavily on interpersonal communication. Thus at the very least, researchers should acknowledge which source of uncertainty they are investigating and the limitations implicit in focusing on only one aspect of the uncertainty construct.

Furthermore, this analysis also offered further insight into the uncertainty *process*, showing that daters’ appraisals of uncertainty are shaped by considerations regarding the goal relevance and goal congruence of uncertainty, as well as its tractability, and that uncertainty may not always be salient for daters. The data presented here suggests that to resolve the ongoing debate about how uncertainty is appraised it may be necessary first to agree on a definition of uncertainty, and second to further investigate and measure empirically the biopsychological processes underlying uncertainty. In particular, how do we account for - and how do we talk about - situations in which, despite a lack of knowledge or the presence a dilemma, the individual does not “feel” uncertain (and may or may not be aware of the cognitive dimension of uncertainty)? Additionally, how shall we treat the emotional and cognitive aspects of uncertainty with respect to defining the overall

experience of it? While this study did not truly offer a solution to this question, its contribution lies in exposing the complexity of teasing apart the affective and cognitive dimensions of a process that has some nonconscious components, and the consequent complexity of providing a finite, measurable definition and operationalization of said concept.

This study also offered insight into how the context influenced the strategies enacted by daters to cope with uncertainty, with intrapersonal strategies becoming often as relevant as interpersonal, information-based coping strategies due to the emphasis on mate selection in online dating platforms. This confirms we need to expand our understanding of coping beyond information-based uncertainty reduction, and suggests that to do so we need to examine and take into account the context to understand how it shapes and constraints goals - relational and communicative - but also how its characteristics or affordances limit or affect communication and the underlying psychological processes.

By recognizing the limitations that the context and the goals it serves impose on communication, it is also possible to understand the peculiar ways in which the context affects the experience and the process of uncertainty by making communication *problematic*. Daters often felt they needed to make uncertainty acceptable before deciding to interact interpersonally, either in writing or offline; this in turn created a paradox that seems very specific to online dating environments, whereby the best strategy to cope with uncertainty - communication - becomes problematic in itself.

Online daters decide to communicate only after some initial screening, and they arrive at a face to face meeting after more or less lengthy text-based interactions; they have to decide if they want to communicate with a potential match first, and if they want to meet afterwards, and all those decisions are fraught with doubts and concerns. By contrast, in offline romantic relationship

initiation contexts, communication (and the face to face meeting), are often the zero point, and daters do not have to *decide* about it; it just happens. Even if they are set up on a date by friends, their uncertainty may not be as unacceptable as in online dating, because their friends serve as warrants for the interaction and for potential compatibility. Thus, uncertainty can be more disruptive online if daters are not able to short circuit the uncertainty paradox - Won't know until I meet; can't meet until I know - and communicate or "jump" into an offline meeting without too much hesitation.

Implications for Practice

Online dating environments have very specific characteristics that potentially heighten uncertainty and affect how daters cope with it through communication in the pursuit of their relational goals. The nature of the online dating process gives rise to the peculiar paradox described above, whereby communication can help solve the integrative dilemmas that feed into perceptions of uncertainty, but is itself often problematic. This may negatively affect relationship initiation dynamics unless daters are able to recognize how the context influences their behaviors, and enact strategies that short circuit the paradox, including risk-acceptance and quick transitions from online to offline.

Fortunately, there is some evidence that daters can learn and adapt, and that adaptation will enable them to reduce the negative impact of the uncertainty-inducing characteristic of online dating environments. Learning arcs can occur at both the societal and at the individual levels, and this compounded effect may ultimately reduce the difference between the consequences of uncertainty in online and offline contexts through increased "literacy" in the use of the platforms. The relative lack of concern around safety and intentional misrepresentation, for example, parallels

society's increased acceptance of online dating, the recognition that everybody does it, and that a bit of diffidence is enough to ensure safety.

