On the Self-Protective Nature of Inconsistency-Negativity Management: Using the Person Memory Paradigm to Examine Self-Referent Memory

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How do individuals remember feedback that is inconsistent or negative? According to the inconsistencynegativity resolution model, individuals are motivated to reduce uncertainty and resolve inconsistency
even when threat to self is potential. They more deeply process and better remember negative self- than
other-referent information. According to the inconsistency-negativity neglect model, individuals are
motivated to protect the self against threat. They engage in more shallow processing and remember less
negative self- than other-referent information. Participants read and recalled either self- or other-referent
mixed-valence information. The neglect model was supported in personality and minimal feedback
settings. A chronometric exploration of processing mechanisms and the ruling out of a retrieval
interference account clarified aspects of the model. Individuals are hypersensitive to threat potential:
They will protect the self against even hypothetical threat.

It's not only the most difficult thing to know one's self, but the most inconvenient.

-Josh Billings

The very purpose of existence is to reconcile the glowing opinion we have of ourselves with the appalling things that other people think about us.

-Quentin Crisp

As comfortable, supportive, and warm as individuals may find their professional and social niches, sooner or later they will come face to face with negative information that contradicts their cherished self-beliefs. A supervisor will applaud parts of their work but concurrently disapprove of other parts. A therapist will highlight psychological strengths but also pinpoint shortcomings in their behavioral patterns. A friend, partner, or spouse will affirm aspects of their personality but simultaneously criticize others. Even in the absence of direct feedback, individuals occasionally will wonder whether they are indeed the kind of person who would act in the same double-faced and disputatious manner as a shrewd politician, a scandalous movie star, or the proverbial next-door neighbor.

How do individuals process information that is partially negative or inconsistent with the way they view themselves? Do they remember negative or inconsistent information better than positive or consistent information? Do they process the same information differently when it actually describes another person? More generally, to what lengths will individuals go to protect the self from negative or inconsistent feedback?

We borrowed and modified techniques from the person-memory literature to address the above questions in four experiments. In the first experiment, we simulated a direct personality feedback situation. In the second experiment, we tested whether the results of Experiment 1 extend to a minimal feedback setting, in which participants simply are asked to consider the new, hypothetical information. Experiment 3 was a chronometric exploration of underlying processing mechanisms, whereas Experiment 4 tested a retrieval interference explanation of the findings. Collectively, with these experiments we attempted to paint the portrait of the individual as manager of informational inconsistency or negativity.

Experimental Task

The questions that prompted the present investigation will now be expressed more formally. How do individuals remember information that (a) pertains to either the self or another person, (b) is evaluatively inconsistent (i.e., contains both positive and negative items), and (c) is referentially mixed (i.e., refers to both aspects that are central to and aspects that are peripheral to one's self-concept)? Do individuals remember self- and other-referent information differently even when this information is identical?

To address the above questions, an experimental task is needed with the following three specifications. First, the information ought to refer either to the self or another person (Ybarra, 1999, Experiment 2); we assigned this hypothetical other person the androgynous name of Chris. Second, the information ought to contain behaviors that are evaluatively inconsistent with regard to a given personality trait; that is, both positive and negative behaviors exemplifying the trait would need to be included (Asch & Zukier, 1984). Finally, the information ought to contain behaviors

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exemplifying traits that are central and also traits that are peripheral to participants' self-concepts (Sedikides, 1993).

We constructed such an experimental task by borrowing methods and techniques from the well-established and prolific personmemory paradigm. Furthermore, we modified these techniques and merged them with experimental tradition in research on self-perception. We display the behaviors that composed the experimental task in Appendix A. The task permits testing of two competing theoretical models of self-other differences in inconsistency-negativity management: the inconsistency-negativity resolution model and the inconsistency-negativity neglect model.

The Management of Inconsistent-Negative Information: Resolution or Neglect?

The experimental task allows for a rather striking processing implication: The self-referent behaviors are virtually impossible to process in the same manner as the Chris-referent behaviors. Imagine being told, or being asked to consider, that you are the kind of person who would borrow other people's belongings without their knowledge. You probably thought spontaneously whether you performed such a behavior or were likely to perform it. In the case of self-referent behaviors, spontaneous reference to stored self-knowledge is an inherent part of the comprehension process and cannot be turned off easily. In contrast, imagine being told, or being asked to consider, that Chris is the kind of person who would borrow other people's belongings without their knowledge. You may not necessarily think about this behavior in reference to any particular person. Rather, you are likely to comprehend the behavior in terms of general knowledge about how individuals behave.

The above examples illustrate that different processes are activated by the referents self versus Chris. Klein and his colleagues (Klein & Kihlstrom, 1986; Klein & Loftus, 1988, 1990) have distinguished between two processes in which individuals engage when forming impressions: elaboration (i.e., thinking about the behaviors in relation to prior knowledge) and organization (i.e., thinking about the specific behaviors in relation to one another). The existing associative network models of impression formation focus almost exclusively on organizational processes (Hamilton, 1981; Hastie & Kumar, 1979; Sherman & Hamilton, 1994; Skowronski, Carlston, Mae, & Crawford, 1998; Srull & Wyer, 1989; Vonk, 1994). However, elaborative (as well as organizational) processes are evident in the case of the self-reference effect. According to this effect, participants demonstrate superior memory for adjectives about which they make self-descriptive (i.e., "describes you?") judgments as opposed to adjectives about which they make structural (i.e., "big letters?"), phonemic (i.e., "rhymes with __?"), or semantic (i.e., "means the same as __?") judgments (Rogers, Kuiper, & Kirker, 1977; Symons & Johnson, 1997).

Elaboration, then, is relatively more likely to occur when self-referent information is processed, whereas organization is relatively more likely to occur when other-referent information is processed. Nevertheless, important questions are left unanswered. How exactly do the processes of elaboration and organization operate? What are the memorial consequences of these processes? The inconsistency-negativity resolution and the inconsistency-negativity neglect models are pertinent to these questions. We will

present the two models after a brief exposition of definitional issues.

Definitional Issues

Semantic Versus Episodic Knowledge

Self-knowledge can be classified in terms of two types: semantic, abstract, or trait-based (Kihlström & Cantor, 1984; Klein & Loftus, 1993); and episodic, concrete, or behavioral (Groninger & Groninger, 1984; Locksley & Lenauer, 1981). Semantic and episodic knowledge can also be used for the representation of other persons (Park, 1986; Sherman & Klein, 1994).

Central and Peripheral Self-Conceptions

Central self-conceptions are (a) characterized by high amounts of self-knowledge, (b) held with high certainty, (c) highly selfdescriptive (with their dimensional polar opposite being highly nonself-descriptive) of the individual, (d) very important (with their dimensional polar opposite being very unimportant) to the individual, (e) highly positive (with their dimensional polar opposite being highly negative), and (f) highly likely to be acted on (with their dimensional polar opposite being highly unlikely to be acted on). Compared with central self-conceptions, peripheral self-conceptions are (a) characterized by low amounts of selfknowledge, (b) held with low certainty, (c) of average selfdescriptiveness, (d) of average importance, (e) of average valence (i.e., positivity-negativity), and (f) less likely to be acted on. In summary, central self-conceptions occupy the extremes of the six distributions implied above, whereas peripheral self-conceptions hover around the means of these distributions (Sedikides, 1993, 1995; present Pilot Studies 1 and 2). Next, we will turn to a presentation of the two theoretical models.

The Inconsistency-Negativity Resolution Model

The inconsistency-negativity resolution model views the individual as an objective information processor, a scientist, a passionate truth seeker. The individual is motivated to reduce uncertainty about the self, to find out who she or he truly is. In doing so, the individual is committed to solving informational puzzles. When confronted with inconsistent informational items (i.e., new and negative information contradicting old and positive information), the individual will seek to reconcile them. Resolution of inconsistency is the individual's principal task, and the individual will be motivated to complete this task even at high cost. That is, the individual will be motivated to achieve inconsistency resolution even when the likely outcome is unfavorable to the self, even when the resolution implies some undesirable personal qualities. (For renditions of this view, see Festinger, 1954; Jahoda, 1958; Nisbett & Valins, 1972; Sorrentino & Hewitt, 1984; Trope, 1983.) Likewise, the individual will seek to resolve inconsistency even when the likely outcome is unfavorable to another person (Asch & Zukier, 1984; Kruglanski, 1990; Trope & Bassok, 1982).

