Abstract

Drawing on abundant research on decision-making, expertise, and cognitive psychology, I make a case for using cognitive reflection to improve mediators’ decision-making. I propose that automatic, intuitive decisions dominate mediators’ judgment in the dynamic, fast-paced and often uncertain circumstances of mediation. Although faulty at times, these automatic judgments could gradually improve. Considering the interplay between conscious and unconscious cognitive processing, I propose that the quality of mediators’ decisions can improve by conscious reflection. It would primarily benefit a broader, complex range of intangible goals such as social-psychological that have been typically overlooked in mediation. Cognitive processing underpinning automatic unconscious decisions are reviewed to support these propositions and to show that learning and conscious activities play a decisive role in shaping automatic decisions. Two conditions are pertinent for improving the quality intuitive judgments: 1) An environment that provides constant exposure to regularly repeated cues, and 2) sufficient opportunities for learning the environment. Examples from an observational study conducted in a psychology laboratory on mediators who mediated a simulated conflict in a psychology laboratory, provide additional support for the importance of continuous reflective, professional development. Since no empirical study on the effectiveness of reflective processing was found in mediation, I draw from research conducted in other fields such as management and medicine to show that systematic and purposely reflection supports the formation of complex domain schema that subsequently develops the quality of automatic judgments. I provide a part of a reflective protocol that I developed in the Appendix.
INTRODUCTION
Mediators function within dynamic, fast-paced conditions in which they are constantly dealing with novel and often unpredicted social situations. Mediators work with a variety of clients who are struggling with different conflicts of intense emotions. Mediators are expected to support parties and their companions on multiple levels. Beyond addressing tangible goals, we know that parties and negotiators are highly interested in attending a wide array of social-psychological issues including their feelings about themselves, relational matters, and process related goals (Curhan, Elfenbein, and Xu 2006) in addition to tangible goals. Addressing these expectations requires expertise. Despite the centrality of these goals in the eyes of parties, negotiators, and mediators, these social psychological goals are often overlooked (e.g., Bush and Folger 1994; Monk and Winslade 2001; Charkoudian et al. 2009; Picard 2000; Peleg-Baker 2012; Peleg-Baker et al. 2012). A few reasons can be considered for understanding the low attention given to social-psychological goals:

1. **Complex understanding of mediation practice is at its infancy phase.** Mediation is an emerging profession with no agreed-upon criteria to assess mediators’ expertise. Mediation literature is abundant but fragmented, covering topics such as the advantages of using mediation, mediation conditions and contextual influences, strategies, tactics, and styles (Wall and Chan-Serafin 2010; Kressel 2006; Pruitt 2012). Still lacking is a comprehensive understanding of the wide array of possible mediation goals as well as how mediators make decisions. As mediation becomes widely accepted and expertise more in demand, a deeper, more complex understanding of the practice, beyond reaching agreements, is critical. Practice is usually not derived from evidence-based inquiry (Weiner 2012), and although mediation is a dynamic field of practice and research, social-psychological research on mediation has dwindled considerably in the last ten years (Pruitt, 2012). Pruitt was able to locate two studies (Conlon, Moon, and Ng 2002; Kressel and Gadlin 2009), and another study by Kressel and colleagues (2012) was reported in the same year.

2. **Mediators are typically focus on agreement making.** Research shows that unconscious
activity dominates experts’ decisions and that they are likely to be automatic and intuitive, especially under pressure and in uncertain environments (Simon 1992; Bodenhausen and Todd 2010; Deutsch and Strack 2010; Evans 2011). Therefore, it is reasonable to assume that mediators’ decisions in the dynamic context of mediation are no different. Furthermore, conflict resolution and mediation professionals have been traditionally focusing on tangible objective outcomes, e.g., mutually satisfactory solutions, settlements or agreement-making (e.g., Bush and Folger 1994; Picard 2000; Charkoudian et al. 2009; Kressel 2009). Therefore, if tangible outcomes are so central, mediators automatically attend tangible issues while giving less attention to social-psychological goals.

3. **The naive mediator might not be fully aware of subtle psychological dimensions.** Mediators might not be sufficiently aware of or ready to deal with implicit cognitive, relational biases and noises and the negative emotions powerfully involved in mediation. As their secondary profession, mediators might lack the expertise or might not have sufficient psychological knowledge to address these complex psychological and emotional complexities effectively. I discuss this along with the possibility of pseudo expertise later, in the section on the Automaticity and Overestimation of Mediators’ Decisions.

4. **Insufficient emphasis on ongoing and reflective development.** Though learning is crucial for continuous professional development and effectively addressing multidimensional issues in mediation, systematic education is not prevalent in the field. Rather, initial, formal, and short-term mediation training is a typical mediators’ training, and in many cases, it is limited to basic forty hours of certificate program (e.g., Hedeen, Raines and Barton 2010; Kressel et al. 2012). Additionally, mediation training focuses primarily on the acquisition of techniques and skills rather than on personal and professional continuous transformation and development. The latter is critical for effectively addressing mediation complex social-psychological challenges.

