

Decision Making - Emotional, not Logical

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Abstract

Making decisions is an activity that has always been accompanied with "logic." It is a chore that requires thought and processing, so the saying goes. However, recent research and theories, such as the Appraisal-Tendency Framework (ATF), have highlighted the emotional component of decision making. The ATF's 4 main components illustrate how emotions play a part in decision-making. These factors center on thoughts, particular emotions, judgment, and tendencies. The paper presents a survey that relates its findings back to the first feature of the ATF, specific emotions: incidental and integral, and how it influences decision making, in order to further explore the emotional component of decision making. The research study also looks at how emotions affect moral judgments, specifically deontological and utilitarian decisions.

Keywords: *Decision Making, Appraisal-Tendency Framework, Integral Emotions, Incidental Emotions*

1.0 INTRODUCTION

We humans make decisions at every single moment from what to have for breakfast to which particular stock to invest in. However, among many other factors, emotions play a very important role in these decision making processes. For instance, when one is sad you tend to choose (self-identified) sad songs to listen to (Van den Tol & Edwards, 2013). Findings in neuroscience also show that emotional processes play a larger role in decision making than logical processes (Ellis, 2019). Recent findings in neuroscience show that emotional processes play a larger role in decision-making than logical processes. Decision making is a critical tool that one uses in order to solve problems or is perhaps obligated to use when asked to make a choice. In 2007, Han, Lerner, and Kelrner came up with the **Appraisal-Tendency Framework (ATF)**, which explains how and why emotions affect judgment and decision-making. The ATF is founded on emotions triggering a cognitive reaction or evaluation, which then has an impact on judgment. There are 4 primary aspects of the ATF: Specific emotion, appraisal tendencies, content and depth of thought, and judgment or decision. These occurrences demonstrate how attentional activity elicits emotions in people and contributes to cognitive processes, which finally leads to decision-making. Such as this example, there are a number of other features and other factors that indicate the significance of emotional processes in decision-making and give the ATF greater validity. This paper will cover the idea of only 1 aspect, specific emotion, and how that impacts thinking and day-to-day/everyday, ethical decision making.

One is the influence of different specific emotions: incidental and integral (Van den Tol & Edwards, 2013). Incidental emotions refer to those feelings that impact the decision which individuals make, even if those feelings are not related to the decision at all. Feeling angry at work because of a fight that one had with their family before coming to work is an example of incidental emotions. The impact that these incidental emotions hold are related to possible errors when making a decision. In the example mentioned previously, the anger that one brings to the workplace could possibly affect choices they make at work such as signing an erroneous contract. Contrary to incidental emotions, integral emotions are those that are triggered by the decision: an individual feeling disappointed at themselves for yelling unnecessarily at their child. These integral emotions can have a big influence on the decision that one makes, as it becomes an experience which contributes to cognitive processes such as memory. With the implications that these emotions may hold on decision-making, it is important to be aware of them. And so it is seen that the influence of these specific emotions can play a huge role in decision making, which supports the ATF.

Another factor is the valence of emotions that an individual faces - which can differ by being negative or positive. According to research, when a person's emotions have a negative valence, they are more likely to make deontological decisions. The notion of deontological choices root from that of deontology, which is a theory that states whether *choices are morally required, forbidden or permitted* (Alexander and Moore, 2007). Therefore, displaying the definition of deontological choices as those that follow ethical means or in other words making choices that follow an ethical process rather than looking at its result. On the other hand, those who have a positive valence of emotions have been demonstrated to be more likely to make a utilitarian decision, which refers to the choice made according to results and the biggest advantage expected for the greatest number of people. An example of the use of these choices, would be seen in an ethical dilemma, such as being in a position where you would have to kill 2 fishes to save 4 other fishes. When choosing to save the other 4 fishes becomes the option, it demonstrates a utilitarian choice being made which supports the concept of the result justifying the means to reach it. This further allows the conclusion that utilitarian choices follow the concept of 'the end justifies the means', whereas deontological choices do not. In general - positive valence leads to good decisions, while negative valence might lead to irrational decisions. In this paper, the focus also revolved around ethical choices, rather than repeating the same findings that have previously been discovered. With research ahead of us, it is shown that an individual's emotional valence can lead to one of two choices: deontology or utilitarianism, with the fundamental difference being that one justifies the means to accomplish a result and one does not. As a result of additional results and study, there has been more support towards the concept that emotional processing plays a bigger part in decision-making than cognitive processes.

To understand the 1st principle of the ATP, it is vital to understand an individual's point of view when making decisions. To further understand this concept, a digital semi-structured survey was utilized: There were two hypothetical cases with multiple choices as responses. There were also open ended questions to understand the participants' reasons for selecting the choices they did. A survey was utilized because it is time-effective as well as allows large amounts of data to be gathered in a short period of time. This method was also chosen as it would aid in reaching out to a large number of participants, as a digital survey may be convenient for members of the community to fill out, owing to the pandemic and restricted movement.

2.0 SAMPLE

The target population for the sample in this experiment were approximately 30 adults who fit in the age range of 30-50 years old as they are likely those who have been in situations where they have made critical decisions. Understanding their point of view could further allow us to gain insight on the role of emotional processes when making decisions. This target audience for the sample was assembled using the technique of convenience sampling, with the choice to participate being voluntary. This sampling method has its benefits of being easy to implement and access, as well as a higher scope to provide rich and qualitative behavior. This is because participants who are performing in this study are more likely to respond honestly seen through their willingness to do so.