The most fundamental postulate of the inconsistency-negativity resolution model is that information that is inconsistent with self-knowledge (e.g., negative, particularly central negative, information) will enjoy a processing advantage over information that is consistent with self-knowledge (e.g., positive, particularly central

positive, information). This processing advantage will occur because individuals are likely to encode inconsistent information more deeply. Individuals will attend to, think about, compare, and integrate new inconsistent behaviors with stored self-knowledge (elaboration). As a result, inconsistent information will be connected multiply to stored information. These multiple associative pathways will, in turn, facilitate retrieval of inconsistent information (Hastie, 1980; Srull, 1981; Srull & Wyer, 1989). Note that the assumption of inconsistency advantage also holds in the case of information about another person (Peeters & Czapinski, 1990; Skowronski & Carlston, 1989; Taylor, 1991). However, in this case deep processing refers mostly to associative activity that reconciles evaluatively inconsistent new behaviors per se (organization). This reconciliation will be carried out through attributional processes (Hastie, 1984; Stangor & McMillan, 1992; Weiner, 1985).

The inconsistency-negativity resolution model endorses the notion that self-referent information processing follows a two-stage route. When encountering a self-referent behavior, one gauges, at Stage 1, the plausibility of the behavior with respect to semantic self-knowledge. One appraises, on the basis of general selfknowledge, whether one is likely to perform such a behavior. Individuals' self-conceptions are mostly positive (Edwards, 1957; Kendall, Howard, & Hays, 1989; Schwartz, 1986). This makes positive behaviors (especially central positive ones) consistent with one's self-conceptions and makes negative behaviors (especially central negative ones) inconsistent with one's selfconceptions. If the behaviors are consistent, one terminates processing in Stage 1. In contrast, if the behaviors are inconsistent, one advances to Stage 2 and engages in inconsistency resolution. The model proposes a similar processing route regarding otherreferent information.

We will explicate these processing routes below. We will express the predictions of the inconsistency-negativity resolution model as a triple interaction among Referent (self or Chris), Behavior Type (central or peripheral), and Behavior Valence (negative or positive). We will draw the predictions by decomposing hypothetically this interaction in terms of the two Referent × Behavior Valence interactions that correspond to each level of Behavior Type (i.e., central and peripheral behaviors). The predictions of the model are presented in Table 1. Empirical evidence for the assumed differential expectancies for self versus Chris is presented in Table 2 (see also Pilot Study 3).

Table 1
Hypothetical Means of Recalled Behaviors Used to Illustrate
the Predictions of the Inconsistency Resolution and
Inconsistency Neglect Models

| | Central behaviors | | Peripheral behaviors | |
|--------------------------|-------------------|----------|----------------------|----------|
| Model | Negative | Positive | Negative | Positive |
| Inconsistency resolution | · | | | |
| Self | 10 | 5 | 6 | 4 |
| Chris | 7 | 5 | 4 | 4 |
| Inconsistency neglect | | | | , |
| Self | 5 | 7 | 3 | 3 " |
| Chris | 7 | 7 | 3 | · 3 |

Note. Range = 1-10.

Table 2
Behavioral Likelihood of Performance Ratings as a Function of Referent, Behavior Type, and Behavior Valence in Pilot Study 3

| Referent | Central behaviors | | Peripheral behaviors | |
|----------|-------------------|----------|----------------------|----------|
| | Negative | Positive | Negative | Positive |
| Self | 1.61 | 6.73 | 2.85 | 5.11 |
| Chris | 3.11 | 4.84 | 4.18 | 4.09 |

Processing of Information Related to Central Self-Conceptions

First, we will discuss how participants process information pertaining to their central self-conceptions. This information can be either self or other referent.

Self-referent processing. Self-referent central information is processed in two stages. In Stage 1, one appraises whether one is likely to perform each behavior. One relies on semantic self-knowledge to answer implicitly this appraisal with either a yes or a no. If consistency exists between behavior and prior self-knowledge, the answer is yes and processing is terminated. On the other hand, if inconsistency exists between behavior and prior self-knowledge, the answer is no and processing continues to Stage 2. At this stage, one consults episodic knowledge; that is, one searches for a specific instance in which the behavior or a similar one has occurred.

It follows that central positive and central negative behaviors will be processed differently. Central positive behaviors are highly consistent with self-knowledge, given that participants strongly expect to perform such behaviors. Thus, processing of such behaviors will cease in Stage 1. However, central negative behaviors are highly inconsistent with self-knowledge, given that participants strongly expect not to perform such behaviors. Consequently, participants will advance to Stage 2; that is, participants will bring to mind episodic knowledge and will attempt to reconcile the new information with episodic knowledge. Given that recall is a function of amount of processing (Craik & Tulving, 1975; Hastie, 1980; Srull & Wyer, 1989), central negative behaviors will be recalled substantially better than central positive behaviors.

Other-referent processing. Other-referent central information will also be processed in two stages. In Stage 1, one makes a snap judgment of how likely the other person is to perform the behaviors. One is somewhat aided in this attempt by self-knowledge. Individuals use knowledge pertaining to their central self-conceptions in order to form impressions of unfamiliar others (Lewicki, 1983; Markus, Smith, & Moreland, 1985; Sedikides & Skowronski, 1993). Central self-conceptions, then, act as expectancies (albeit weak ones) even in the case of unfamiliar others.

Central positive and central negative behaviors referring to Chris will be processed differently. Central positive behaviors are consistent with self-knowledge, given that participants expect somewhat for Chris to perform such behaviors. Thus, processing of such behaviors will cease in Stage 1. However, central negative behaviors are inconsistent with self-knowledge, given that participants expect somewhat for Chris not to perform such behaviors. Consequently, participants will advance to Stage 2. Participants will engage in attributional thinking in an attempt to comprehend

Chris's behaviors. This will result in deeper processing of central negative behaviors and, hence, in their higher recall.

Processing of Information Related to Peripheral Self-Conceptions

We will now discuss how participants process information pertaining to their peripheral self-conceptions. This information also can be either self or Chris referent.

Self-referent processing. Peripheral positive behaviors are likely to be moderately consistent with self-knowledge, given that participants hold moderate expectancies about performing such behaviors. On the other hand, peripheral negative behaviors are likely to be moderately inconsistent with self-knowledge, given that participants hold moderate expectancies about not performing such behaviors. It follows that, in the case of peripheral positive behaviors, only Stage 1 will be evoked. However, in the case of peripheral negative behaviors, processing will advance to Stage 2 (i.e., participants will, to some extent, bring to mind episodic knowledge). Thus, peripheral negative behaviors will have a moderate recall advantage over peripheral positive ones.

Other-referent processing. Processing of other-referent peripheral information is completed in Stage 1. Participants will form a judgment as to how likely Chris is to perform peripheral behaviors. Participants are unaided in this attempt by their peripheral self-conceptions, because such self-conceptions do not entail expectancies. Consequently, participants will regard Chris as equally likely to perform peripheral negative and positive behaviors. The two behavioral categories will not be recalled differentially.

Summary and Additional Predictions

The inconsistency-negativity resolution model predicts that, when the referent is the self, central negative behaviors will be recalled much better than central positive behaviors, whereas peripheral negative behaviors will be recalled moderately better than peripheral positive ones. When the referent is Chris, central negative behaviors will be recalled moderately better than central positive behaviors, whereas peripheral negative and positive behaviors will not be recalled differentially. The model also anticipates (a) a Referent × Behavior Valence interaction, in which participants who engage in self-referent processing recall many more negative than positive behaviors, whereas participants who engage in Chris-referent processing recall slightly more negative than positive behaviors, and (b) a Behavior Valence main effect, with participants recalling negative behaviors better than positive behaviors.

The Inconsistency-Negativity Neglect Model

The inconsistency-negativity neglect model views individuals as motivated to neglect the processing of information that challenges their positive self-conceptions (Brown & Dutton, 1995; Sedikides & Strube, 1997; Taylor & Brown, 1988, 1994). The more challenging the information is, the more likely the individual will be to neglect it (Greenwald, 1981; Holmes, 1970: Sedikides, 1993). The individual has low tolerance for threat, defined as "when favorable views about oneself are questioned, contradicted, impugned, mocked, challenged, or otherwise put in jeopardy"

(Baumeister, Smart, & Boden, 1996, p. 8). By neglecting threatening feedback, individuals manage to maintain the stability of the self-concept (Greenwald, 1980). In the context of the present research, the individual will neglect processing inconsistent (i.e., central negative) information.