Taken together, mediation expertise is not well established. Consequently, complex relational
and emotional goals are often missed. Considering the inevitability of automaticity of mediators' intuitive decisions, an important question is whether and in what ways mediators could improve the quality of their automatic judgments, especially whether and how they could improve attainment of social-psychological goals. I discuss this question in the following sections, but first, I examine the importance of social-psychological goals in mediation.

**Beyond Tangible Goals- Social Psychological Goals are Essential**

Mediation is a process in which an acceptable third party, without any power to prescribe solutions, assists parties to negotiate their differences (Kressel and Pruitt 1989; Wall, Stark, and Standifer 2001). As a relatively new profession, there is no firm understanding or agreement among scholars on its goals. As stated, parties and negotiators often express great interest in a wide range of social psychological goals, beyond tangible ones, such as their feelings about themselves, relational matters, and process related concerns (Curhan et al. 2006; Curhan et al. 2010). Similarly, mediators often describe their approach as eclectic. They express interest in pursuing both settlement and relational goals (e.g., Picard 2000; Charkoudian et al. 2009; Peleg-Baker 2012a). Despite their broad intention, mediators have been observed focusing mainly on tangible outcomes, e.g., settlements and agreement making while relatively neglecting social psychological goals (e.g., Picard 2000; Charkoudian et al. 2009; Peleg-Baker et al. 2012).

As mediation becomes widely accepted and expertise more in demand, a deeper, more complex understanding of its practice, beyond reaching agreements, is vital. Research on mediation styles provide mediators with explicit top-down guiding principles and offer them direction in a fast-paced and complex process of mediation. However, this research does not explain mediators' thinking processes and their decisions. Moreover, literature on styles is typically dichotomous like facilitative versus evaluative (Riskin 1996), problem-solving versus transformative (Bush and Folger 1994) and others (Silbey and Merry 1986; Kolb 1994). The combination of dichotomous frameworks along with the emphasis on agreement making offers too simple frames...
for understanding the complexity of mediation and mediators’ decision-making, particularly regarding the emotional and social-psychological issues.

Though tangible matters dominate the process, what leaves a significant emotional and psychological mark on the parties are relational and emotional aspects that are inseparable parts of conflict. Scholars have been challenging the rationalist assumption as an economically driven process that underlies the study of mediation and negotiation (Thompson 1990; Curhan et al. 2006). Thompson proposed two types of negotiation outcomes: economic—the explicit terms or products such as an agreement or division of resources, and social psychological, based on social perception and include three aspects—perceptions of the situation, of the other party, and of oneself (Thompson 1990).

In four studies, Curhan and colleagues (2006) explored the range of social psychological outcomes valued subjectively as consequences of negotiations. They provided an open-ended opportunity to widely diverse populations to express their subjective valuable outcomes and rate the importance of their business and personal negotiations. Using a variety of inductive and deductive methods, valuable outcomes were systematically identified and classified into four factors comprehensive framework—the Subjective Value Inventory (SVI): negotiators’ perceptions of tangible, the self, process, and relationship outcomes. Intriguingly, though participants mentioned objective, tangible outcomes, such as agreements, more frequently than other goals, the importance of tangible issues was not higher than social psychological outcomes such as relationship quality, face-saving, fairness, listening, and positive emotions. Additionally, one in five participants did not mention any tangible outcomes at all. Interestingly, in a sequel two-round negotiation study, negotiators’ social psychological outcomes in the first negotiation were a better predictor than objective outcomes of both the desire to negotiate again with the same counterpart, as well as of the objective outcome in the second negotiation (Curhan et al. 2010). These findings point at the significant role of social-psychological outcomes for negotiators.

New approaches to mediation emerging in the mid 1990’s emphasized the necessity of
addressing relational and developmental goals (e.g., Bush and Folger 1994; Winslade and Monk 2001). Moreover, self-reports present mediators’ aspiration to attain eclectic goals including psychological and relational and to use diverse styles (Picard 2000; Charkoudian et al. 2009; Kressel et al. 2012; Peleg-Baker 2012; Peleg-Baker et al. 2012). For example, in an exploratory study of mediators-instructors (Picard 2000), three patterns of styles were identified: pragmatic settlement/problem (25%); socioemotional, humanistic, and relational (21%); and mixed-pragmatic and socio-emotional (54%).

