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Dissociating implicit wanting from implicit liking: Development and validation of the Wanting Implicit Association Test (W-IAT)



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ABSTRACT

Background and objectives: Wanting and liking reflect different phenomena that can be dissociated. In the present research, we develop and validate an implicit measure of wanting, the Wanting Implicit Association Test (W-IAT). To examine the validity of the W-IAT, we compared it with a standard liking IAT (L-IAT) and a semantic pseudo-wanting IAT (PW-IAT) in a context where wanting-liking dissociations have been established by previous research. Specifically, we predicted that heterosexual male participants prefer attractive female over attractive male faces in the new wanting IAT, whereas no such asymmetry should be obtained for the liking and pseudo-wanting IATs.

Methods: The rationale of the W-IAT consists in endowing one of the two attribute responses in the IAT with a truly motivational wanting quality, which allows assessment of stimulus-response compatibility effects between target stimuli and responses that are based on motivational wanting. To establish the motivational quality of the wanting response, participants are made thirsty with salty snacks before the test. During the W-IAT, participants obtain water as an action effect of the response with which they categorize drinks into the attribute category “I want”. As target stimuli for which the strength of implicit wanting was to be assessed in the IAT, attractive and unattractive male and female faces had to be classified on the basis of their attractiveness.

Results: In the W-IAT, participants (heterosexual and male) showed a stronger implicit preference for attractive female over attractive male faces. No such difference was found for implicit liking (assessed with a standard valence IAT) and for the pseudo-wanting IAT (using only semantic labels of wanting and not wanting).

Limitations: Future research is needed to validate the W-IAT in other motivational contexts besides attractive faces (e.g., addiction, craving) and to identify the elements of the procedure that are critical for establishing an implicit measure of wanting.

Conclusion: Results suggest that the W-IAT is a valid measure of implicit wanting.

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1. Introduction

Most people would state that they want what they like and like what they want. Indeed, research suggests that liking and wanting are positively correlated (Berridge & Robinson, 2003; Berridge, 1996). However, several studies provide evidence that liking and wanting actually reflect different phenomena that can be dissociated under certain conditions or with regard to specific classes of stimuli. Research on addiction has shown, for instance, that after

casual drug use has developed into addiction, wanting for addictive substances is not necessarily related to enjoyment of their consumption any more (Robinson & Berridge, 1993). Similarly, for heavy drinkers, a priming dose of alcohol increases wanting without a concurrent increase in liking; whereas tainting alcohol with an unpleasant tasting substance reduces liking without influencing wanting (Hobbs, Remington, & Glautier, 2005). Research on eating behavior complements these findings. Food deprivation increases wanting for food without influencing liking (Epstein, Truesdale, Wojcik, Paluch, & Raynor, 2003). Even contrary shifts in wanting and liking can be observed under specific conditions. Constraints, denials or failures in obtaining a desired stimulus (e.g., a consumer good) can increase wanting while simultaneously decreasing liking (Dai, Dong, & Jia, 2014; Litt, Khan, & Shiv, 2010).

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Wanting-liking dissociations were also found for specific classes of stimuli irrespective of previous deprivation or addictive disorders. Dai, Brendl, and Ariely (2010) showed that men's preference for attractive female over male faces was stronger when assessing wanting compared to liking (see also Aharon et al., 2001). This finding suggests that at least for some classes of stimuli, the absence of a wanting motivation does not imply low levels of liking (e.g., men might like pretty male faces because of their aesthetic features but do not want them). Finally, evidence for wanting-liking dissociations from animal models suggests that liking and wanting (at least in the domain of addiction) have distinct neural substrates: Whereas liking is mediated by opioid systems and primary sensory and prefrontal valuation regions, wanting seems to be mediated by midbrain dopamine activity (Berridge, 1996; Berridge, Robinson, & Aldridge, 2009; Knutson, Fong, Adams, Varner, & Hommer, 2001).

Wanting is best understood as a motivation to approach, obtain, and consume a desired stimulus, whereas liking refers to the purely hedonic response that the stimulus elicits (e.g., Berridge et al., 2009). In animal research, wanting and liking are typically operationalized on the basis of facial expressions (liking) and actual consumption (wanting). As has been argued elsewhere (Tibboel et al., 2011), facial expressions and consumption are likely to be invalid indicators of liking and wanting in human subjects, because humans can easily fake facial expressions and inhibit consummatory impulses. The most widely used measurement procedures for wanting and liking in research with humans are self-report measures. However, self-reports bear several risks that might undermine the validity of the assessment. First, self-reports are affected by demand characteristics. Second, subjects might confuse wanting and liking or conceptualize them idiosyncratically. Finally, wanting and liking do not necessarily need to be conscious and therefore may be inaccessible to introspection (Berridge & Kringelbach, 2008).