The most fundamental postulate of the inconsistency-negativity neglect model is that information that is particularly threatening to the self (i.e., central negative information) will have a processing disadvantage over information that is nonthreatening or enhancing to the self (i.e., central positive information). Processing of the former kind of information will cease relatively early on in the sequence. Note that inconsistent information about an unfamiliar person lacks threat potential and thus will be processed in the same manner as consistent information about this person.

Similar with the inconsistency-negativity resolution model, the inconsistency-negativity neglect model endorses the notion that the processing of self-referent information follows a two-stage route. In Stage 1, the person gauges the plausibility of each behavior with respect to semantic self-knowledge. Processing either terminates or advances to Stage 2. However, the inconsistency-negativity neglect model differs from the inconsistency-negativity resolution model regarding the conditions under which processing either terminates in Stage 1 or advances to Stage 2. The predictions of the inconsistency-negativity neglect model are presented in Table 1. As a reminder, Table 2 presents pilot data in support of our assumption that individuals have differing expectancies for self versus Chris.

Processing of Information Related to Central Self-Conceptions

Self-referent processing. First, one appraises, on the basis of semantic self-knowledge, whether one is likely to perform a central behavior (Stage 1). If the answer is no (i.e., inconsistency exists between behavior and self-knowledge), processing ceases. If the answer is yes (i.e., consistency exists between behavior and self-knowledge), one accesses episodic knowledge (Stage 2), searching for instances in which the behavior or a similar one has occurred.

Central negative behaviors are highly inconsistent with self-knowledge, given that participants have strong expectancies about not performing such behaviors. Therefore, processing of these behaviors will terminate in Stage 1. However, central positive behaviors are highly consistent with self-knowledge, given that participants have strong expectancies about performing such behaviors. Therefore, participants will advance to Stage 2, that is, they will relate these behaviors to stored episodic knowledge. In summary, central negative behaviors will be recalled more poorly than central positive behaviors.

Other-referent processing. In Stage 1, individuals form a judgment about the likelihood of Chris performing the behaviors. Individuals hold relatively weak expectancies. They expect somewhat for Chris not to perform central negative behaviors but to perform central positive behaviors. However, in either case, participants are unmotivated to protect their self-concept, given the absence of self-threat. Thus, the information will be equally likely to be connected to stored episodic information (Stage 2), resulting in nondifferential recall.

Processing of Information Related to Peripheral Self-Conceptions

Self-referent processing. Peripheral negative behaviors are moderately inconsistent with self-knowledge, whereas peripheral positive behaviors are moderately consistent with self-knowledge. However, inconsistency does not play a major role in this case, because the peripheral negative behaviors pose only a minor threat to the self. Thus, Stage 2 will be evoked minimally: Recall for negative behaviors will tend to be slightly (if at all) lower than recall for positive behaviors.

Other-referent processing. Participants hold similar expectancies with regard to Chris performing peripheral negative and positive behaviors. Furthermore, the two behavioral categories are equally nonthreatening to the self. Thus, Stage 2 will not be initiated. The level of recall for the two behavioral categories will not differ significantly.

Summary and Additional Predictions

The inconsistency-negativity neglect model predicts that, when the referent is the self, central negative behaviors will be recalled worse than central positive behaviors, whereas peripheral negative behaviors will be recalled minimally worse (if at all) than peripheral positive ones. When the referent is Chris, though, no difference in recall between negative and positive behaviors will be observed, regardless of whether the behaviors are central or peripheral. The model also anticipates (a) a Referent × Behavior Valence interaction, in which participants who engage in self-referent processing recall fewer negative than positive behaviors, whereas participants who engage in Chris-referent processing recall equivalent amounts of negative and positive behaviors, and (b) a Behavior Valence main effect, with participants recalling fewer negative than positive behaviors.

Pilot Studies

We conducted three pilot studies. Pilot Studies 1 and 2 aided in the development of the stimulus materials. Pilot Study 3 tested an assumption made by both theoretical models, namely that participants hold different expectancies for self versus Chris.

Participants in all pilot studies and subsequent experiments were University of North Carolina at Chapel Hill (UNC-CH) students fulfilling an introductory psychology course option. To keep self-presentational concerns to a minimum, all participants were promised response anonymity. Note that there will be occasional variability in the degrees of freedom within experiments, because a handful of participants did not respond to some scales. Finally, because of space limitations, we restrict coverage to those statistically significant results that are theoretically relevant. Very few additional results (i.e., order effects) reached significance; however, none of these results manifested a replicable pattern, and none qualified the reported findings.

Pilot Study 1: Trait Valence and Trait Importance Ratings

Seventy-eight participants rated (on 9-point scales) two central traits (trustworthy and kind) and synonyms (dependable and thoughtful, respectively) as well as two peripheral traits (modest

and uncomplaining) and synonyms (humble and nonwhining, respectively) for valence (1 = extremely negative, 9 = extremely positive) and importance (1 = extremely unimportant, 9 = extremely important). We selected these traits on the basis of prior research (Sedikides, 1993, 1995). The ratings validated our trait selections: Participants rated the central traits as more positive (M = 8.43) than the peripheral ones (M = 7.42), t(77) = 12.58, p < .001, and rated the central traits as more important (M = 8.13) than the peripheral ones (M = 6.61), t(77) = 12.01, p < .001.

Pilot Study 2: Behavior Valence, Behavior Importance, and Behavior Diagnosticity Ratings

Seventy-eight participants (the same ones who participated in Pilot Study 1) rated the valence and importance of the 32 behaviors that we used fully in Experiments 1-3 (Appendix A) and partially in Experiment 4 (Appendix B). The subject of each behavioral sentence was omitted; that is, the behaviors were in the form "would + verb + object." Participants rated the behaviors (on 9-point scales) on how positive or negative they thought the behaviors were (1 = extremely negative, 9 = extremely positive). Additionally, participants rated how important each behavior was for them to perform or not to perform (1 = not performing thebehavior is extremely important to me, 9 = performing the behavior is extremely important to me). Finally, participants rated the extent to which the behaviors were diagnostic of the trait they exemplified. Participants were instructed to decide if "performing the behavior would tell you a great deal about how trustworthy a person is [informative behavior], or very little about how trustworthy a person is [uninformative behavior]." Participants rated the behaviors on a 9-point scale, ranging from 1 (extremely uninformative) to 9 (extremely informative). The design was a 2 (Behavior Type: central behaviors or peripheral behaviors) × 2 (Behavior Valence: positive behaviors or negative behaviors) repeated measures factorial.

First, we report results pertaining to behavior valence. The Behavior Valence \times Behavior Type interaction was significant, F(1, 76) = 510, p < .001. Participants rated central positive behaviors (M = 8.11) more positively than peripheral positive behaviors (M = 6.39), t(76) = 17.80, p < .001, whereas they rated central negative behaviors (M = 2.08) more negatively than peripheral negative behaviors (M = 2.98), t(76) = -13.29, p < .001. Participants rated positive behaviors (M = 7.25) more positively than negative behaviors (M = 2.53), Behavior Valence main effect F(1, 76) = 2.103, p < .001. Additionally, participants rated central behaviors (M = 5.09) as more positive than peripheral behaviors (M = 4.69), Behavior Type main effect F(1, 76) = 46.27, p < .001.

We proceed with reporting results that pertain to behavior importance. The Behavior Type \times Behavior Valence interaction was significant, F(1, 75) = 41.31, p < .001. Participants rated central positive behaviors (M = 7.30) as more important than peripheral positive behaviors (M = 5.97), t(75) = 8.57, p < .0001, whereas they rated central negative behaviors (M = 2.91) as less important than peripheral negative behaviors (M = 3.32), t(75) = -2.94, p < .004. Participants rated central behaviors (M = 5.11) as more important than peripheral behaviors (M = 4.65), Behavior Type main effect F(1, 75) = 50.29, p < .001. Participants also rated positive behaviors (M = 6.64) as more important than

negative behaviors (M = 3.18), Behavior Valence main effect F(1, 75) = 176, p < .001.

We conclude by reporting the diagnosticity results. Participants considered the behaviors (M = 7.16) diagnostic, as a t test testing for significance against the scale midpoint (M = 5.00) revealed, t(77) = 14.99, p < .001. More specifically, participants considered as diagnostic both the central behaviors (M = 7.42) and the peripheral behaviors (M = 6.90), t(77) = 16.64, p < .001, and t(77) = 12.30, p < .001, respectively. Pilot Study 2 validated the selection of behaviors.