Although many mediators wish to move beyond a single style and to attain several socioemotional goals, observational studies show that most still focus on agreements when actually leading the process while relatively neglecting other goals when managing the process (e.g., Peleg-Baker et al. 2012; Charkoudian et al. 2009). Similarly, mediation lab studies reveal that while often mediators focus on agreements observed to neglect psychological, developmental or relational goals, they explicitly talk about the latter goals in pre-mediation statements and interviews as critical issues (Kressel, et al. 2012; Peleg-Baker et al., 2012). To conclude, while negotiators and mediators recognize a broader range of goals, in practice, they continue focusing on substantive matters. Mediators are called to improve their skills to address a wide-range of relational and emotional concerns effectively. Before discussing how we can go about improving mediators’ decisions, let us see first what processes are involved in how mediators make judgments. Understanding the automaticity of mediators’ decisions and their overconfidence as well as the role of conscious processes will shed light on what specifically is needed to be done. Then, I will move on to how mediators could develop their expertise and reduce the gap between aspirations and practice.

The Automaticity of Mediators’ Decisions

As noted, observing mediators' work reveals the automaticity of decisions about when and how to intervene. In psychology laboratory studies, mediators were observed making decisions
that swiftly and automatically. After viewing his recorded mediation, a mediator responded: “you miss things...I was watching the tape and critiquing what I had done. Sometimes I remembered...but I didn’t always...a lot of what I do is totally intuitive” (Kressel, et al. 2012; Peleg-Baker et al. 2012). Many judgments were observed as non-adaptive and inappropriate by observers and in contrast to the intentions expressed mediators by an initial interview. For example, facilitative mediators who talked in pre and post interviews about their win-win goals sought compromise very early in the process. They did not even explore underlying concerns to allow them to develop win-win solutions.

One mediator, for example, described himself as an eclectic mediator. In a pre-mediation interview, he talked about his multiple goals including win-win, empathy, validating the parties, improving relationships and friendship, and the importance of uncovering hidden issues. Instead, in practice, he led simple, linear and pragmatic process. He avidly focused on pursuing compromise to get to an agreement quickly. He also addressed only surface issues and repeatedly pushed aside any expression of emotions or any tension that could present a potential obstacle to an agreement. Another mediator also described himself as eclectic. He talked about providing counseling, helping the parties to improve relationship, and avoiding deciding for the disputants, brow-beating and being intolerant. In his actual performance, he was consistently observed to be evaluative and judgmental and had no tolerance for relational or emotional matters.

Evidence for automatic, unconscious processes has been rapidly growing in everyday life (Jacoby, Lindsay, and Toth 1992; Bargh and Chartrand 1999; Westen 1999), and in decision-making (Simon 1992; Bodenhausen and Todd 2010). Though efficient for adaptive behavior, some can be futile and prone to systematic biases and flaws (Nisbett and Ross 1980), especially in uncertain stressful settings (Tversky and Kahneman1974; Kahneman, Slovic, and Tversky 1982; Kahneman and Klein 2009). The context of mediation can often be stressful and uncertain.

It has been shown that experts are often unaware of their implicit cognitive model, which drives their behavior (Simon 1992). Implicit social cognition studies indicate that a multitude of
mental sub-processes are part of most behaviors without the individual being aware of them (Deutsch and Strack 2010), and that implicit attitudes, beliefs, and stereotypes shape behavior, which sometimes negates peoples' intentions (Wilson, Lindsey, and Schooler 2000; Deutsch and Strack 2006). Correspondingly, observational studies on mediators' work reveal how intuitive is mediators' performance (Kressel, et al. 2012; Peleg-Baker et al., 2012). Moreover, common salient goals such as settlements and agreements appear to become mainly automated.

Automatic, intuitive judgments are by their nature unconscious, fast, and involve an associative match (Simon 1992). Simon described intuitive decisions as "analyses frozen into habits and the capacity for rapid response through recognition" (Simon 1992: 139). Though many intuitive judgments are proficient and successful, it is not the case for all decisions of such type. Important to note, people often have no way to know the origin of their intuitive judgments and whether they are faulty or skilled (Kahneman and Klein 2009).