A promising way to overcome limitations of these assessment procedures consists in the development of implicit measures. Implicit measures aim at assessing automatic responses toward stimuli that are less open to strategic self-presentation concerns. However, recent attempts to assess wanting and liking in addiction with implicit measures have provided no evidence for wanting-liking dissociations. Tibboel et al. (2011) used two versions of the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) to assess implicit wanting and liking. In the IAT, participants sort target stimuli into target categories (e.g., “flowers” vs. “insects”) and attribute stimuli into attribute categories (e.g., “positive” vs. “negative”), using the same two response keys for both tasks with a block-wise variation of response assignments. A difference in mean response times between blocks (the IAT effect) is interpreted as the relative association strength between target and attribute categories (Greenwald et al., 1998). Tibboel et al. (2011) tried to assess implicit liking and implicit wanting for smoking. A valence IAT with the attribute categories “I like” and “I don't like” was used to assess implicit liking, and a wanting IAT with the attribute categories “I want” and “I don't want” was developed to assess implicit wanting. Target categories were “nicotine” and “household” in both IATs. Results revealed a high correlation between the wanting and the liking IATs, and a deprivation manipulation had no influence on implicit wanting. On the basis of their findings the authors conclude that they “found no evidence that implicit wanting measures and implicit liking measures capture different processes” (Tibboel et al., 2011, p. 291; for a more detailed and critical review on the validity of implicit wanting measures, see; Tibboel, De Houwer, & Van Bockstaele, 2015).

A similar approach to assess implicit wanting and liking has been taken by Dewitte (2015) who aimed at examining incentive salience and hedonic quality of sexual stimuli. Besides a valence-

based liking IAT, a wanting IAT was administered that used semantic descriptions of wanting and not wanting as attribute category labels (I want vs. I don't want) and synonyms of wanting and not wanting as attribute stimuli (e.g., desire, avoid). Both IATs comprised only one target category, namely words that referred to sex (e.g., make love, orgasm). Prior to the IATs, participants were randomly assigned to one of three motivational context conditions, which comprised watching either a sex movie, a romantic movie, or a neutral movie. It was hypothesized that the motivational context has a stronger influence on wanting compared to liking. However, results revealed no interaction of motivational context and IAT type, indicating that the wanting and liking IATs did not respond differentially to the motivational manipulation. Such an interaction, however, would have been crucial to establish a dissociation between the wanting and liking IATs and for validating the wanting IAT as a specific measure of implicit wanting. Furthermore, the pattern of findings for the wanting IAT did not correspond to predictions, with wanting for sex being lowest after watching a sex movie. Apparently, like in the Tibboel et al. (2011) study, employing semantic labels and stimuli for wanting (and not wanting) alone seems not to suffice to establish an implicit wanting IAT.

In the present research, we wanted to further examine whether implicit wanting and liking can be dissociated with different versions of the IAT. In accordance with previous attempts to assess implicit liking, we propose that valence IATs using attribute categories like “positive”/“negative” or “I like”/“I don't like” allow for an implicit assessment of liking. We question, however, the adequacy of previous attempts to assess implicit wanting. Assessing merely semantic relations between the target and wanting-related attribute categories might lead to a simple recoding of the two IAT tasks in terms of valence (Meissner & Rothermund, 2013; Rothermund, Teige-Mocigemba, Gast, & Wentura, 2009), which could explain high correlations between previous wanting and liking IATs (Tibboel et al., 2011). Instead, our aim was to assess stimulus-response compatibility effects (SRC; De Houwer, 2001) that are based entirely on the motivational, wanting-related properties of the target stimuli and of the to-be executed response. For this purpose, one of the two IAT responses has to acquire the quality of a truly motivational wanting response that is characterized by an automatic impulse to approach, obtain, and consume a stimulus (Berridge et al., 2009).