Pilot Study 3: Likelihood of Behavioral Performance

Both the inconsistency-negativity resolution and the inconsistency-negativity neglect model assume that participants hold different (i.e., more positive) expectancies for the self than for another person. Pilot Study 3 tested this assumption. Seventy-six participants rated the likelihood that either the self or a hypothetical other named Chris would perform each of the 32 behaviors. Ratings were made on a 9-point scale, ranging from 1 (extremely unlikely that I [Chris] would perform the behavior) to 9 (extremely likely that I [Chris] would perform the behavior). The design was a 2 (Referent: self or Chris) × 2 (Behavior Type: central behaviors or peripheral behaviors) × 2 (Behavior Valence: positive behaviors or negative behaviors) mixed factorial. Referent was a between-participants factor, whereas Behavior Type and Behavior Valence were within-participants factors. The results are presented in Table 2.

The triple interaction was significant, F(1, 74) = 7.14, p < .001. We decomposed this interaction by examining the Referent \times Behavior Valence interaction separately for central and peripheral pehaviors. With regard to central behaviors, the Referent × Benavior Valence interaction was significant, F(1, 74) = 67.68, p < 100001. Participants regarded the self as less likely to perform negtive than positive behaviors, t(37) = -20.33, p < .001; the pattern was similar but not as pronounced for how they regarded Chris, t(37) = -5.30, p < .001. Participants also regarded the self is less likely to perform negative behaviors than Chris, t(74) = -5.86, p < .001, but as more likely to perform positive behaviors han Chris, t(74) = 7.73, p < .001. With regard to peripheral ehaviors, the Referent × Behavior Valence interaction was also ignificant, F(1, 74) = 31.86, p < .001. Participants regarded the elf as less likely to perform negative than positive behaviors, (37) = -7.06, p < .001; however, they regarded Chris as equally ikely, in essence, to perform negative and positive behaviors, (37) = -.19, p < .85. Participants also regarded the self as less ikely to perform negative behaviors than Chris, t(74) = -5.65, < .001, but as more likely to perform positive behaviors than Thris, t(74) = 4.40, p < .001.

The overall Referent \times Behavior Valence interaction was also ignificant, F(1, 74) = 61.51, p < .001. Participants judged the elf as less likely to perform negative behaviors (M = 2.23) than hris (M = 3.65), t(74) = -6.91, p < .0001, but they judged the elf as more likely to perform positive behaviors (M = 5.92) than hris (M = 4.47), t(74) = 6.88, p < .001.

In summary, participants held strong expectancies regarding the elf, particularly with regard to the performance of central behavirs. That is, participants strongly expected not to perform central egative behaviors and to perform central positive behaviors.

Expectancies regarding performance of peripheral behaviors by the self followed a similar but weaker pattern. Further, participants held relatively weak expectancies regarding enactment of central behaviors by Chris. They expected for Chris to be moderately more likely to perform central positive than central negative behaviors, but to be equally likely to perform peripheral negative and peripheral positive behaviors.

Experiment 1: Testing Competing Models of Inconsistency-Negativity Management

Experiment 1 pits the inconsistency-negativity resolution and inconsistency-negativity neglect models against each other. Participants took an ostensibly reputable personality inventory and received feedback in the form of behaviors that they were likely to enact. Subsequently, they engaged in a distractor task and completed a surprise recall test.

Method

Participants, experimental design, and stimulus materials. We tested 200 participants. In this and all subsequent experiments, we (a) tested 3-6 participants per experimental session, (b) made certain that partitions prevented participants from seeing each other when seated, and (c) assigned participants randomly to the between-participants experimental conditions.

The experimental design was a 2 (Referent: self or Chris) \times 2 (Behavior Type: central behaviors or peripheral behaviors) \times 2 (Behavior Valence: positive behaviors or negative behaviors) \times 2 (Behavior Type Order: central behaviors presented first or peripheral behaviors presented first) \times 2 (Behavior Valence Order: positive behaviors presented first or negative behaviors presented first) mixed, balanced factorial. Referent, Behavior Type Order, and Behavior Valence Order were between-participants factors, whereas Behavior Type and Behavior Valence were within-participants factors.

The stimulus materials consisted of 32 behaviors, which were tested in the pilot studies (Appendix A). Participants were presented with all 32 behaviors under different instructional sets. Participants in the self condition were told that they were likely to perform the behaviors. In contrast, participants in the Chris condition were told that another person (Chris) was likely to perform the behaviors. This manipulation constituted the Referent factor.

Eight behaviors exemplified each of four trait dimensions. The trait dimensions were trustworthy-untrustworthy, kind-unkind, modest-immodest, and uncomplaining-complaining. The first two trait dimensions are central, whereas the last two trait dimensions are peripheral to undergraduate students' self-concepts (Pilpt Studies 1 and 2). This constituted the Behavior Type factor. Additionally, for each trait dimension, half the behaviors were positive and half were negative. This constituted the Behavior Valence factor. We used an equal number of negative (or inconsistent) and positive (or consistent) behaviors in order to avoid a potential confound involving set size and prior expectancies (Bargh & Thein, 1985; Hemsley & Marmurek, 1982; Higgins & Bargh, 1987), namely that behaviors in the numerical minority are recalled better regardless of being consistent or inconsistent with expectancies.

The valence order of eight hypothetical behaviors (four positive, four negative) was randomized under the stipulation that no more than two same-valenced behaviors appear sequentially. This randomization pattern (i.e., negative, positive, negative, negative, negative, negative, positive, positive) was used for all four sets of behaviors that were presented to half the participants. An alternative randomization pattern, which reversed the order of behaviors (i.e., positive, negative, positive, negative, negative, negative, negative, negative, negative, negative, that

were presented to the remaining participants. This factor. Behavior Valence Order, was used to control for recency and primacy effects. Another control factor, Behavior Type Order, involved presentation order of behavior type. The central behaviors were presented first to half the participants, whereas the peripheral behaviors were presented first to the remaining half.

Procedure. Participants were tested in individual work stations. The first computer screen informed participants that they would take a computer-administered 45-item personality inventory, the alleged Michigan Omnibus Personality Inventory (MOPI). Successive computer screens announced that the MOPI (a) had been used by psychologists and psychiatrists since 1984, (b) was administered in 1995 alone to over 68,000 college students in the United States, (c) had proven most reliable and valid, (d) gives highly accurate diagnoses of whether a participant possesses a wide range of personality traits, and, importantly, (e) provides feedback in terms of behaviors that participants are likely to perform.

The next phase of the experiment involved the actual administration of the MOPI. Participants were instructed to read the MOPI items and indicate their agreement or disagreement with each on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The items were general and nondiagnostic of any particular trait, as judged by the co-authors of this article and helpful associates. Some examples are, "It's amazing how 'light' life sometimes seems," "I sometimes go to people I consider wise for advice," and "I don't mind visiting places where I have never been before." Upon administration of the MOPI items, participants were instructed to wait patiently while the computer scored their responses. After successive time intervals, computer screens indicated that 25%, 50%, 75%, and 100% of the scoring had been complete. The next stage of the computer presentation involved behavioral feedback.

Participants in the self condition were reminded that

the MOPI provides specific feedback in the form of behaviors that you are likely to perform. In other words, you will read several behaviors that you are likely to perform. In this way, you will receive concrete and highly accurate information about the type of person that you are.

Participants in the Chris conditions were told,

Your scores will be used to validate the MOPI for UNC-CH undergraduates. We are interested in how participants perceive other people. You will read the personality test results of another person who recently completed the MOPI and gave permission for his or her results to be used anonymously. Let's call this person Chris. The MOPI provides specific feedback in the form of behaviors that a person is likely to perform. In other words, you will read several behaviors that Chris is likely to perform. In this way, you will receive concrete and highly accurate information about the type of person Chris is.

After 10 trials in which participants practiced general statements (e.g., "The chairs were ordered neatly around the table"), participants read the 32 behaviors at their own pace.

Next, participants engaged in a distractor task for 2.5 min (i.e., writing down as many of the United States as possible) and were given a surprise recall test. Specifically, they were instructed to recall as many behaviors as possible in a booklet, to write down one behavior per page in any order the behaviors came to mind, not to turn back to previous pages, and to try to be accurate without worrying about recalling the behaviors verbatim. The recall task lasted 5 min. Finally, participants indicated on 9-point scales, ranging from 1 (not at all) to 9 (very much), how they liked the MOPI and whether they considered the MOPI items insightful, wrote down what they thought the purpose of the experiment was (no participant guessed correctly), were debriefed carefully, thanked, and excused.