Similarly, as daters learn to recognize and be aware of the ways in which the context affects their decision-making process, their perceptions, their expectations, and the way they communicate with others, they may adapt to it, thus effectively minimizing the negative effects of uncertainty - for example by avoiding lengthy online exchanges and meeting in person more quickly, or by accepting the possibility of making mistakes in their evaluations and missing an interesting opportunity.

Limitations

This study presents several limitations that must be acknowledged in order to put the findings into due perspective. First of all, due to its qualitative nature, causal claims cannot be made, and the interpretations proposed here would need to be tested explicitly to verify their explanatory and predictive value. However, the sensitizing concepts drawn from Brashers and Babrow proved to be a good fit to explain and interpret daters' accounts, and it is also possible that experimental studies may not be the best methodology to investigate comprehensively an experience and process that are fluid and multilayered. At the very least, this study points to the need to debate which is the best methodological approach to study uncertainty, and to acknowledge the limitations inherent in extant models of uncertainty which will necessarily only capture a facet of it.

Secondly, women were overrepresented in the sample. The characteristics of the sample clearly limit the generalizability of the findings, especially with regards to any potential gender effect. A more balanced sample, and potentially gender-congruent interviewers, may allow to clarify whether some of the differences observed in this study were due to demand bias and to the

sample composition, or if men and women truly vary in their sensitivity to different sources of uncertainty. To the degree that women are more sensitive to the stigma of singlehood, it is plausible that they would be more inclined to problematize choice during mate selection, but this would be better established within an experimental setting.

With regards to sample size, only 13 daters were interviewed, reducing the possibility of drawing inferences about broader trends. However, saturation was reached with the first six interviews, and subsequent coding only added a few new codes and additional nuance to existing ones, suggesting that the small sample size does not completely compromise the meaningfulness of the conclusions proposed here. However, it must be noted that the selection criteria requiring participants to be actively dating may have led to a different kind of bias. Active daters looking for a relationship by definition have not yet had success in their search for a mate, and this could lead them to focus more on the self as a source of uncertainty if they doubt their own ability to judge others accurately or make the best choices. Similarly, they could also appraise uncertainty more negatively if their overall online dating experience has failed to meet their needs, exposing them to doubts and dilemmas without rewarding their efforts. It is possible that among existing couples who have met online and developed a relationship, recollections of uncertainty may be less negative.

Directions for Future Research

This study suggests multiple different avenues for future research. A first promising line of research could tie uncertainty more explicitly to Expectancy Violation Theory (Burgoon & Hale, 1988). Daters' definition of uncertainty in terms of alarm bell, or red flag, explained here on the basis of a neuropsychological approach (Hirsh & Inzlicht, 2008) and PI (Babrow, 2001), seems to warrant an interpretation of uncertainty in terms of a violation of expectancies. PI itself bears

some similarity to EVT as it postulates that uncertainty stems from integration that is “problematic.” Expectancy violations were also used in this study to explain how modality switches could not only alleviate uncertainty, but also increase it, in line with results by Ramirez et al. (2014). Future research could explore the scope and boundary conditions of a definition of uncertainty based on EVT.

Other interesting avenues concern the potential gender effects in relation to the sources of uncertainty, and further investigations into how goal relevance, goal congruence, and tractability of uncertainty shape perceptions of what is acceptable and what is not. With regards to gender effects, this study’s ability to draw conclusion about differences in self-uncertainty between men and women are limited, but given the increasing number of people relying on online dating to find a partner it would be important to understand if the context exacerbates doubts about the self in women more so than men as a function of its emphasis on mate selection. If that is the case, dating online may lead to more frustrating experiences for women as a result of the tension between openness and closedness, and even negatively affect their self confidence. Future studies could investigate this by recruiting a larger sample with a more even representation of the genders.

In terms of the second point, this study has offered a tentative explanation regarding uncertainty salience and its acceptability based on goal relevance, goal congruence, and tractability, pointing to how these factors interact to lead to daters disengaging from an interaction. Experimental studies may provide a better understanding of how these three variables interact to produce relational outcomes. However, I believe that naturalism would be imperative for the success of any such study to trigger the desired perceptions; simple mock up profiles or scenarios may possibly capture the cognitive aspect of uncertainty but may be inadequate to induce arousal and the affective responses that according to theory also play a part in the process.