In order to establish such a wanting response, we made subjects thirsty before the test with salty snacks, so that drinks were likely to become triggers for wanting. During the W-IAT, drinks and neutral objects were presented as attribute stimuli that had to be categorized into the categories “I want” (for drinks) and “I don't want” (for other objects). To further endow the wanting response with a consummatory character, participants earned water for later consumption and received brief visual and auditory feedback indicating drinking with each quickly and accurately categorized drink (i.e., the quality of the wanting response was established by linking it to motivationally relevant action effects; cf. Eder, Rothermund, & De Houwer, 2013). Together, these features of the W-IAT, that is, the presentation of attribute stimuli that satisfy a current need and the consummatory consequences of the response, should ensure that the motivational quality of the wanting response drives SRC effects for potential target stimuli.

To test whether the W-IAT is a valid measure of implicit wanting, we aimed at replicating findings from previous research on wanting-liking dissociations. It has been shown (with explicit measures) that men's preference for attractive female over male faces is stronger when assessing wanting compared to liking (Aharon et al., 2001; Dai et al., 2010). To replicate this finding, we used male and female facial photos as target stimuli that had to be classified as attractive or uninteresting. As dependent variable, we

calculated SRC-based IAT effects separately for attractive female and male photos. In the W-IAT, we expected that SRC effects should be stronger for attractive female compared to attractive male faces. To validate the W-IAT, we compared the results of the W-IAT with two other IATs in a between-subject design. With regard to the target dimension, the two other IATs were identical to the W-IAT, that is, male and female facial photos had to be classified as attractive or uninteresting. One of the other IATs was a standard valence-based liking IAT (L-IAT) where the attribute task consisted of classifying positive and negative pictures (rather than drinks/neutral pictures) according to their valence. In the L-IAT, in contrast to the W-IAT, we expected similar SRC effects for attractive female and attractive male faces (Aharon et al., 2001; Dai et al., 2010). The third IAT, which we labelled the pseudo-wanting IAT (PW-IAT) was designed to rule out the possibility that a wanting IAT could be created by merely changing the semantic meaning of the attribute categories from “positive/negative” to “I want/I don’t want”, and that the thirst manipulation on its own influences IAT effects, for instance by reducing the efficiency of executive control processes which in turn increases the likelihood that behavior is driven more strongly by automatic processes (e.g., Wiers, Beckers, Houben, & Hofmann, 2009). Thus, the PW-IAT was in many procedural features a close copy of our W-IAT, but lacked the (in our reasoning) critical component of a true W-IAT, which is the motivation-based wanting response for one of the attribute categories. The PW-IAT comprised the thirst induction procedure of the W-IAT to endow drinking-related stimuli with motivational salience, as well as the attribute category labels “I want/I don’t want”. However, as attribute stimuli in the task we now used desirable and undesirable objects (rather than drinks vs. neutral objects), and correct “I want” responses were not accompanied by any further consummatory consequences. Instead, participants could earn water by fast and correct space bar presses upon encountering drink stimuli in an additional task, which introduced a consummatory response that was entirely different from the responses that were used to categorize exemplars of the target and attribute categories. For the PW-IAT, we predicted that the results would be similar to the L-IAT (i.e., similar SRC effects for attractive female and attractive male faces) because it lacks the motivational character of the attribute response which should be crucial for an assessment of SRC effects based on implicit wanting. Taken together, a valid assessment of implicit wanting is reflected in an interaction of IAT type (W-IAT vs. L-IAT vs. PW-IAT) and sex of target face (attractive female vs. attractive male faces): In the W-IAT, IAT effects should be larger for female vs. male faces. This difference should be considerably smaller or completely absent in both the L-IAT and the PW-IAT.

2. Method

2.1. Participants and design

One hundred and thirty-four men participated in our experiment. The data of nine participants were excluded from the analyses for the following reasons: Six participants indicated a non-heterosexual orientation. Two participants responded faster than 300 ms in more than 10% of IAT responses (for exclusion criteria, see Greenwald, Nosek, & Banaji, 2003). One participant responded erroneously in 100% of trials of one cell of our design, which precludes data analysis. Thus, the final sample consisted of 125 participants (age: $M = 24.8$, $SD = 5.1$).

2.2. Procedure and materials

Participants were seated at individual computer terminals and performed either the L-IAT, the W-IAT, or the PW-IAT.