Results and Discussion

Manipulation checks. Participants liked the MOPI (M=5.57), as a t test for the difference of the mean against the scale midpoint (5.00) indicated, t(195)=4.36, p<.001. Also, participants considered the MOPI items insightful (M=5.39), t(193)=2.63, p<.009. At the same time, participants in the Chris condition (a) liked the MOPI better (M=5.84) than participants in the self condition (M=5.31), F(1,188)=4.11, p<.04, and (b) found its items more insightful (M=5.67) than participants in the self condition (M=5.10), F(1,186)=3.79, p<.05. Note that all the results reported below maintained their statistical significance after we controlled (through analyses of covariance) for the differential MOPI ratings for Chris versus self.

Proportion of behaviors recalled. Free recall data were coded according to a "gist" criterion. In this and subsequent experiments, we have obtained over 98% agreement between two independent judges who were unaware of the experimental conditions, perhaps because the behaviors are highly specific and thus easy to code.

Intrusions constituted 5% of recalled behaviors. We defined intrusions in terms of writing the same behavior twice (e.g., "Chris would keep secrets when asked to" and "Chris would not reveal secrets to anyone"), recalling a behavior that was not presented (e.g., "Chris is a habitual nose picker"), or changing the valence of a recalled behavior (e.g., "Chris would not keep secrets"). Note that the present percentage of intrusions is comparable to the one found in experiments that have used a similar methodology (e.g., Lichtenstein & Srull, 1987; Wyer, Bodenhausen, & Srull, 1984). Also, the intrusions appeared to be evenly distributed among experimental conditions. We removed the intrusions from the data analyses. In this and all subsequent experiments, we adopted the criterion of no more than two intrusions per participant. Consequently, we removed from the analysis 2 participants whose recall protocols included three or more intrusions. Next, we entered the proportion of recalled behaviors into a 2 (Referent) × 2 (Behavior Type) \times 2 (Behavior Valence) \times 2 (Behavior Type Order) \times 2 (Behavior Valence Order) analysis of variance (ANOVA). We display the results in Table 3.

The crucial Referent \times Behavior Type \times Behavior Valence interaction was significant, F(1, 192) = 6.39, p < .01. We decomposed this effect by examining the Referent \times Behavior Valence interaction separately for central and peripheral behaviors. In the case of central behaviors, the Referent \times Behavior Valence interaction was significant, F(1, 192) = 15.70, p < .001. Participants who engaged in self-referent processing recalled fewer central negative behaviors than participants who engaged in Chrisreferent processing, t(198) = -3.51, p < .001. Furthermore, participants who engaged in self-referent processing recalled fewer

Table 3

Proportion of Behaviors Recalled as a Function of Referent,
Behavior Type, and Behavior Valence in Experiment 1

| | Central behaviors | | Peripheral behaviors | |
|----------|-------------------|----------|----------------------|----------|
| Referent | Negative | Positive | Negative | Positive |
| Self | .31 | .39 | .14 | .18 |
| Chris | .40 | .36 | .15 | .17 |

central negative than central positive behaviors, t(99) = -3.26, p < .002. However, in the case of peripheral behaviors, the Referent × Behavior Valence interaction was not significant, F(1, 192) = 0.68, p < .41. These results upheld the inconsistency-negativity neglect model. When faced with self-threat potential, individuals bypass it by neglecting processing of information that is inconsistent with their self-conceptions. Individuals use neglect as a strategy to maximize self-protection.

The overall Referent \times Behavior Valence interaction was also significant, F(1, 192) = 12.26, p < .001. Participants who processed information in reference to the self recalled fewer negative (M = .23) than positive (M = .29) behaviors, t(99) = -3.84, p < .001, whereas participants who processed information in reference to Chris did not recall a statistically different amount of negative (M = .28) and positive (M = .27) behaviors, t(99) = -0.95, p < .37. Finally, the Behavior Valence main effect was significant. Participants' recall for negative (M = .25) behaviors was lower than for positive (M = .28) behaviors, F(1, 192) = 5.40, p < .02. These findings are also supportive of the inconsistency-negativity neglect model and contradict predictions from the inconsistency-negativity resolution model.

Experiment 2: Does Self-Protection Know Boundaries?

Does self-protection have boundaries? Will individuals protect the self even in the most innocuous of situations, one in which they are asked simply to consider information about themselves that is hypothetical? Will self-protection tendencies be present even in a minimal feedback setting? The objective of Experiment 2 was to address these questions.

Method

We tested 112 participants. The experimental design was identical to that of Experiment 1. The stimulus materials were also identical to those of Experiment 1, with two exceptions. The first exception involved the instructions associated with the referent factor. When presented with the 32 hypothetical behaviors, participants were asked simply to consider them. More specifically, participants in the self-referent condition were instructed to "consider the following description of yourself. Think of the description as being based on actual knowledge of people who know you well." Participants in the Chris-referent condition were instructed to "consider the description of a person named Chris. Think of the description as being based on actual knowledge of people who know Chris well. Think of the description as real."

The second exception pertained to the presentation of behaviors. Participants were presented with a booklet consisting of a "description of a person." This description was composed of four pages containing eight behaviors each, for a total of 32 behaviors. Behaviors on each sheet all reflected a single trait, such as trustworthy or modest; half the behaviors were positive and half were negative in valence. Participants were instructed to read through the booklet at their own pace. Upon completion of the booklet (i.e., after approximately 4 min), participants engaged in a distractor task and were given a surprise recall test—as in Experiment 1.

Results and Discussion

Intrusions constituted 4% of recalled behaviors and were evenly distributed among experimental conditions. We removed from the analysis 2 participants whose recall protocols included three or

more intrusions. We display the proportion of behaviors recalled in Table 4.

The crucial triple interaction among Referent, Behavior Type, and Behavior Valence was significant, F(1, 104) = 4.08, p < .04. In the case of central behaviors, the Referent × Behavior Valence interaction reached significance, F(1, 104) = 5.83, p < .02. Participants who engaged in self-referent processing recalled fewer central negative behaviors than participants who engaged in Chris-referent processing, t(110) = -3.05, p < .003. Furthermore, self-referent participants recalled fewer central negative than central positive behaviors, t(55) = -2.35, p < .02. However, in the case of peripheral behaviors, the Referent × Behavior Valence interaction was not significant, F(1, 104) = 0.001, p < .99. This pattern supports the inconsistency-negativity neglect model.

The overall Referent \times Behavior Valence interaction was also significant, F(1, 104) = 4.38, p < .04. Participants who processed information in reference to the self recalled fewer negative (M = .24) than positive (M = .32) behaviors, t(55) = -2.98, p < .004, whereas participants who processed information in reference to Chris recalled an equal amount of negative (M = .32) and positive (M = .32) behaviors, t(55) = 0.36, p < .72. Finally, participants recalled fewer negative (M = .28) than positive (M = .32) behaviors, Behavior Valence main effect F(1, 104) = 6.41, p < .01. These findings lend further support to the inconsistency-negativity neglect model. Self-protection is present even in a minimal feedback setting. Individuals will protect the self even when the potential for threat is hypothetical and innocuous.

Experiment 3: A Chronometric Test of Underlying Cognitive Processes

According to the inconsistency-negativity neglect model, self-protection is achieved by allocating less processing time to central negative self-referent behaviors (thus exhibiting neglect) than to central positive self-referent behaviors, central negative Chrisreferent behaviors, or central positive Chrisreferent behaviors. Experiment 3 directly tested this proposition of the model.

Specifically, Experiment 3 manipulated behavior presentation time. The rationale for this manipulation was as follows. If the time that participants allocate to processing central negative self-referent behaviors is a determinant of recall for such behaviors, then reducing substantially the time participants spend doing so should produce similar results across the four behavioral categories specified above (i.e., central negative self- and Chris-referent, and central positive self- and Chris-referent). Stated otherwise, if a key reason for the relatively poor recall of central negative self-referent behaviors (i.e., neglect) is a motivated reduction in the time allocated to processing them, then experimentally imposing a

Table 4
Proportion of Behaviors Recalled as a Function of Referent,
Behavior Type, and Behavior Valence in Experiment 2

| Referent | Central behaviors | | Peripheral behaviors | |
|----------|-------------------|----------|----------------------|----------|
| | Negative | Positive | Negative | Positive |
| Self | .33 | .44 | .15 | .19 |
| Chris | .46 | .43 | .18 | 21 |

common minimal processing time should result in equally poor recall for all behaviors whether central negative self-referent or not.

