Intuition versus deliberation: the role of information processing in judgment and decision making
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Summary
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Research already showed, in a variety of domains, that judgments and preferences of people who opt for deliberation might prove to be less in line with expert opinion, be regretted more over time, be less consistent, and reveal lower correlations with expressed behavior than judgments that are made intuitively. My research provides additional insights in this effect and the results of this research have several implications.

The first empirical chapter (Chapter 2) investigated processing style as an underlying mechanism of the effect of intuition versus relying on reasons in judgment and decision-making. Processing style refers to the way we attend to information. On the one hand, people may attend to the global picture and focus on the Gestalt: A collection of trees, for example, can be seen as a forest. On the other hand, people can focus on details; an individual tree in the forest. The attentional mechanism used to focus on perceptual information is correlated with the attentional mechanism utilized to select conceptual nodes within the semantic network: People who focus on the visual Gestalt also focus on the Gestalt conceptually. They have more associations, are more creative and more often think "out of the box". Chapter 2 demonstrated that deliberation induces a local processing style with a focus on details, which makes it harder to judge adequately. Intuition, in contrast, is related to a global processing style, which improved quality judgments of art. In addition, the effect of judgment mode on judgment appeared to be, at least partially, mediated by processing style.

The second empirical chapter (Chapter 3) examined the relation between processing style and judgment mode in more detail. First, I showed that the relation between decision mode and processing style is bidirectional: processing style induces decision mode the same way as decision mode induces processing style. Second, I showed that a fit between processing style and decision mode produces subjective value. Individuals induced with a global processing style who decided intuitively, and individuals with a local processing style who decided after deliberation, experienced more subjective value of the decision outcome than did those who made deliberative decisions in a global focus and those who made intuitive decisions in a local focus.

Chapter 4 examined the characteristics of intuitive versus deliberative decision-making, and demonstrated an increased sensitivity for processing fluency and affective reactions among people who adopt a global –more intuitive– mode of processing, in comparison to a local –more analytic and deliberative– mode of processing. A mundane
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judgment task revealed that people also assigned more weight to these sources of information in their judgments: people in a local processing style were principally affected by detailed information provided in accompanying text, while people in a global processing style were principally affected by information in accompanying pictures that conveyed a feeling.

Chapter 5 examined moderating effects of expertise on the effects of judgment mode. I proposed a framework that distinguishes among three levels of expertise on the basis of experience and knowledge: Three experiments, in different domains, showed that people who are low (novices) and high (experts) in experience and knowledge are unaffected by judgment mode or processing style. They performed poorly or adequately, respectively, irrespective of judgment mode. However, intermediates performed adequately when relying on intuition, but performed relatively poorly when asked to provide reasons before making their judgment. Individuals whose knowledge is outweighed by their experience profited from intuition, and did less well when relying on deliberation.

Implications

My research provides additional insights in the effects of relying on intuition or on reasons. The results of this research have several implications. To profit from intuition and knowledge based on processing fluency and affective reactions (Chapter 4), it might be wise to induce a global processing style before making decisions, such as buying a house, choosing between jobs and selecting a university course.

The study on decisional fit between processing style and decision modes (Chapter 3) shows that it may not always be beneficial to rely on intuition, even when relying on intuition can yield objectively superior judgments and decisions. It may sometimes be more rewarding to make a decision that feels right, rather than selecting the objectively best option but being dissatisfied and feeling bad about it.

Besides implications for personal or consumer decisions, my research has implications for judgments and decisions in professional settings. Most decision makers in complex domains should be considered intermediates according to the way I operationalized the three levels of expertise (Chapter 5). They have a lot of experience in doing their job, but are often not aware of all relevant factors that should play a role in their decisions. Furthermore, they often cannot fully decompose their judgment or decision; their
professional domains are just too complex. Our research suggests that especially this group would profit from intuition. That does not mean that people should refrain from deliberation in all circumstances. Deliberation could help to analyze the hows and whys of certain decisions, which should make it easier to explain these to others and to teach new generations on how to make optimal decisions. To benefit from both intuition and deliberation it might be wise to analyze decisions afterwards.

Of course adequate judgments and decisions should be based on relevant information. Since a local processing style is related to information search, it might be wise to first collect all relevant information in a local processing style and then induce a global processing style to profit from intuition when making decisions or judgments.

**Limitations and Future Research**

My studies leave questions unanswered and also open up opportunities for future research. The studies that compared intuitive to deliberated judgments mostly concerned judgments of art (Chapters 2 & 5). Of course, the beneficial effects of intuition have already been shown in other domains by other authors (see above). Still, further research is needed to test whether processing style plays the same role in other domains. The fact that I found effects of processing style in judgments of paintings and poems (Chapter 2) indicates that the effect is not limited to the visual domain, suggesting that similar mechanisms may play a role in other domains.

Similar questions can be asked about the moderating effect of experience and knowledge. Again the effect was only shown in the domain of art (Chapter 5). Does experience and knowledge affect judgments in other domains the same way as it does in art? The effect was found in judgments of musical performances, paintings, and poems, which again suggests that similar mechanisms may play a role in other domains.

Generally my experiments showed that relying on intuitions provides better and more accurate judgments and decisions than a careful analysis of the pros and cons. As mentioned above, other research showed that this is true for a number of domains. But does it also hold for decisions or judgment tasks that require decision makers to follow strict rules or to focus on details? Relying on intuition or employing a global focus might distract from the optimal, analytical strategy. Also, what about more complex decisions, like strategic decisions in policy making and business? Does intuition or a global focus also
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increase performance in decision-making in these domains? I would argue that it does. People may profit from intuition in every domain where knowledge is overshadowed by experience (see Chapter 5).

Chapter 3 also raises interesting questions for future research. Besides increased subjective value, fit-effects have been shown to also yield other positive effects such as increased performance in sports, on academic tests, and in solving anagrams. Future research is needed to assess whether, and possibly when, fit-effects in decision-making would also lead to superior judgments and decisions.

In Chapter 4 I studied the characteristic of intuitive versus deliberative decision-making by inducing a global or local processing style. Future studies should investigate the role of intuition and deliberation in judgment and decision-making using alternative operationalizations and paradigms.

Closing Remarks

In sum, I may conclude that the way we make decisions affects how we attend to and process information, which in turn affects the quality of our judgments and decisions (Chapter 2). When we rely on reasons or analyze, we focus on details and possibly ignore other valuable sources of information. When relying on intuition we focus on the global picture and incorporate affective reactions and processing fluency as information in our judgment (Chapter 4). However, preference for decision strategies is affected by processing style. A local focus induces a preference for and reliance on deliberation, while a global focus induces a preference for and reliance on intuition (Chapter 3). Also, people experience more value of the decision outcome when the strategy they are using fits their current orientation, that is, when they make deliberate decisions in a local focus or intuitive decisions in a global focus (Chapter 3). The effects of relying on intuition or on reasons depend on individuals' knowledge and experience. Judgments and decisions made by novices (individuals low on experience and knowledge) and experts (individuals high on experience and knowledge) are not affected by judgment mode. Novices perform poorly and experts adequately, irrespective of whether they rely on reasons or on intuition. Intermediates however (those who are high on experience and low on knowledge), benefit from relying on intuition, in comparison to relying on reasons (Chapter 5).

To sum up; it does not always hurt to trust your intuition.