Preference for Negative Emotions

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This research demonstrates that preference for emotions sometimes cannot be equated with a positive–negative valence dimension. Participants were asked to make choices between pairs of affect-inducing options opposite in valence but equal in activation. The results showed that in absence of contextual cues or situational constraints, choices followed a pleasure-maximizing principle. However, when information was provided about a context cueing appropriateness of certain emotions over others, a preference reversal was observed so that negative emotions were preferred over positive emotions. These results are discussed in relation to current theories of pleasure-maximizing choice and behavior.

Keywords: decision making, choice, emotion, affect, judgment

A recent flurry of researchers have addressed how emotions influence decision making (Loewenstein & Lerner, 2003; Loewenstein, Weber, Hsee, & Welch, 2001; Slovic, Finucane, Peters, & MacGregor, 2002). In some of this research it is assumed that decision makers inspect their experienced or anticipated feelings for different decision options and choose the alternative that incurs the greatest average positive affect (Cabanac et al., 2002; Mellers, 2000). Considering one’s feeling rather than listing all possible reasons for choosing has several benefits. First of all, affect comes only in two “flavors”—positive and negative—whereas thoughts include many more aspects and more complex tradeoffs (Peters, in press.) Second, affect seems to be the common currency that allows decision makers to compare apples with oranges (Peters, in press.) In this vein, Kahneman, Wakker, & Sarin (1997) suggested that the utility experienced in relation to a decision outcome can be described by its position on a single good–bad (pleasure–pain) affect dimension.

The idea that decision making is guided by pleasure-maximizing principles is not new, however. Bentham (1789/1948) suggested that a “hedonic calculus” is used to identify the optimal course of action. The pleasures and pains of each possible action are evaluated with respect to intensity, duration, certainty, propinquity (the remoteness of any pleasure or pain), fecundity (the chance that a pleasure is followed by further pleasures and pains followed by further pains), purity (the chance that pleasure is followed by pains and vice versa), and extent (the number of persons affected). Based on the hedonic calculus, the course of action with the highest pleasure (and least pain) is chosen. An example of the continued popularity of this notion is a recent study by Cabanac et al. (2002) that showed that pleasure–displeasure ratings for various situations and decisions (ethical decisions and mathematical problems) predicted choices.

Viewing decision makers as pleasure maximizers in all situations may, however, be an oversimplification. There are several examples of situations in which a less positive feeling may be approached and a positive feeling avoided. For instance, people spend money to watch sad movies, listen to plaintive music rather than love songs, and so forth (Erber, Erber, & Poe, 2004). Why do people not always conform to the pleasure-maximizing principle in certain situations? Consider the following example: Imagine that you have a choice between two outcomes that you anticipate will make you feel either worried or upbeat. According to valence-based theories, a positive emotion (upbeat) is always preferred over a negative emotion (worried) (Mellers, 2000). However, consider the same choice between feeling worried and upbeat with the additional information that “you feel that your romantic relationship is not really working and you are thinking about ending it” (Parrott, 1993). Given such a context, we predict that people would prefer negative affect over positive affect (i.e., a preference reversal compared with the pleasure-maximizing principle).

So far we have centered our discussion around integral affect, that is, feelings that arise in relation to a specific decision object or process (Loewenstein & Lerner, 2003). However, it seems that a similar line of reasoning applies to incidental affect, that is, mood states. For instance, holding everything else constant, people attempt to regulate their moods to attain positive moods and avoid negative moods. Such “mood maintenance” and “mood repair” strategies has frequently been used to explain differential effects of positive and negative mood on judgment and behavior (Clark & Isen, 1982). However, the effects of moods and the mood-regulation strategy used by decision makers depend on the context in which the mood is encountered or experienced (Erber et al., 2004; Martin & Davies, 1998; Martin, Shelton & Shrira, 2002). More specifically, whether or not a mood (or emotion) is appropriate to experience in a given situation is a key feature of this proposition. Erber et al. (2004) highlighted this with the following example “. . . a rainy day may primarily make us feel bad when it
prevents us from playing golf or doing yardwork, but may not affect us much when it provides the context for a busy day at the office, and may even make us feel good when our goal is to curl up in front of the fireplace” (pp. 199–200).