Participants processed information under two conditions: ampletime (as in the previous two experiments) and limited time. From a statistical standpoint, the inconsistency-negativity neglect model predicts a quadruple interaction. This interaction can be decomposed into two triple interactions: The two Referent × Behavior Type × Behavior Valence interactions will be examined separately for the ample and the minimal behavior presentation time conditions. The inconsistency-negativity neglect model will be supported if the Referent × Behavior Type × Behavior Valence interaction (a) is significant when processing time is ample (thus replicating Experiments 1 and 2) but (b) is nonsignificant when processing time is limited.

Method

We tested 236 participants. The design was identical to that of the previous two experiments with the addition of a between-participants factor: presentation time. Each behavior was presented to participants for either an ample (8 s) or limited (2 s) time interval. These time intervals were derived through pretesting. Between-participants cell sizes ranged from 14 to 15.

The instructions were the same as in Experiment 2; that is, Experiment 3 also involved a minimal feedback setting. The stimulus materials (i.e., 32 behaviors) were the same as in Experiments 1 and 2, and the presentation of behaviors was computerized as in Experiment 1. Finally, the procedure and dependent measure were identical to those of the previous two experiments.

Results and Discussion

Intrusions reached 5% of recalled behaviors and were evenly distributed among experimental conditions. We removed 5 participants whose recall contained three or more intrusions. We display the results of the experiment in Table 5.

The critical quadruple interaction among Presentation Time, Referent, Behavior Type, and Behavior Valence was indeed significant, F(1, 220) = 4.83, p < .03. We decomposed this interaction into the two Referent \times Behavior Type \times Behavior Valence interactions separately for ample and limited presentation time.

Ample presentation time. Under the ample behavior presentation time condition, the Referent \times Behavior Type \times Behavior Valence interaction was marginal, F(1, 110) = 3.62, p < .06. We

Table 5
Proportion of Behaviors Recalled as a Function of Presentation
Time, Referent, Behavior Type, and Behavior Valence in
Experiment 3

| | Central behaviors | | Peripheral behaviors | |
|-------------------|-------------------|----------|----------------------|----------|
| Presentation time | Negative | Positive | Negative | Positive |
| Ample (8 s) | | | | |
| Self | .33 | .45 | .17 | .22 |
| Chris | .42 | .42 | .18 | .22 |
| Limited (2 s) | | | | |
| Self ` | .32 | .23 | .14 | .15 |
| Chris | .32 | .25 | .13 | .10 |

proceeded with examining the Referent \times Behavior Valence interaction separately for central and peripheral behaviors. In the case of central behaviors, the Referent \times Behavior Valence interaction was significant, F(1, 110) = 7.50, p < .007. Participants who engaged in self-referent processing recalled fewer central negative behaviors than participants who engaged in Chris-referent processing, t(116) = -2.80, p < .006. Furthermore, self-referent participants recalled fewer central negative than central positive behaviors, t(58) = 3.58, p < .001. However, in the case of peripheral behaviors, the Referent \times Behavior Valence interaction was not significant, F(1, 110) = 0.03, p < .85. These interaction patterns replicate those of Experiments 1 and 2 in confirming the inconsistency-negativity neglect model.

The Referent \times Behavior Valence interaction was significant, F(1, 110) = 5.03, p < .03. Participants who processed information in reference to the self recalled fewer negative (M = .25) than positive (M = .34) behaviors, t(58) = 3.98, p < .001, whereas participants who processed information in reference to Chris did not recall a statistically different amount of negative (M = .30) and positive (M = .32) behaviors, t(58) = 1.18, p < .24. The Behavior Valence main effect was also significant. Participants recalled fewer negative (M = .28) than positive (M = .33) behaviors, F(1, 110) = 14.66, p < .001. These findings are congruent with those of Experiments 1 and 2 and lend further support to the inconsistency-negativity neglect model.

Limited presentation time. Under the limited behavior presentation time condition, the Referent \times Behavior Type \times Behavior Valence interaction was not significant, F(1, 110) = 1.31, p < .25. The Referent \times Behavior Valence interaction was not significant either, F(1, 110) = .20, p < .66. Finally, the Behavior Valence main effect was significant: Participants recalled more negative (M = .23) than positive (M = .18) behaviors, F(1, 110) = 12.15, p < .001.

Summary. The recall disadvantage of central negative behaviors (i.e., neglect) was evident under ample but not limited behavioral presentation time. These findings uphold the postulate of the inconsistency—negativity neglect model that central negative information is recalled poorly because, at least in part, such information receives the allocation of minimal processing time.

Consideration of a rival hypothesis. Interestingly, Experiment 3 allows for the testing of a rival hypothesis, which we will call the self-schema hypothesis (e.g., Markus, 1977). This hypothesis is illustrated best by directing the reader's attention to central positive self-referent behaviors. According to this hypothesis, participants manifest superior recall for central positive information not because they allocate more processing resources to it, but rather because they are schematic for it. That is, participants have a large repertoire of self-knowledge that pertains to their central positive traits; hence, participants link new central positive information to stored central positive information (i.e., self-schemas) in an effortless, if not spontaneous, manner. Processing effort is irrelevant to this alternative theoretical account.

The self-schema hypothesis predicts an identical pattern of findings for the ample and limited behavioral presentation time conditions, as far as central positive self-referent behaviors are concerned. That is, given that processing effort is irrelevant, no differences in the recall of central positive self-referent behaviors will be observed between the ample and limited behavioral presentation time conditions. The obtained results disconfirm the

self-schema hypothesis: Recall for central positive self-referent behaviors was higher in the ample (M = .45) than the limited (M = .23) presentation time condition, t(116) = 6.26, p < .001 (Table 5). Instead, this finding is in line with the core tenets of the inconsistency-negativity neglect model.

Experiment 4: Testing a Retrieval Interference Account

Experiment 4 was designed to test an additional rival hypothesis—what we term the retrieval interference account. As a reminder, according to the inconsistency-negativity neglect model, the relatively poor recall of central negative self-referent behaviors is due to lack of depth of processing during encoding. Alternatively, however, the poor recall of such behaviors may be a function of information interference during retrieval.

The retrieval interference account proposes that, when recalling central positive self-referent behaviors, participants are likely to generate new central positive self-referent behaviors (extra list items). This may happen for at least two reasons. One reason is the availability of extra list items in memory: The bulk of self-knowledge is positive, and much of it is central. Second, this sort of self-knowledge forms interrelated associative structures in memory (Higgins, Van Hook, & Dorfman, 1988; Kihlstrom & Cantor, 1984). The extra list items interfere with the retrieval of central negative self-referent behaviors. The extra list items displace the central negative self-referent behaviors from working memory. The displacement, in turn, leads to poor recall of such behaviors.

As in previous experiments, we varied behavior valence and behavior type on a within-participant basis. Diverging from previous experiments, we treated the critical variable of referent as a within-participants factor. To that effect, we added 32 behaviors. Thus, all participants were presented with 64 behaviors, half of which referred to the self and half to Chris. Further, we randomized the presentation of the 64 behaviors. The intent behind these two modifications (i.e., doubling the behaviors and displaying them randomly) was to increase the complexity of the stimulus display, thus making processing cognitively taxing. Participants, we reckoned, would not be able to easily form associative bonds between the behaviors and their referent.

However, the most important procedural alteration that we implemented was to instruct participants to recall the behaviors disregarding the referent. We instructed participants that they did not need to keep in mind, and they should not record, whether each behavior pertained to self or Chris. Our rationale was as follows. If participants disregarded the referent, they would be less likely to generate extra list items while retrieving central positive behaviors, thus reducing the likelihood that extra list items would displace central negative self-referent behaviors. The possibility of interference would be minimized.

The inconsistency-negativity neglect model and the retrieval interference account make contrasting predictions. According to the former, the pattern of recall will mimic that of previous experiments: Central negative self-referent behaviors will be poorly recalled compared with central positive self-referent behaviors. However, according to the latter, the recall pattern will be markedly different: Central negative self-referent behaviors will have no recall disadvantage over central positive self-referent behaviors.