Conclusion

The nature of uncertainty and its effects on relationship formation have long time been debated, but this study shows that to understand uncertainty and its consequences it is paramount to focus on contextual differences to identify interactants' goals, correctly assess the nature and constraints to which information and communication are subject to, and thus understand which coping strategies are more likely to be adopted and what role communication plays in the process as a whole. By focusing our attention on the context, and problematizing the concept of uncertainty in light of the lived environment which shapes and constrains communication, it will be possible to gain a deeper understanding of how online dating platforms affect relationship formation dynamics at the individual and social level.

APPENDIX

Uncertainty in Online Daters' Experience: Interview Protocol

Participant requirements:

- Participants must be aged 18 or older
- Participants must be active on one or more online dating websites and/or apps (e.g., Match.com, eHarmony, BlackPeopleMeet, Tinder, Bumble)
- Participants must be single or divorced, but not married
- Participants should have had at least 5 conversations in the 10 days prior to the study sign-up.
- Participants must be heterosexual

Interview

- The researcher will confirm that participants meet the inclusion criteria
- The researcher will explain the nature of the study and provide prospective participants with the Informed Consent Form to obtain signature
- The researcher will illustrate the details of the study
- The researcher will collect demographic information: Age, Occupation, Ethnicity
- Approximately 10-20 interviews will be conducted

a) Pre Interview Statement:

Hi! My name is Elena, and I am the researcher in this study. I will be interviewing you today. I am a Ph.D. candidate at Wayne State University and this study is part of my dissertation. My focus is on daters' experience of uncertainty as they date online.

This interview will take around 60-90 minutes. I will ask you to show me some of the messages you have received during this period and to describe situations in which you felt uncertain. I will ask you what made you feel uncertain and how you reacted. I may ask you to quote excerpts from the messages you received, and to show me the messages you may have written in response.

Before we start, I would like to remind you that I will record the interview so that I can pay attention to what you tell me. Your name and identity will only appear in a master's list that will be password protected, and only accessible to me. The master's list will link your name to a pseudonym of your choice. On all other documents and data related to you, you will be identified with said pseudonym. Only the primary researcher (me) will have access to the recordings to prepare the written transcript.

Remember that this is voluntary and you do not have to answer questions that make you uncomfortable. You can also terminate the interview at any time. Do you have any questions before we begin?

[Turn on computer and let participants log onto their online dating account]

b) Interview

[Turn on tape recorder]

Before we start discussing the messages you have received...

- Can you tell me a little bit about your online dating experience so far?
 - How long have you been dating online?
 - Why do you date online?
 - How do you like it?

Thank you. Now that I have some background, let's move to what happened in the last few days. Where do you want to start?

[Participant opens her inbox and shows first message]

1. So, tell me about this message...
 - a. Probe: appraisals
 - b. Probe: perceptions of uncertainty
 - c. Probe: perceptions of the self, sender, relationship
 - d. Probe: coping strategies
2. Did the message inspire you to follow up on it?
 - a. **[If NO]:** Can you explain why you did not follow up?
Probe to see if (un)certainty played a role
[Move to next message and start again]
 - b. **[If YES]:** So, let's discuss what you did after reading the message...
 - i. Probe: information-seeking
 - ii. Probe: perceptions of uncertainty
 - iii. Probe: perceptions of self, other, relationship
3. At this point, you had to decide whether you wanted to respond or not...Did you respond?
 - a. **[If NO]:** Can you explain why you decided not to respond?
Probe to see if uncertainty played a role
[Move to next message and start again]
 - b. **[If YES]:** Can you explain why you decided to respond?
 - i. Probe: perceptions of uncertainty
 - ii. Probe: perceptions of self, other, relationship

[Ask subject to share response and remind them that it may be used for analysis, and excerpts may be quoted but in fully anonymized form]