2.2.1. Liking IAT

In the L-IAT, participants had to assign stimuli via key press into one of four categories. Stimuli depicting a facial photo had to be classified as being either attractive or uninteresting (target dimension). Facial photos comprised four attractive female and four attractive male photos and for the contrast category four unattractive female and four unattractive male photos.¹ As attribute stimuli, we used eight positive and eight negative pictures from the *International Affective Picture System* (IAPS; Lang, Bradley, & Cuthbert, 2008) that had to be classified as either positive or negative.

The L-IAT started with an attribute categorization practice block (16 trials) where participants had to press the right response key (i.e., “L” on the computer keyboard) for positive and the left key (i.e., “D”) for negative pictures. Subsequently, participants practiced the target classification task by categorizing target stimuli as attractive faces or uninteresting faces (16 trials). The same two keys as in the preceding attribute classification block were used; however, the right key was assigned to one type of faces and the left key to the other type of faces. Afterwards, participants completed the first combined block in which targets and attributes appeared in random order on alternating trials (96 trials). After another target classification practice block with reversed response assignment (16 trials), participants completed another combined block, also with the reversed assignment for the target categories (96 trials).

All stimuli were presented in the center of the screen until a response was detected. Incorrect responses as well as responses above the response deadline (reaction time > 750 ms) provoked an error message. The inter-trial interval was 1000 ms.

2.2.2. Wanting IAT

Participants who completed the W-IAT were instructed to eat salty crackers before the IAT and were informed that they would be able to gain water for later consumption during the experiment. To increase motivation to gain water, participants were further told that they would have to eat more crackers after the experiment. Subsequently, participants received 15 salty crackers and had to eat as much as possible within 2 min, at least eight pieces². Afterwards, they completed an IAT procedure similar to the liking IAT, differing only in the attribute categories which were “I want”, containing eight pictures of “drinks” (e.g., bottle of water), and “I don’t want”, containing pictures of eight neutral “other objects” (e.g., sunglasses). All attribute stimuli were free stock photos taken from <http://www.freeimages.com>. When participants responded correctly and below the response deadline to pictures of drinks, they earned 10 ml of water for later consumption. This was displayed by adding the picture of a glass at the corner of the screen,

¹ To ensure high relevance of the facial stimuli, participants performed in both IAT conditions a pre-rating where a set of 60 facial photos (30 female; taken from the internet and various databases) had to be evaluated. For each female photo, participants indicated on a 7-point scale their agreement with the following statement: “I find this woman attractive and can imagine having a date with her”. For each male photo, participants responded to the following statement: “This man is attractive and is likely to be successful when having a date”. For each participant, the four most and four least attractive faces of each sex were selected as target stimuli.

² To test whether the salty snacks induced thirst, participants in the W-IAT and PW-IAT condition answered questions on their state thirst after snack consumption (e.g., “I would like to drink something now”; 7-point scale). Participants in the L-IAT condition answered these questions at the beginning of the experiment. A one-way between subjects ANOVA was conducted to compare results of a composite measure of the thirst items between the three IAT conditions. It yielded a main effect of IAT condition, $F(1, 122) = 7.19$, $p = 0.001$, $\eta^2 = 0.105$. Pairwise comparisons using the Tukey HSD test revealed that thirst ratings did not differ between the two IATs where there was a thirst manipulation (W-IAT: $M = 4.64$, $SD = 1.24$; PW-IAT: $M = 4.33$, $SD = 1.24$), $p = 0.48$, but were significantly lower in the L-IAT ($M = 3.70$, $SD = 1.1$) than in the other two IATs (both $ps < 0.05$).

accompanied by a cork popping or bottle opening noise played via headphones. After completing the W-IAT, participants received the amount of water they had gained and had to eat four additional crackers to maintain consistency with the previous instructions.

2.2.3. Pseudo-wanting IAT

Like in the W-IAT, participants who completed the pseudo-wanting IAT (PW-IAT) started with the consumption of at least eight salty crackers within 2 min and were informed that they could gain water during the experiment. The following IAT procedure was identical to that of the W-IAT with two exceptions. First, instead of drinks and neutral objects, attribute stimuli consisted of desirable (e.g., smartphone) and undesirable (e.g., garbage) objects that had to be categorized into the “I want” or “I don't want” category. Second, participants were informed that whenever the stimulus image displayed a drink, they could gain 10 ml of water by pressing the space bar instead of one of the two assigned response keys. If performed fast enough, these space bar presses were accompanied by the same visual and auditory effects as correct classifications of drinks in the W-IAT. Drink images were presented equally often as each of the other stimulus categories, which increased the overall trial number of the PW-IAT in comparison to the W-IAT, but ensured that participants could gain the same overall amount of water in the PW-IAT as in the W-IAT.