Method

We tested 52 participants. To the old 32 behaviors we added another 32 (Appendix B). The new behaviors were selected in full consensus by the experimenters and helpful research assistants. We will provide a statistical test of the equivalency of the old and new behaviors.

The design was a 2 (Referent: self or Chris) \times 2 (Behavior Type: central behaviors or peripheral behaviors) \times 2 (Behavior Valence: positive behaviors or negative behaviors) \times 2 (Behavior Set: A vs. B) mixed factorial. Referent, Behavior Type Order, and Behavior Valence Order were within-participants factors, whereas Behavior Set was a between-participants factor. To explicate this latter factor, half the participants learned that the old behaviors referred to the self and the new ones referred to Chris (Set A), whereas the remaining half learned that the new behaviors referred to the self and the old ones referred to Chris (Set B). We reasoned that the equivalency of the old and new behavioral sets would be established if the quadruple interaction was not significant.

Participants were told that this was an impression formation study. They were handed a booklet that contained descriptions of two persons. One person was Chris, and participants were asked to "think of the description as being based on actual knowledge of people who know Chris; think of the description as real." The other person was the self, and participants were likewise asked to "think of the description as being based on actual knowledge of people who know you; think of the description as real."

The booklet contained 64 behaviors on four pages. On the top of each page, we instructed participants to "consider the following descriptions: think of the descriptions as being based on actual knowledge of people who know you and Chris well." Importantly, and in contrast to previous experiments, the 64 behaviors were presented randomly, under the stipulation that no more than two self- or Chris-referent behaviors appear sequentially. Participants read through the booklet at their own pace and completed the distractor task.

Recall instructions followed. Participants were handed a blank booklet. Both verbal and written instructions emphasized recall without referent. Participants were told that, while recalling the behaviors, they should "ignore WHO performed the behavior. That is, don't write down Self or Chris, but start each sentence with 'would' and then write down the rest of the sentence." Participants were given an example ("Would get all As on final exams") and subsequently engaged in recall for 5 min. Debriefing concluded the experimental session.

Results and Discussion

Intrusions reached 5% of recalled behaviors and were evenly distributed across experimental conditions. No recall output contained three or more intrusions. We display the results in Table 6.

The critical Referent \times Behavior Valence \times Behavior Type interaction was significant, F(1, 50) = 4.50, p < .039. With regard to recall of central behaviors, the Referent \times Behavior Valence interaction was significant, F(1, 50) = 8.23, p < .006. Participants recalled fewer central negative than central positive self-referent behaviors, t(51) = 3.97, p < .001. Furthermore, participants

Table 6
Proportion of Behaviors Recalled as a Function of Referent,
Behavior Type, and Behavior Valence in Experiment 4

| | Central behaviors | | Peripheral behaviors | |
|---------------|-------------------|------------|----------------------|------------|
| Referent | Negative | Positive | Negative | Positive |
| Self Chris | .22 .28 | .33 .27 | .17 .13 | .18 .12 |

recalled fewer central negative behaviors about the self than about Chris, t(51) = -2.36, p < .022. With regard to recall of peripheral behaviors, the Referent \times Behavior Valence interaction was not significant, F(1, 50) = 0.02, p < .89. These results replicate the basic pattern of the previous three experiments in supporting the inconsistency-negativity neglect model. The results disconfirm the retrieval hypothesis account.

The overall Referent \times Behavior Valence interaction was also significant, F(1, 50) = 5.21, p < .027. Participants recalled fewer negative (M = .20) than positive (M = .26) self-referent behaviors, t(51) = 2.67, p < .010, whereas they recalled an equivalent amount of negative (M = .21) and positive (M = .20) Chrisreferent behaviors, t(51) = 0.79, p < .43. Also, the Behavior Valence main effect was significant. Participants' recall for negative (M = .20) behaviors was lower than for positive (M = .23) behaviors, F(1, 50) = 6.69, p < .013. These findings replicate previous experiments in providing support for the inconsistency-negativity neglect model.

Notably, the quadruple interaction was not significant, F(1, 50) = 2.56, p < .12. This null effect is in line with the argument favoring the equivalency of the two behavioral sets.

Supplementary analyses. A very small portion (3%, or 18 of 714) of the recalled behaviors was accompanied by a referent pronoun (e.g., "would lie to his parents"), indicating that participants still associated referent with behavior at recall. Obviously, this type of recall can compromise a valid test of the retrieval interference account. Hence, we reanalyzed the data excluding such behaviors.

The reanalyses were fully congruent with the above-reported findings. The Referent \times Behavior Valence \times Behavior Type interaction was significant, F(1, 50) = 4.79, p < .033. Regarding recall of central behaviors, the Referent \times Behavior Valence interaction was significant, F(1, 50) = 7.65, p < .008. Participants recalled fewer central negative (M = .21) than central positive (M = .32) self-referent behaviors, t(51) = 3.86, p < .001. Furthermore, participants recalled fewer central negative behaviors about the self (M = .21) than about Chris (M = .28), t(51) = -2.37, p < .021. Regarding recall of peripheral behaviors, the Referent \times Behavior Valence interaction was not significant, F(1, 50) = 0.08, p < .78.

The overall Referent \times Behavior Valence interaction was also significant, F(1, 50) = 4.52, p < .043. Participants recalled fewer negative (M = .20) than positive (M = .24) self-referent behaviors, t(51) = 2.42, p < .019, whereas they did not recall a statistically different amount of negative (M = .21) and positive (M = .19) Chris-referent behaviors, t(51) = 0.85, p < .40. The Behavior Valence main effect did not reach significance, as recall for negative behaviors (M = .20) was not substantially lower than recall for positive behaviors (M = .20), F(1, 50) = 0.85, p < .36. Importantly, the quadruple interaction remained nonsignificant, F(1, 50) = 1.83, p < .18.

Summary. In this experiment, we took steps to complicate the stimulus display and thus make the processing task (i.e., the pairing of referent with behavior) cognitively taxing. Specifically, we used 64 instead of 32 behaviors, and we presented the 64 behaviors randomly rather than blocking them by referent and by trait. More importantly, we asked participants to recall the behaviors disregarding the referent, in an effort to inhibit the generation

of extra list items. These changes were made in the spirit of facilitating an incisive test of the retrieval interference account.

The recall pattern was identical to that of previous experiments. Despite the fact that the generation of extra list items was inhibited, participants recalled a relatively low proportion of central negative self-referent behaviors. Participants neglected the recall of such behaviors. The retrieval interference account was disconfirmed.

General Discussion

Feedback is a fact of life. Individuals sometimes receive it when they ask for it, but often when they do not. The objective of the present investigation was to find out how individuals process information (solicited or unsolicited) that refers to the self compared with information that refers to another person. In particular, the investigation relied on the person memory paradigm to examine how individuals manage the inconsistency between incoming and negative self-referent information on the one hand and stored positive self-knowledge on the other.

Summary of Theoretical Statements and Empirical Findings

The investigation tested two competing theoretical models: the inconsistency-negativity resolution and the inconsistency-negativity neglect model. Both models posit that the management of inconsistency-negativity is motivated. However, the two models differ in terms of the motivation-fueled cognitive mechanisms that they postulate to underlie the management of inconsistency-negativity.

According to the inconsistency-negativity resolution model, individuals are truth seekers. They are motivated to resolve inconsistency even when such resolution has unfavorable implications for the self. Individuals will strive to resolve inconsistency even when the truth of their cherished self-beliefs is jeopardized. In their quest for accurate self-knowledge, individuals remain undaunted by the potential of threat to the self. According to the inconsistency-negativity neglect model, individuals are motivated to protect the self from unfavorable informational consequences. Individuals will neglect the processing of information that is inconsistent with self-knowledge—especially when this information is likely to challenge cherished self-beliefs. Individuals will strive to protect the self even when it is not necessary, and even against hypothetical threat. In brief, individuals are hypersensitive to threat potential.