There are several reasons why people sometimes prefer negative feelings. Parrott (1993, 2001, 2002) highlighted several situations in which the appropriateness of a mood in a context will be traded off against maximization of the immediate hedonic experience. Constraints imposed by the context, social situation, task, or personality may lead to inhibition of a positive mood (Erber, Wegner, & Therriault, 1996; Tamir & Robinson, 2004). For example, in some situations people may want to promote realistic thinking, prevent bad fortune, or behave appropriately in a social situation. Conversely, a bad mood may be maintained to sustain motivation, to punish oneself, or to communicate needs to others. In sum, we believe that contextual cues signal situational demands that may activate naive theories about the effect of emotions on behavior (Erber et al., 2004). For instance, both explicit and implicit awareness of the effects of emotions on task performance (Gohm, 2003), as well as naive theories (Wilson & Gilbert, 2003) may lead to a desire to avoid positive emotions to promote realistic thinking, or social constraints (my friend is unhappy) may signal the appropriate feeling to experience.

Thus, a momentary negative feeling may be worth its unpleasantness if it leads to future benefits (i.e., a “functional utility” of negative emotion; see Parrott, 2002). The hedonic quality of a positive mood is important for well-being (Västfjäll, Gärling, & Kleiner, 2001), but instant pleasures may be subordinate to future goals holding promise of even larger gains. It is believed that such interactions between direct and future enjoyment is present in many everyday decisions (see, e.g., the research on time discounting reviewed in Loewenstein et al., 2001).

In the present research we examine choices between pairs of affect-inducing options in the absence or presence of contextual cues. We predict that choices will follow the principle of hedonic maximization in the absence of contextual cues. When information about a context is given (effectively signaling the appropriateness of any given feeling state), a preference reversal (i.e., negative emotions are preferred over positive emotions) is expected.

A way of studying the dissociation of valence of the option and preference for the same options was suggested by Västfjäll and Gärling (2002) and Västfjäll et al. (2001). We use a paradigm in which we ask participants to express their likes–dislikes or preferences for emotions that are associated with decision outcomes. In earlier studies we have asked participants to rate the valence and activation of their reaction to each option presented to them and, further, to indicate how much they liked–disliked feeling this way (Västfjäll & Gärling, 2002). In the present experiment, we explicitly ask participant to make choices between pairs of affective options, carefully preselected to enable a comparison between options that are equal in activation and opposite in valence.

Method

Participants

Eighty (26 men) psychology undergraduates at Göteborg University participated. Their mean age was 29.4 years (SD 9.2).

Materials

Affective words were used as stimuli. Words opposite in valence but comparable in activation level were selected from previous research of the dimensional structure of affective words (Russell, 2003) and from affective norms for words (Bradley & Lang, 1999; Whissell & Charuk, 1985). Table 1 lists the word pairs that were used. Swedish words were selected from Västfjäll, Friman, Gärling, and Kleiner (2002). Eight word pairs were constructed that elicited a positively valenced and a negatively valenced emotion that were equal in activation. Pretesting (N = 32) showed that valence and activation ratings of the word pairs differed as predicted for both the noncontext and context conditions.

Context

Because the aim was to show that choices among emotions reverse if relevant contextual information signaling the appropriateness of feeling is provided, several short text descriptions of contexts were constructed on the basis of the principles outlined in Parrott (1993, 2002) and Erber et al. (2004). The contexts thus varied in either task or social demands imposed by the situation. Descriptions of all contexts are given in the right column of Table 1.