- c. Can you tell me more about your response?
 - i. Probe: emotions
 - ii. Probe: perceptions of uncertainty

- iii. Probe: perceptions of self, other, relationship
4. Thank you! I am curious to know what happened afterwards...Did you receive a reply?
 - a. **[If NO]:** How do you feel about the reply you received?
 - i. Probe: perceptions of uncertainty
 - ii. Probe: perceptions of self, other, relationship
 - [Move to next message and start again]**
 - b. **[If YES]:** How do you feel about it?
 - c. What has happened since the reply?
 - i. Probe to understand how the experience of uncertainty has changed over the course of the exchange
 - d. Did you decide to follow up with a meeting in person?
 5. Now, I'd like to ask you to draw a line on this graph to show me how your feelings of uncertainty developed. On the horizontal axis, you can mark any event (i.e., initial message, information-seeking). On the vertical axis, it's your level of uncertainty. I will help you. **[Give participant a blank sheet with a and a pen to draw]**
 - a. Ask participant how much uncertainty they felt at different stages of the exchange to set the points.
 - b. Ask them to draw a line connecting the points
 - c. Ask participants to mark the event that terminated the exchange or escalated it to another medium.
 6. Thank you. Now, let's move to another message...

[Repeat the process for as many as 10 messages, depending on time availability]

Thank you! Now I would like to ask you a few questions about your experience of online dating in general.

- Thinking broadly, can you describe what is uncertainty for you when you date online, or situations in which you have felt uncertain?
 - Probe to understand what are the *sources, the forms, and the objects* of uncertainty
 - Probe to understand how uncertainty is *appraised* emotionally and what influences different appraisals
 - Probe to understand what *coping strategies* may be used
- Now, can you describe if and how you think your uncertainty may affect your search for a partner online?
- Uncertainty threshold & general UCT level

Thank you for sharing your experience with me...

- a. Is there anything you want to add?
- b. Do you have a pseudonym that you'd like me to use in this study to identify you?

Debriefing

Unless you have any questions for me, this is the end of the interview.

[Turn off tape-recorded]

Thank you for your time. We really appreciate all of the information you reported. If you have any questions or concerns, please don't hesitate to get in touch with me.

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UNCERTAINTY IN ONLINE DATING**ABSTRACT**

by

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Relationship initiation is a moment typically characterized by high uncertainty, and online dating platforms have the potential to heighten uncertainty and thus deeply affect relationship formation dynamics. While previous research has focused on other-uncertainty and on its reduction through information-seeking, this qualitative study adopts Babrow's (2001) problematic integration (PI) theory to expand our understanding of uncertainty in online dating beyond other-focused uncertainty, by exploring the meanings and sources of uncertainty in online dating, how uncertainty is appraised, and what strategies daters adopt to cope with it.

Data obtained from 13 semi-structured interviews with active online daters was analyzed using thematic analysis. The analysis uncovered multiple sources of uncertainty related to the self, the other, and the relationship, and multiple epistemological and ontological meanings daters ascribed to uncertainty that validated PI's perspective. Daters often appraised uncertainty as undesirable, but they also appeared willing to tolerate unsolved uncertainty they deemed acceptable; furthermore, uncertainty was not always salient in their interactions, suggesting the need for further investigation into the biopsychological aspects of the appraisal process.

Daters' varied coping strategies revealed that uncertainty reduction was often forgone when it conflicted with communication goals, and the reliance on decision-making heuristics reflected the recognition that uncertainty could rarely be solved in full, especially in a context characterized by an emphasis on mate selection and abundance of choice. The analysis also revealed that the online dating process has the potential to increase the negative effects of uncertainty by delaying interpersonal communication and thus problematizing the most significant coping strategy available to daters.

AUTOBIOGRAPHICAL STATEMENT

Elena Corriero is a media analysis professional and a scholar of interpersonal communication. Her research focuses on the psychological and communicative aspects the uncertainty process and experience. Her research has appeared in *Mobile Media & Communication*, *Journal of Family Psychology* and she has contributed to the *SAGE Encyclopedia of Research Methods*