The Problem of Overestimation

People also overestimate their ability to make accurate judgments (Carroll, Sweeny, and Shepperd 2006) and are often overconfident even though their decisions are lacking (Kruger and Dunning 1999). Likewise, it has been claimed that pseudo experts, experts who have acquired expertise in other domains but lack adequate, relevant domain knowledge, might experience an illusion of validity: overconfidence in dealing with issues they might have little aptitude for (Kahneman and Klein 2009). Similarly, Mediators in laboratory studies conveyed high confidence with their work despite admitting, in a post-mediation interview, that they failed to achieve essential goals they described in a pre-mediation interview (Kressel et al. 2012; Peleg-Baker et al. 2012). Several lawyers-mediators expressed high confidence and often overestimated their mediation abilities. Despite ample knowledge of disputes' legal aspects, they exhibited relatively weak skills in handling latent psychological subtleties and relational dynamics. For the most part, they did not recognize it, nor reflect on it in a post-mediation interview or when provided the opportunity to
review their recorded mediation sessions. Another example from our lab studies was a divorce lawyer who stated in her initial interview process and psychological issues as her mediation goals (Kressel et al. 2012; Peleg-Baker et al. 2012). While she did show a theoretical understanding of underlying emotional and psychological dynamics and the need to use creative methods to explore them, she struggled with the how to apply her knowledge. She lacked the skills needed to implement the process she aspired. She wanted to empower parties and help them to untangle their issues, take the lead, and establish ownership but was unable to execute her mediation goals. With settlement at the forefront coupled with her limited skills to back up her understanding of the conflictual situation impaired her performance. She led an intense, erratic, unstructured and unbalanced mediation. Though she expressed dissatisfaction and was highly self-critical of her performance, she nevertheless remained extremely confident in her superior abilities.

Once again, we see how critical it is to Increase awareness to the automatic nature of mediators’ decision-making and how their decisions are dominantly driven by the desire to reach an agreement. Moreover, mediators’ overconfidence in their ability to accomplish their goals also stand in the way of quality processes. Mediators are unable to recognize these implicit challenges, and therefore, cannot properly tackle them. Let us see how these unconscious concerns might be attended.

**Quality Automatic Decisions Relies on Conscious Thought**

Although automatic, intuitive decisions appear involuntary and ostensibly uncontrollable, they are not made in a vacuum. Many decisions stem from specific experiences that determine their quality (Dreyfus and Dreyfus 1986; Bodenhausen and Todd 2010). They are learned, and conscious activity is critical in shaping them. To fully recognize this assertion, it is vital to understand perceptions of the function of consciousness in an unconscious decision. The claim that consciousness is entirely in charge of directing and controlling behavior has been under much criticism since Freud; some even doubt whether conscious thought is useful at all (Bargh and ...

Critiques of conscious thought include its low value and unreliable nature due to frequent false conscious understandings and wrong behavioral explanations (e.g., Wilson 2002). Another critique refers to the question of its contribution to the control of action (see review in Baumeister and Masicampo 2010). Together, they doubt the positive value of conscious in perceiving self and world and indirectly controlling actions. Instead of dismissing the value conscious thought, Baumeister and Masicampo (2010) suggest that the function of conscious thought is not primarily for explaining behavior and having direct control on actions. Instead, they point at consciousness critical viable value in its ability to process information the brain already has and indirectly rather than directly contribute to the control of behavior (Baumeister and Masicampo 2010; Baumeister, Masicampo, and Vohs 2011). Hence and very important to our case of mediators’ work, the exceptional and incomparable advantage of conscious processes may lie beyond the immediate action. Consciousness can support reconstructing and reshaping decisions, stimulate thinking especially through interactions with others while considering their views, learn from past experiences, and generate other future decisions options.

Evidence for conscious causation of behavior is robust, though again, often indirect and delayed, and contingent upon an interplay with unconscious processes (Baumeister et al. 2011). Causality between intentions and behavior is more likely to be attained by having a specific plan, such as, “If X happens, then I will do Y” (Gollwitzer 1999). Awareness of a link between an expected cue (X) and a wanted behavior (Y) causes the behavior to be performed automatically (Brandstatter, Lengfelder, and Gollwitzer 2001). Moreover, simulating possible plans and connecting them with outcomes is critical to change future response (Gollwitzer and Sheeran 2006). Research on skills’ acquisition reveals that skills begin explicitly with declarative knowledge, and ends with procedural, often automatic knowledge (Anderson 1982; Dreyfus and Dreyfus 1986; Reber 1989). The more repeated the deliberate process, the more components of the decision-making become automated (Charness et al. 2005).
Thus, initial conscious processing is necessary for high-quality intuitive judgments (Hogarth 2001). Learning is the input to automatic decisions and defines their quality. Most notably, expertise literature shows that expert performance does not merely reflect prolonged experience but rather, it relies on the quality of the experience. In other words, quality performance is not simply determined by the length of practice time. Instead, it relies on an intense cognitive endeavor and on-going concentration on improving particular expertise aspects to ensure development and superior performance (Ericsson and Lehmann 1996; Ericsson and Towne 2010). The learning process requires patience, systematic struggle and truthful, often painful self-reflection.

Ericsson claims that an extended period, at least a decade, needs to be invested wisely, by continuously engaging in deliberate practice-- training that focuses on tasks beyond the current level of competence and comfort (Ericsson 2007). It entails specific sustained efforts to do something one can’t do well or even at all. Thus, the focus should be on mistakes and possible ways to correct them. To illustrate this point, Ericsson uses the advanced stage of learning to play golf as an example. When strokes become automatic, and the player thinks less about each shot and plays more from intuition, it is recommended to take many shots from the exact same location rather than just playing the game over and over again. Repetitive actions involve more specific feedback on the technique to enable gradual adjustment of playing style and improving control (Ericsson 2007). When practicing deliberately, professionals practice their thinking. They are not only performing actions but also planning on where they want to go and how to get there. This requires tracking the thought process including exploring options for the next move, considering the consequences of each and planning possible sequence of moves to follow as well as assessing what went wrong and how to avoid future errors.