3.0 METHOD

The semi-structured digital survey (appendix i) was created on google forms. The first section of the google form had a briefing statement that marked the steps and asked participants to fill the form with honesty. It also stated the confidential nature of the survey, through which the survey would not collect personal IDs of participants or ask them questions about their identity except their age. The survey consisted of 2 case studies: the first one studying the aspect of integral and incidental emotions, and the second one studying the relationship between valence of emotions and ethical decision making (deontological and utilitarian choice).

The 1st case study (case A) presented a situation that read: *“You have a really important task to complete, and you need to purchase an item to complete it. As you leave the house to purchase the item, you have a fight with your family and you are angry about it. However, as purchasing the item is important, you still go to the store. You are still very furious as you enter a store, and as you're entering the store, you tripped over a cable and hurt yourself.”* It then asked participants about their reaction through a multiple-choice (structured) based response. These options read: *“You would leave the store without purchasing the item.”* or *“You will scream at the nearby store staff for putting the cable there.”* or *“You will forget about your anger, and purchase the item.”* Once this part was filled, the survey asked them for 2 short responses. First in regards to why they would have chosen that option and the second being how they would have possibly felt

the next day making the decision they did. Using this semi-structured format, a similar anchor or choice of reaction from participants would be identified as well as demonstrate the rise of incidental emotions - those that one may be feeling before the decision has to be made. This would then be used to comprehend the 2 short responses after: first, verify and explain the rise of incidental emotions, and second, explain the aspect of integral emotions which are those that are felt after the decisions are made and integrated in one's life - *the aftereffect*.

The 2nd case study (case B) investigated the relation between valence of emotions and utilitarian or deontological choices. It presented the famous ethical dilemma: The Trolley Problem. The first question in case B displayed a scale-based question that asked them how they were feeling at the moment(1-10): 1 being mostly negative emotions and 10 being mostly positive emotions. This question would allow us to understand the individual's valence of emotions. The 2nd question in the case study was a hypothetical situation with an illustration (appendix ii) for participants to obtain a better understanding of the situation. The hypothetical situation read: *"You are a bystander at a track switch, and you come across a situation where 5 people's life is at risk. However, you have the option to hit a switch, which would sacrifice the life of 1 person and save the other 5, and If you don't hit the switch the trolley will run over the 5 individuals and save the 1."* They were asked to pick an option from the given: Hit the switch or do not hit the switch. The option "hit the switch" represents a utilitarian choice which follows the concept of "end justifies the means", whereas, the option "do not hit the switch" represents a deontological choice which goes against the concept of "end justifies the means" and rather believes in the theory of deontology which states whether choices are morally forbidden or permitted. Through these 2 questions a better understanding of a correlation between valence of emotions and ethical choices can be established.

4.0 FINDINGS

The response from case A showed that 75% of the participants would "forget about your anger, and purchase the item.". The other 25% of the participants said that they would either leave the store without purchasing the item or scream at the nearby store staff due to the placement of the cable. When 25% of the sample that chose to let their incidental emotions impact their decision were asked how they would feel the next day, many chose to respond with "regret", "silly", "not good". Similarly, the other 75% of the participants showed that they would make a rational decision, not allowing their incidental emotions to come in between an important task and also responded with "happy", "proud to make the right decision" when asked how they would feel the next day - displaying positive integral emotions the next day. However, an interesting response to the short response question: *"Why did you choose the option that you did? Please elaborate as much as possible."* from a participant that chose the option about forgetting their anger stated: *"In my earlier phase of life, emotions take over mature decisions. So probably if this situation was put to me 5-10*

years before, I would have reacted in a more irrational or angry manner. But now, the moment I step out of that space, I think I will allow my mind to breathe better and relax. Also since the purchasing of that particular item is important, I wouldn't let my past affect that present moment." This perhaps demonstrates how experiences and past integral emotions may impact how an individual responds to a rise in incidental emotions - many adults may have reflected through their previous experiences which could help them avoid the negative impact that incidental emotions could have on decision making.

The results for case B, firstly showed that the mean scale that participants chose in regards to their emotions when asked how they were feeling, was 7.78. This shows that most participants had a higher valence of emotions. In specifics only 5 participants chose 5 or lesser on the scale, indicating a more negative valence of emotions. The response to the hypothetical situation showed that out of 37 participants, only 8 choose (approximately 22%) the deontological choice. The mean of these 8 participants' valence of emotions was 9. This does not agree with the hypothesis that *participants with a positive valence of emotion would make a utilitarian decision, whereas those with negative valence of emotion would make a deontological choice.* This shows us that a link between valence of emotional and ethical choices may not exist, which rejects the second hypothesis of this study.

5.0 CONCLUSION

In conclusion, the findings from case A display the difference and the relationship between integral and incidental emotions. Not only how they impact each other, but how these emotions play the role of learning - for example, controlling the rise in incidental emotions due to past integral emotions that an individual may have felt. This allows us to further understand how these two specific emotions impact each other and how they independently impact a person. The findings from case B rejected the hypothesis that more positive valence of emotions would be related to utilitarian choices and negative valence of emotions would be related to deontological choices. It displayed that the link between ethical choices and valence of emotions would need to be further studied as no link or correlation was found through this survey.

6.0 RECOMMENDATION

While no relationship between valence of emotion and ethical choice was established, another observation that can be made is the correlation between case A which investigates integral and incidental emotions, and case B which investigates valence of emotions in regards to ethical choices. The results demonstrated that 7 out of 8 participants that chose "do not hit the switch" making a deontological choice also chose to avoid the interference of incidental emotions in their decision making as they chose the option "*You will forget about your anger, and purchase the item.*" A link between the participants' restriction to allow the interference of incidental emotions and their ethical decision making has scope to be further studied.

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Appendices:

Appendix i: The digital semi-structured survey

<https://forms.gle/wsNTCJGwkqyBMipS7>

Appendix ii: The picture used in the semi-structured survey