3. Results

We calculated SRC-based IAT effects separately for attractive female and attractive male facial photos (i.e., stimulus effects; [Gast & Rothermund, 2010](#)) on the basis of the D600 measure ([Greenwald et al., 2003](#)). The SRC-based IAT effects were submitted to a 3 (IAT type: L-IAT vs. W-IAT vs. PW-IAT) \times 2 (target face: attractive female vs. attractive male) ANOVA with repeated measurement on the second factor (see [Table 1](#) for means). Results revealed a main effect of target face, $F(1, 122) = 6.03, p = 0.015, \eta_p^2 = 0.047$, indicating that IAT effects were more pronounced for attractive female ($M = 0.78, SD = 1.21$) than for attractive male faces ($M = 0.42, SD = 1.63$). There was also a main effect of IAT type, $F(2, 122) = 3.73, p = 0.027, \eta_p^2 = 0.058$, which was followed up with pairwise comparisons revealing that average IAT effects were significantly lower in the W-IAT ($M = 0.24, SD = 1.43$) than in the L-IAT ($M = 0.90, SD = 0.89$), $p = 0.008$, but did not differ between the PW-IAT ($M = 0.65, SD = 1.01$) and the other two IATs. Most importantly, these main effects were further qualified by the predicted interaction of IAT type and target face, $F(2, 122) = 3.57, p = 0.031, \eta_p^2 = 0.055$. Pairwise comparisons of IAT effects for attractive female and attractive male faces were conducted for each IAT type to account for this interaction and revealed that similar IAT effects were attained for attractive female and attractive male target faces in the L-IAT and the PW-IAT (both $F_s < 1$), whereas in the W-IAT, larger SRC effects were obtained for attractive female than for attractive male target faces, $F(1, 122) = 13.1, p < 0.001, \eta_p^2 = 0.097$.

Table 1
Stimulus-response-compatibility-based IAT effects as a function of IAT type and target face.

IAT type	Target face	
	Attractive female	Attractive male
Liking IAT	0.92 _a (1.13)	0.89 _a (1.14)
Wanting IAT	0.68 _a (1.22)	−0.21 _b (2.07)
Pseudo-wanting IAT	0.72 _a (1.29)	0.59 _a (1.35)

Note. Standard deviations appear in parentheses below means. Within columns and rows, means that do not share a common subscript differ at $p < 0.05$.

4. Discussion

We tested whether a new variant of a wanting IAT (W-IAT) that endows one of the two responses with a motivational character provides a valid measure of implicit wanting. We replicated a finding from research on wanting-liking dissociations: It has been shown (by using explicit measures of wanting) that men's preference for attractive faces is stronger for female than for male faces when assessing wanting compared to liking ([Aharon et al., 2001](#); [Dai et al., 2010](#)). Based on this finding, we predicted that SRC-based IAT effects should show a strong asymmetry between attractive female and male faces when using the new W-IAT, but not for a standard liking IAT (L-IAT) or a semantic variant of a wanting IAT without endowing one of the attribute responses with a truly motivational character (PW-IAT). Results were in line with this predicted dissociation between the three IATs, suggesting that the W-IAT provides a valid measure of implicit wanting that is different from implicit liking and also from semantically-based versions of the wanting IAT.

Previous attempts to measure implicit wanting with a variant of the IAT did not find fully convincing support for wanting-liking dissociations ([Dewitte, 2015](#); [Tibboel et al., 2011](#)). We believe that these divergent findings can be explained by a crucial difference regarding the nature of the attribute dimension in previous work and in the current wanting IAT. In previous research, the wanting IAT differed from the standard liking IAT only in the use of semantic equivalents of wanting (“I want”/“I don't want”) rather than liking (e.g., “I like”/“I dislike” or “positive”/“negative”) as attribute category labels. However, as argued above, semantic equivalents of wanting might not be enough to establish the motivational quality of the respective responses, because, for instance, semantic labels of wanting might be recoded in evaluative terms ([Meissner & Rothermund, 2013](#); [Rothermund et al., 2009](#)). We tried to overcome these limitations by introducing a truly motivation-based wanting response into the W-IAT. Specifically, by executing the “I want” response, participants satisfied a current need by earning water for later consumption after they had been made thirsty with salty snacks. In addition, the consummatory character of the response was further emphasized by linking each successful execution of this response with an action effect that signaled immediate consumption of the desired incentive (cf. [Eder et al., 2013](#)). The wanting response thus contained the core features of wanting, that is, the motivation to approach, obtain, and consume a desired stimulus ([Berridge et al., 2009](#)). The introduction of such a motivation-based wanting response into the W-IAT allowed us to assess wanting-based stimulus-response compatibility (SRC) effects for stimuli that are introduced as targets into the W-IAT. In our validation study, this assumption was supported by showing a difference in W-IAT effects between attractive female and attractive male faces (for heterosexual male participants) that was absent in a standard valence IAT (L-IAT) and also in a semantic variant of the wanting IAT (PW-IAT).