Kahneman and Klein (2009) point at two conditions for assessing the quality of intuitive judgments. These conditions reinforce the critical role of learning processing and conscious input. They refer to 1. The validity of the environment in which the decision was made; and 2. The history of the decision-makers learning opportunities to study and repetitively practice the rules and
regularities of that context. High-validity environments are necessary for developing skilled automatic intuitions by offering valid cues on the nature of the situation. Such environments enable constant exposure to regularly recurring cues (Hertwig, Hoffrage, and Martingnon 1999). They have relatively steady relationships between cues and resulting outcomes. For example, medicine is considered a field of relatively high validity while political advisors operate in low-validity environments. The second necessary condition for developing high-quality intuitive judgments is creating sufficient opportunities for learning that environment. It is essential to learn domain regularities and relevant cues and practice necessary skills over an extended period.

In light of these conditions, context validity in mediation cannot be guaranteed as cases, and situations are highly diverse and not necessarily repeat themselves. Mediation may be defined as an ill-structured knowledge domain whereby cases may be complex and different from others (Ross et al. 2005). However, emotional, psychological and relational patterns do exist and repeat themselves across cases, creating opportunities for professional development.

Thus, mediation expertise can improve by continuously and systematically learning and reflecting on repetitive behavioral and emotional cues. Yet, as discussed, typical mediation education and formal training are limited to basic 40 hours of initial certificate program and ongoing learning is not highly established among certified mediators. Continuous learning is indispensable to establish expertise in the field. Most mediators agree that basic training in the skills and processes of mediation are essential, but insufficient to ensure competence (Bronson 2000). Initial training is more likely an introduction to building expertise in a field that calls for continuing education and constant professional growth, as evidenced by many of the standards of practice (Bronson 2000).

In spite of this widespread view among mediators, very few showed interest in deliberation and reflection in observational comprehensive laboratory studies (Kressel et al. 2012; Peleg-Baker et al. 2012). Genuine curiosity and eagerness to use post-mediation interview we conducted and recorded mediation video of their performance as learning opportunities for self-examination and
self-assessment, were scant and were only expressed by a couple of mediators. Yet, as shown in
cognitive and social psychology studies, expertise and decision-making, mediators can certainly
improve their performance as was nicely illustrated by Ericsson’s golf example, by continuously
and systematically reflect on their decisions. It could be especially beneficial for effectively
handling psychological and relational complexities that are so entangled in the mediation process.

So far I discussed the automatic, intuitive nature of mediators’ judgments in rapid and
uncertain circumstances of mediation. I also suggested that the drive for settlements and
agreements often overrides the attention given to complex issues such as process and relational
aspects. Despite their high importance, they are neglected. Conscious repetitive learning is
recommended for improving automatic implicit tendencies, especially for effectively addressing
complex issues. To support the importance of continuous learning, two necessary conditions for
skilled intuitive decisions were introduced: an environment that provides constant exposure to
regularly repeated cues and sufficient opportunities for learning the environment.

Recognizing the critical role of learning opportunities in building expertise, and consistent
with the principles of adult learning, I propose reflective processing as a specific beneficial learning
tool for mediators. Adults develop expertise through acquiring new knowledge and developing
understanding and skills. Their learning is most effective by directly using theirs and others’
experiences as rich resources (Schon 1983; Lang and Taylor 2000). Advocating reflective practice,
Lang and Taylor (2000) encourage mediators to be purposeful and intentional in their work. To
become a competent expert and to examine the effectiveness of their interventions, they
recommend mediators to link between their practices and the theories they are based on. It is
important for mediators to increase their awareness to the choices they make and the impact of
their actions on the parties, process and mediation results. Systematic and specific reflection can
guide mediators to review their behavior and consistently improve their decision-making and
expertise.

Although reflection has been extensively endorsed in many domains, only a handful of
empirical studies were found on the effectiveness of reflective processes. No such studies were found in the fields of conflict resolution or mediation. Thus, to amplify the merit of reflective processing as a promising educational tool for learning and practicing emotional, behavioral patterns and improve mediation performance, next I present a few insights and empirical findings from other fields such as medicine and management.

**Why Reflection? Systematic Reflection for Improving Mediators’ Work**

As discussed, given the uncertain nature of the mediation environment and the mediator’s significant role in addressing emotional, psychological, and relational complexities, it is important for mediators to employ learning tools to nurture their cognitive and behavioral flexibility and enhance their expertise in handling these aspects.