Procedure

Participants either served individually or in groups. They were randomly assigned to one of two conditions (word only or words in context). All

<table>
<thead>
<tr>
<th>Word pair</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low activation</td>
<td></td>
</tr>
<tr>
<td>Serene-Down (Fridfyll-viss)</td>
<td>You have been complimented for your good course work but it is actually</td>
</tr>
<tr>
<td>Dissatisfied-Satisfied</td>
<td>You have repeatedly told your room mate that he/she need to clean the</td>
</tr>
<tr>
<td>(Missnöjd-beläten)</td>
<td>house. As many times before, you are left doing all the house work</td>
</tr>
<tr>
<td>Indifferent-Calm</td>
<td>Your financial situation has declined lately and you really need to do</td>
</tr>
<tr>
<td>(Oengagerad-lugn)</td>
<td>something. For some reason you tend to think about other things.</td>
</tr>
<tr>
<td>Bored-At Ease (Uträkad-tillfreds)</td>
<td>A good friend with whom you used to have fun times is moving abroad for</td>
</tr>
<tr>
<td>High activation</td>
<td></td>
</tr>
<tr>
<td>Anxious-Elated (Ångslig-upprymnd)</td>
<td>You have been in a good mood for a long time and you are starting to</td>
</tr>
<tr>
<td>Angry-Euphoric (Arg-euforisk)</td>
<td>feel that something bad is going to happen soon.</td>
</tr>
<tr>
<td>Worried-Upbeat (Bekymrad-begeistrad)</td>
<td>You feel that your relationship is not really working and you are thinking about ending it.</td>
</tr>
<tr>
<td>Happy-Sad* (Glad-ledsen)</td>
<td>You are attending a distant relative’s funeral. While being in the church</td>
</tr>
</tbody>
</table>

*The happy-sad pair is neither low nor high in activation.
eight choices were printed in a booklet interspersed with other choices between words. Participants in both conditions were instructed to think about how they felt when viewing each option. They were asked to choose the feeling that they preferred to experience in the situation by checking a box that was printed under each alternative. In addition, participants were reminded for each choice to “choose the alternative that denotes the way you would prefer to feel.” The order of the alternatives and pairs was counterbalanced.

After participants had finished making their choices, they were debriefed and thanked for their participation. Sessions lasted about 20 minutes.

Results

Consistent with valence-based theories, participants in the no context condition always chose pleasant over unpleasant alternatives (see Table 2). When providing a relevant context, reversed choices were observed for all word pairs except sad–happy. In all cases there was a significant increase of choices of the negatively valenced emotion in the context condition compared with choices of the negatively valenced emotion in the no context condition.

Discussion

The present research provides empirical support for Parrott’s (2002) claim that “…there are more to human decision making than hedonism” (p. 341). When research participants made choices between pairs of context-free emotion words, they chose the positively valenced alternatives. However, preferences reversed when relevant information about a situational context was given. In line with Parrott (2002) we suggest that the context provided in our experiment activated appraisals or cues that were needed to evaluate whether the emotion experienced is good or bad. Thus, when provided the relevant context, an inherently positive feeling (elated) may be considered bad, and an inherently negative feeling (anxious) may be considered good.

The finding that contextual cues determine the appropriateness or value of a feeling in a specific situation is similar to some recent findings in judgment and decision-making research. When decision makers are asked to form a particular judgment or to make a specific decision, they construct their values and preferences on the spot using cues from the decision situation and internal reactions (Payne, Bettman, & Schkade, 1999; Slovic, 1995). Our research suggests that when making affect-based judgments, people readily incorporate both the constraints imposed by the situation and their reactions. A study reported by Erber et al. (2004) gives further support to this notion. They showed that participants anticipating a high-stakes gamble tried to attain a negative mood state, whereas when anticipating a low-stake gamble people wanted to optimize their positive mood. Erber et al. interpreted the high-stakes manipulation as imposing a situational constraint so that individuals realized that a too positive mood would be potentially detrimental to their performance in the task (Erber et al., 1996). Hence, in anticipation of an important task, participants preferred to be in a negative mood state.