In order to measure implicit wanting we aimed at implementing a motivation-based wanting response into the IAT that is as strong as possible. We incorporated three elements that contributed to achieving this goal. First, one of the attribute categories and its stimuli (i.e., drinks) corresponded to a current motive (i.e., thirst) that is activated within the experimental setting. Second, by reacting fast and correctly to the wanting stimuli, participants could acquire the incentive (i.e., water) that satisfies the current need. Third, correctly classifying wanting stimuli leads to additional action effects (i.e., cork popping or bottle opening noise played via headphones) that have a consummatory character. We do not know whether all of these elements are necessary for measuring implicit wanting or whether one or two of the features would have been

sufficient to establish a motivational wanting response. However, our main goal was the development of a measure of implicit wanting that works, and results suggest that the features of the W-IAT allow for measuring implicit wanting for the facial target stimuli. Furthermore, results of the PW-IAT show that simply using semantic equivalents of wanting and making subjects thirsty is not enough to measure implicit wanting. Thus, for the time being, we suggest that researchers who want to assess implicit wanting integrate all features of the W-IAT because each of these features – or their combination – might contribute to the motivational quality of the wanting response. Whether or not implementing only one or two of the elements suffices to measure implicit wanting is an interesting avenue for future research that aims at testing whether the W-IAT can be simplified.

Most previous research that aimed at assessing (implicit) wanting-liking dissociations was conducted in the addiction context where a motivational manipulation (i.e., deprived vs. not deprived, aroused vs. not aroused) is supposed to determine drug-related wanting-liking dissociations. In contrast, we focused on specific stimuli (i.e., attractive female vs. attractive male faces) for which we predicted and found unconditional wanting-liking dissociations that did not depend on motivational manipulations relating to stimulation or deprivation. It thus might be too early to conclude on the basis of the current findings that the W-IAT is also a sensitive measure for wanting (e.g., of drugs, food, sex) under conditions of deprivation or stimulation. In this regard, it is important to note that in the W-IAT the wanting quality of the response is actually induced with a substance deprivation (i.e., participants were not allowed to drink although they wanted to drink). In our view, this core feature of our new measure should render the W-IAT particularly suitable for assessing wanting-based SCR-effects for other currently deprived substances (e.g., cigarettes or alcohol). However, additional research is required to provide direct evidence for this claim.

If the W-IAT turns out to be a valid indicator of implicit wanting in different contexts, future research should also examine implicit wanting processes in areas where explicit indicators of wanting (e.g., self-reports) are likely to be biased by social desirability concerns (e.g., drug use or pedophilia). In these contexts, the W-IAT might be a much better predictor of behavior than explicit measures.

The present findings also provide new theoretical insights. Specifically, our results lend further support to the idea that wanting and liking reflect different psychological phenomena. However, whereas previous research on wanting-liking dissociations in humans relied predominantly on self-report measures (e.g., Dai et al., 2014; Epstein et al., 2003; Hobbs et al., 2005), our findings suggest that at least for a specific class of stimuli wanting and liking can also be dissociated on an implicit level. Possessing an implicit measure of wanting is of considerable interest because it enables researchers to assess wanting independently from liking even in cases where individuals are either unable or unwilling to provide reliable data via self-report. We recommend the current version of the W-IAT as a flexible tool that can be used for the assessment of implicit wanting for arbitrary selections of target stimuli.

To conclude, we found that implicit wanting and implicit liking can be dissociated. Whereas implicit liking can be measured with a standard valence IAT, implicit wanting can be measured with the W-IAT, which comprises motivation-based wanting responses that allow for an assessment of SRC effects between target stimuli and response characteristics reflecting implicit wanting.

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