An essential tool for developing flexibility and proficiency is the capacity for self-reflection. Reflection is a form of a conscious learning process. Recognizing the benefits of conscious learning, as I previously discussed, I propose reflection as a specific cognitively and thorough learning procedure for increasing mediators’ awareness to their decisions, especially their unconscious automatic responses to the complex aspects of conflict, and for deepening their domain schema (discussed next in this section). A cognitive activity is characterized by awareness, attention, information gathering, and reflection (Louis and Sutton 1991). Consciousness entails two forms: 1. Phenomenal awareness, which is considered the lower level of consciousness, describing feelings, sensations, and orienting to the present moment. 2. Ability to reason, reflect on one’s experiences, and have a sense of self, especially one that extends beyond the current moment (Baumeister and Masicampo 2010). In this article, I focus on improving the latter conscious thought.

Reflection has been well established as a beneficial element of experiential learning generally (Dewey 1938; Schön 1983), and in numerous fields such as organizational management.

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(Weick 1995; Daudelin 1996), medicine (Mamede, Schmidt, and Rikers 2006; Aukes, et al. 2007; Bishop 2007; Mann, Gordon, and MacLeod 2009; Mamede et al. 2010; 2012; 2012a), education and psychology (Ohlsson 1996; Edwards 1998; Mayer 2004; Moreno and Mayer 2005), and conflict resolution and mediation (Kressel 1997; Lang and Taylor 2000; McGuire and Inlow 2005; Marsick, Sauquet, and Yorks 2006; Peleg-Baker et al. 2012). It entails conscious processing of individuals’ own experiences to increase awareness, thus their ability to learn from it and change behavior (Hullfish and Smith 1961), and to integrate new concepts and experiences into existing knowledge structures (Gray 2007).

As mentioned earlier, no empirical studies were found on the effectiveness of reflective processing in the fields of conflict resolution or mediation. Hence, to support my proposal to use cognitive reflection for expertise development in mediation, several studies in medicine and management are provided. Although the mechanisms by which reflection minimizes flaws in diagnosis are still unclear, Mamede and colleagues showed in a series of studies that reflection reduces diagnostic errors, and improves clinical reasoning (Mamede, Schmidt, and Rikers 2006; Mamede et al. 2010; 2012; 2012a). Doctors enhanced the immediate diagnostic accuracy of complex cases by going through cognitive reflection. Reflection was structured by asking participants to suggest a diagnosis for a case, list findings in the case that support their diagnosis or oppose it, then findings expected to be present but were not described in the case, and alternative diagnoses, assuming their initial diagnosis would prove to be incorrect.

Participants followed the same procedure for each alternative diagnosis, and then ranked them in order of likelihood, and selected the most accurate diagnosis. Interestingly, medical students needed time to benefit from reflection, and only when diagnosing simple cases. Importantly, their learning became apparent only a week after, which is in line with studies showing that the effect of elaboration or deep cognitive processing on learning emerges only after some delay (Woods, Brooks, and Norman 2007). Reasons could be exhaustion due to high cognitive load during learning, initial confusion, given the copious details considered, or simple domain
schema with low knowledge. Students in reflection condition outperformed those in non-reflection conditions in diagnosing novel future cases rather than in immediate cases diagnosis (Mamede et al. 2012a).

As in the case of mediation, operating in an environment of time constraints, clinicians' reasoning is highly automatic, and arises early in the clinical encounter, thus prone to biases and errors particularly in complex, unfamiliar or new cases (Mamede et al. 2010; 2012a). After elaborate cognitive processing, the quality of illness scripts (mental representations) and performance seem to improve. Reflection may support expanding as well as restructuring schema, which is likely to result in competent diagnostic and automatic decisions (Mamede, et al. 2010; 2012; 2012a).

Consistent with expertise literature that supports the idea that competent performance stems from domain complex schema, doctors develop complex illness scripts that comprise of the link among symptoms and diseases, and the conditions under which an illness may develop. The richer their scripts, the more accurate the immediate diagnosis. The mechanisms producing incorrect intuitions may operate in the lack of skill as suggested by Kahneman and Klein (2009). Thus, when individuals have a skilled response to a task, they are likely to use it, and they do it automatically. Generating diagnosis relies on pattern recognition by matching symptoms to previous instances (Mamede, et al. 2010). Illness scripts and prior experiences are, therefore, key to arrive at a skillful automatic match. The positive effect of reflection may occur since it explicitly focuses attention on specific aspects, which may lead to richer mental models and diagnosis competence. It may activate additional relevant knowledge and foster integration and reorganization of preexisting knowledge (Mamede, et al. 2010).