Taken together, preference for negative emotions may be driven both by intuitive theories or implicit awareness of the effects of emotions on behavior and information processing (Gohm, 2003) and the constraints imposed by social aspects of the situation (Erber et al., 2004). This theory seems consistent with several recent judgment and decision-making theories suggesting that anticipated emotions (cognitive representations) and naïve theories about the effects of emotions on behavior and experience influence judgment and decision making (Loewenstein et al., 2001; Wilson & Gilbert, 2003). However, naïve theories may sometimes be incorrect, resulting in a discrepancy between anticipated and actual behavior (Wilson & Brekke, 1994). Thus, it remains to be tested whether the preselected scenarios and hypothetical choices in the present study would generalize to real-life decision behavior. Although some research suggests that people may prefer negative affect in real-life settings also (Parrott & Sabini, 1990), it is unclear how common preferences for negative emotions are. In addition, the results of the present study cannot be used to determine the exact mechanism responsible for the preference for negative emotion. We do, however, believe that both explicit awareness of the effects of emotions on task performance (Gohm, 2003), task and social constraint activating conscious affect-regulation (Erber et al., 2004), and nonconscious affect-regulation mechanisms (Gross, 2002) play important roles. Future researchers should further address these issues.

The present study is related to Solomon and Stone’s (2000) analysis of what makes an emotion positive or negative. Their standpoint is that an exclusive focus on valence is misleading because additional aspects are important for emotional experiences and their influence on behavior. They argue that by conceptualizing emotions along a single valence dimension, decision-making researchers may ignore or misrepresent the complexity and sub-

Table 2

<table>
<thead>
<tr>
<th>Word pair</th>
<th>No context</th>
<th>χ²(1)</th>
<th>p</th>
<th>Context</th>
<th>χ²(1)</th>
<th>p</th>
<th>Difference</th>
<th>χ²(1)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low activation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indifferent-Calm</td>
<td>40</td>
<td>3.60</td>
<td>.058</td>
<td></td>
<td>36.52</td>
<td>.001</td>
<td>−26</td>
<td>38.52</td>
<td>.001</td>
</tr>
<tr>
<td>Droopy-Serene</td>
<td>39</td>
<td>4.90</td>
<td>.027</td>
<td></td>
<td>38.52</td>
<td>.001</td>
<td>−23</td>
<td>30.34</td>
<td>.001</td>
</tr>
<tr>
<td>Bored-At ease</td>
<td>40</td>
<td>0.40</td>
<td>.527</td>
<td></td>
<td>22.50</td>
<td>.001</td>
<td>−30</td>
<td>48.08</td>
<td>.001</td>
</tr>
<tr>
<td>Dissatisfied-Satisfied</td>
<td>36</td>
<td>22.50</td>
<td>.001</td>
<td></td>
<td>48.08</td>
<td>.001</td>
<td>−25</td>
<td>23.85</td>
<td>.001</td>
</tr>
<tr>
<td>High activation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angry-Euphoric</td>
<td>35</td>
<td>2.50</td>
<td>.114</td>
<td></td>
<td>23.85</td>
<td>.001</td>
<td>−20</td>
<td>61.59</td>
<td>.001</td>
</tr>
<tr>
<td>Worried-Upbeat</td>
<td>39</td>
<td>4.50</td>
<td>.001</td>
<td></td>
<td>61.59</td>
<td>.001</td>
<td>−35</td>
<td>1.01</td>
<td>.001</td>
</tr>
<tr>
<td>Anxious-Elated</td>
<td>40</td>
<td>6.40</td>
<td>.011</td>
<td></td>
<td>43.08</td>
<td>.001</td>
<td>−28</td>
<td>26.67</td>
<td>.001</td>
</tr>
</tbody>
</table>

a Variable is constant why no test statistic is needed.
tlety of human emotional life. Although we agree that a too single-handed focus on pleasure maximization is unfortunate and sometimes incorrect, it should be noted that in many situations simple hedonistic calculus or valenced responses is a very efficient (i.e., low effort, high accuracy) heuristic (Slovic et al., 2002). The present research is a first step toward identifying the boundary conditions for hedonic maximization.

References