Another example is provided by Ellis and Davidi (2005). They showed that Israeli soldiers demonstrated richer mental models and improved performance in navigation exercises after conducting after-event reviews (AER) of failed events (detecting errors by comparing performance versus the intended action) and failed and successful events (adding successful experiences
analysis). Improvement was higher in the latter group. AER gave soldiers a systematic learning opportunity to contemplate on their performance. Also, Anseel and colleagues found that reflection combined with feedback rather than reflection or feedback alone improves employee performance on a web-based work simulation (Anseel, Lievens, and Schollaert 2009). They conclude that combining reflection and goal-setting instructions, looking back on past behavior by guided reflection and looking forward to future behavior by setting goals may be particularly strong interventions.

Comparing effects of different reflection types on learning--alone, with a helper, and peer group, Daudelin (1996) found that the first two were more significant perhaps because in “helper” and “alone” conditions subjects responded to specific questions, whereas reflection in the peer group was unstructured. Reflection is recommended to be systematic, to be used to formulate and to test hypotheses, and done with a facilitator and in groups (Kressel 2006; Peleg-Baker 2012).

These studies show the critical role of reflection for the formation complex domain schema and improving the quality of mediators’ automatic judgments. Systematic, reflective processing supports developing and restructuring domain schema’s complexity. When individuals engage in focused and repetitive learning over long periods of time, they form complex domain schema and competencies that are likely to override the tendency to flawed intuitive judgments (Kahneman and Klein 2009; Peleg-Baker 2014). Expert schemas have been shown to be more complex than novice schemas; they also include a greater number of attributes, which are better connected as well (Fiske and Taylor 1991; Rousseau 2001). Complex schemas serve experts in multiple ways such as enhanced domain-relevant memory skills, problem-solving and decision-making effectiveness, and skilled intuitive decisions (Chase and Simon 1973; Ericsson and Lehmann 1996; Dane 2010). Simple schemas of low domain knowledge are likely to result in an inclination to generate inaccurate and low-quality automatic judgments (Tversky and Kahneman 1974; Kahneman et al. 1982). They tend to be shallow and insufficient for processing complex environmental stimuli (Weick 1995; Kahneman and Klein 2009).
Further advice for the implementation of reflective processing and its possible highest benefits is found in social cognition literature. Hofmann and Wilson (2010) claim that self-insight into implicit tendencies may be most effective through a gradual self-inference process. The accuracy of this process will be best if valid cues for implicit tendencies exist (such as gut feelings or self-observed nonverbal behaviors), detected (cue detection), and used (cue utilization) as a basis for explicitly explaining and improving behavior. Since cue detection and utilization may be easily impeded by different factors such as attentional focus, chronic self-views, and false lay theories, a repetitive, gradual process may be supportive of increasingly accurate self-inference.

MORE IMPLICATIONS FOR MEDIATORS

Studies on decision-making, expertise, and social cognition provided extensive support for my point-of-departure in this paper that mediators’ decisions in the dynamic, volatile and fast-paced mediation environment are likely to be dominated by intuitive automatic decisions. These decisions lack awareness to inducing cues and explicit assessment of their validity. The quick decisions are expected to be bypassed by powerful, often rigid, automatic responses. They are efficient but likely to be biased and flawed, and might also deviate from initial intentions. As reviewed here, many negotiations and mediation studies indicate that although parties and mediators are highly interested in pursuing a wide range of goals, particularly social-psychological, mediators frequently focus mostly on making agreements while other goals are overlooked.

To improve the quality of automatic judgments’ and help mediators in becoming more flexible and effective in dealing with a broad spectrum of emotional and social psychological issues, I propose creating gradual and consistent learning opportunities, specifically systematic cognitive reflection. This proposition is supported by findings on expertise development, skills acquisition, and social psychology. This type of reflection is likely to reduce the gap between mediators’ intentions and their practice as studies show in the fields of medicine and management that I presented here.
Thus, it would be beneficial for mediators to become cognitively and psychologically skilled. Recognizing the automatic nature of many of their decisions and other implicit tendencies that affect them and the parties is a prerequisite for improving their work. Critical is the understanding of the interplay of these unconscious subtleties with conscious processes, which suggests the possibility of gaining more control, although indirect, over mediators’ practice (see Peleg-Baker 2014 for a comprehensive review). Furthermore, the inherent contextual complexity of mediation is an additional reason for mediators to employ reflective tools systematically. Reflection will help them to create repetitive learning opportunities. As was previously discussed, an intensive conscious cognitive process is likely to deepen as well as extend mediators' domain schema, and consequently advance the likelihood of automatic quality decisions, especially in dealing with multifaceted, complex social psychological aspects.

It is important to emphasize that a potent reflection must be based on systematic, structured, and goal-setting instructions. A detailed reflective protocol can be highly useful for this task. Drawing on the negotiators 4-factor framework (Curhan et al. 2006), I developed a four-section reflective protocol: one addresses tangible goals and three others focus on social-psychological goals: process-related considerations, parties’ perception of self, and relational issues (I provide a partial example of one of the reflective sections in the Appendix).

Similar to the structured reflection conditions used in medicine and management studies, my proposed protocol instructs mediators to follow a structured and systematic reflective procedure in post-mediation reflection. The reflective process is composed of responding to specific questions in which mediators analyze their intended goals versus actual actions. They are also asked for examples of behaviors that promoted or inhibited each of their goal and for prospective useful behaviors for dealing with each goal in future mediations. It is recommended to follow the same systematic format of questioning for each of the four sections.

A systematic and structured reflective framework is preferable to the common debriefing frequently used in the mediation field as the latter is not specific but typically composed of general
questions. This typical debriefing might be counter-productive. It lacks focus and systematic examination of specific goals, which are so essential for decreasing the gap between intentions and actions (Gollwitzer 1999; Gollwitzer and Sheeran 2006). A major principle of reflection is to compare intentions and outcomes (Gollwitzer, 1999; Brandstatter, Lengfelder, and Gollwitzer 2001). General typical questions such as ‘Do you think the clients were satisfied with the process?’ or ‘What was challenging about the case?’ might be insufficient and too ambiguous to generate effective gradual learning and improvement. By consciously examining their self-experiences and systematically clarifying intentions versus outcomes, mediators are more likely to improve goals’ attainment, particularly unattended social-psychological ones.

As Dewey argued decades ago (1938), learning occurs when people repeatedly interpret their experiences, develop insights, and revise their actions to meet their goals, which result in new habits. Cognitive, reflective processes are likely to support a more effective and flexible interplay between conscious and unconscious processes, allowing the latter to become consciously accessible. When a reflective process is continuous and persistent, a complex domain-relevant schema is likely to form along with new skills that possibly could override the proclivity toward unfitting intuitive judgments. Consequently, many sequential consequences such as self-inferences, transformation, and behavioral correction, become feasible. My call for increased awareness of the automatic nature of mediators’ decisions and other social psychological dynamics along with showing the potential value of systematic, reflective processing, merit future empirical research to examine whether and how the suggested cognitive, reflective processing enhances mediators’ automatic decisions.
APPENDIX

An Example of Reflective Protocol

The Process Related Considerations section

1. Did you encourage the parties to voice their wishes, concerns and needs?
   
   Not at all  1  2  3  4  5  6  7  NA
   • Examples for your behaviors in which you promoted/ inhibited the parties to voice their wishes, concerns and needs.
   • Prospective useful behaviors for encouraging the parties to voice their wishes, concerns and needs in future mediations.

2. Do you think you emphatically and attentively listened to the parties’ wishes, concerns and needs?
   
   Not at all  1  2  3  4  5  6  7  NA
   • Examples for your behaviors that promoted/ inhibited empathetic and attentive listening.
   • Prospective useful behaviors for being empathetic and attentively listening in future mediations.

3. How helpful were you in assisting the parties to understand their own wishes, concerns and needs?
   
   Not at all  1  2  3  4  5  6  7  NA
   • Examples for your behaviors that promoted/ inhibited the parties’ understanding of their own wishes, concerns and needs.
   • Prospective useful behaviors for assisting the parties in understanding their own wishes, concerns and needs in future mediations.

4. Do you feel the parties listened, understood and consider each other’s wishes, concerns and needs?
   
   Not at all  1  2  3  4  5  6  7  NA
   • Examples for your behaviors that promoted/ inhibited the parties in listening, understanding and considering each other’s wishes, concerns and needs.
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- Prospective useful behaviors for assisting the parties in listening, understanding and considering each other’s wishes, concerns and needs.

5. Would you characterize the process as fair?

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- Examples for your behaviors that promoted/ inhibited fairness of the process.

- Prospective useful behaviors for promoting fairness of the process in future mediations.

NOTES

1. Applying unreflective self-criticism in post interview and in reviewing her recorded mediation video, this mediator kept criticizing herself for a few behaviors including being impulsive, using ineffective behavior, talking too much, not listening, being biased against one of the parties, going beyond evidence in her interpretations of underlying motives, and unhelpful in assisting the parties to directly communicate ("What I wanted to help them do was to find a way to help them communicate with each other and that we didn’t do. So I was not satisfied"). She repeatedly and harshly engaged in self-criticism rather than in constructive self-reflection. In other words, she appeared to view her mistakes as given, fixed rather than as having the potential to change and transform ("I am who I am." or "Take it or leave it"). Therefore, she seemed to have limited capacity to learn from her acknowledged mistakes.

2. In interviews, the mediator presented herself as a mediator, who "can resolve every conflict that comes through the door."

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Improving Mediators’ Decision-Making by Becoming Conscious of the Unconscious


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