The empirical viability of the two models was inferred from recall patterns. In an initial experiment, participants processed personality feedback that (a) referred either to the self or another person (Chris) and (b) contained both central and peripheral behaviors. Subsequently, participants recalled the feedback. The inconsistency–negativity resolution model predicted relatively high levels of recall for central negative self-referent behaviors. This recall advantage would be due to participants processing the inconsistent behaviors more deeply (i.e., attending to them, comparing them with stored self-knowledge, and integrating them with stored self-knowledge). In contrast, the inconsistency–negativity neglect model predicted relatively low levels of recall for central negative self-referent behaviors, because participants would ne-

glect the in-depth processing of such behaviors given that this information posed a serious threat to the self. In other words, participants would neglect inconsistency in the interest of self-protection. The results of this initial experiment supported the inconsistency-negativity neglect model at the expense of the inconsistency-negativity resolution model. The phenomenon of inconsistency-negativity neglect provides an explanation for the well-established empirical pattern of better autobiographical memory for positive rather than negative events (Matlin & Stang, 1978; Skowronski, Betz, Thompson, & Shannon, 1991; Wagenaar, 1986). Participants show poor memory for negative life events because they neglected deep processing of this sort of information.

Experiment 2 tested the boundaries of inconsistency-negativity neglect. Would neglect be present even when the self-referent information was hypothetical and participants were asked merely to consider it? The results mimicked those obtained in Experiment 1: Self-protection was prevalent even in a minimal feedback setting.

Experiment 3 tested a critical tenet of the inconsistency-negativity neglect model, namely that processing time is a proximal cause of inconsistency-negativity neglect. The model postulates that strivings for self-protection are carried out by allocating suboptimal processing resources to central negative behaviors. If this tenet is correct, suboptimal processing time would result in poor recall of all behaviors, not just central negative self-referent ones. Going from limited to ample time will result in the elaboration of, and therefore better recall for, all types of behaviors except central negative behaviors. That is, when participants are given additional time to process behaviors, they will manifest better recall for all types of behaviors except central negative ones.

This experiment manipulated behavior presentation time. Half the participants were given ample time to process the behaviors (a conceptual replication of the previous two experiments), whereas the remaining participants were given a minimal block of time (i.e., the time participants presumably allot naturally to central negative behaviors) to process all behaviors. The results of the first two experiments were replicated in the ample time condition, but were canceled out in the minimal time condition. In that condition, central negative self-referent behaviors did not have a recall advantage. This pattern demonstrated that inconsistency-negativity neglect is due, at least in part, to participants allocating limited processing time to central negative self-referent behaviors. Participants protect against self-threat by expending minimal processing resources to such information.

Experiment 4 tested a rival hypothesis, the retrieval interference account. According to this account, the relatively poor recall of central negative self-referent behaviors is due to such behaviors being displaced from working memory by participant-generated (extra list), central positive self-referent behaviors. These extra list behaviors are presumably generated with ease, as they compose the bulk of self-knowledge.

We attempted to minimize retrieval interference in this experiment by making several modifications in the way participants processed and retrieved information. Participants read twice as many behaviors as in previous experiments, and they read the behaviors in randomized order. These changes rendered the stimulus display and processing task more complex. More importantly, we instituted an instructional set at recall: We asked participants to recall the behaviors disregarding the referent. The experimental

results failed to support the retrieval interference account. Participants still manifested relatively poor recall of central negative self-referent behaviors.

Revisiting the Rival Hypotheses

In light of the collective experimental findings, it is worth reconsidering the self-schema hypothesis and the retrieval interference account.

Reconsidering the self-schema hypothesis. There is a fundamental difference between the self-schema hypothesis and the inconsistency-negativity neglect model. According to the self-schema hypothesis, central positive self-conceptions (i.e., self-schemas) will facilitate the processing of new central positive and self-referent information. Whether processing time is ample or minimal does not make a difference. In fact, minimal time (e.g., 2 s) will be sufficient for the thorough processing of new central positive behaviors, and this processing will manifest itself in substantial levels of recall. However, according to the inconsistency-negativity neglect model, incoming central positive information will not have a recall advantage unless there is sufficient or ample time to process it. In the case of minimal processing time, central positive behaviors will be recalled as poorly as central negative behaviors.

Experiments 1, 2, and 4 were not in a position to differentiate empirically between the self-schema hypothesis and the inconsistency-negativity neglect model. However, Experiment 3 provided a direct test of the two formulations. This experiment showed that central positive and self-referent behaviors were recalled better when ample (as opposed to limited) processing time was available. In so doing, this experiment disconfirmed the self-schema hypothesis in favor of the inconsistency-negativity neglect model. Self-schemas did not "capture" immediately the relevant stimulus input and process it expeditiously. Instead, the allocation of processing resources was necessary. By implications, the results of Experiment 3 supported a most critical tenet of the inconsistency-negativity neglect model, namely that central negative self-referent behaviors are recalled poorly because they receive shallow and insufficient processing.

Reconsidering the retrieval interference account. Experiment 4 tested and disconfirmed a retrieval interference account. It is worth stating that this account is ruled out by the results of Experiments 1—3, albeit in an indirect manner. Specifically, the account anticipated a disproportionately high number of intrusions of central positive self-referent behaviors. These intrusions would actually be the participant-generated extra list items. Such an intrusion pattern, however, was not observed in Experiments 1—3, casting doubt on the account.

Nevertheless, the fact that intrusions were evenly distributed across experimental conditions does not constitute, per se, a definitive test of the account. Generation of extra-list items does not necessarily cause superior recall for these items, as correction processes may take place. Specifically, participants may have engaged in information "quality control" (i.e., rechecking) before retrieval, thus sorting out the extra list items from the encountered behaviors. This would likely be a noncognitively taxing task, given that participants had encountered only eight central negative self-referent behaviors. In any case,

the result of this rechecking would be exclusion of extra items from the recall output.

In summary, although the intrusion pattern of the previous experiments does not constitute a definitive test of the retrieval interference account, we believe that the intrusion pattern, along with the results of Experiment 4, conclusively rule out this rival hypothesis.

Clarifying the Construct of Neglect

Arguably, the current investigation only managed to scratch the surface of the phenomenon of inconsistency neglect. Several issues remain outstanding. What is the role of expectancies in the phenomenon of neglect? Does information inconsistency or information valence drive the phenomenon? Does neglect reflect an encoding or retrieval failure?

The role of expectancies. The inconsistency-negativity neglect model assumes that differing expectancies about self versus Chris moderate the phenomenon of neglect. Although empirical support for the view that participants hold differing expectancies for self versus Chris is available (see Pilot Study 3), direct evidence is needed for the proposition that these differing expectancies account for neglect. The positivity of expectancies (for self, a close friend, or even an acquaintance) will need to be either measured or manipulated and subsequently related statistically to patterns of recall.

Disentangling information inconsistency from information valence. Another critical issue concerns the exact locus of neglect. The reported experiments have deliberately confounded information inconsistency with information valence: Behaviors consistent with self-knowledge were positive, whereas behaviors inconsistent with self-knowledge were negative. This confounding was implemented in the spirit of carrying over faithfully the person memory paradigm to the area of self-memory. However, future research will need to disentangle information inconsistency from information valence in order to find out which factor is the most important determinant of neglect. Are participants threatened by central self-referent information that is inconsistent or by central self-referent information that is negative?

Encoding or retrieval failure? In line with the inconsistency-negativity neglect model, we proposed that neglect involves shallow processing and, indeed, termination of processing in the face of imminent threat (i.e., central negative information). But what does termination of processing mean? What are the psychological processes implicated under the umbrella term neglect?

One plausible psychological process is encoding failure. It is possible that, very early on in the information processing sequence (e.g., in a fraction of a second), the system discards the threatening information. We doubt the plausibility of this account given the low but reliable levels of recall for central negative self-referent information; that is, across the four experiments, participants recalled 30% of central negative self-referent behaviors.

Another possible psychological process is retrieval failure, and, more specifically, a special form of retrieval failure that we call storage-induced retrieval failure. Central negative self-referent information was encoded, but the corresponding "memory trace," albeit available, was too weak to be retrieved. This explanation is compatible with the tenets of the inconsistency-negativity neglect model. The model proposes that the reason for the relatively poor

recall of central negative self-referent behaviors is shallow processing. This explanation can be tested through recognition memory techniques. The explanation anticipates unequal recall but equivalent levels of recognition for central negative and central positive self-referent behaviors (for a conceptually similar finding, see Mischel, Ebbesen, & Zeis, 1973, 1976).

Implications

The reported research has implications both for the literature on the self and for potential steps toward integration of research on self-perception and person perception.

Implications for the literature on the self. Collectively, the current experiments indicate that individuals are hypersensitive to threat potential. They will go to great lengths in striving for self-protection. Individuals will protect the self even in the case of minimal, hypothetical, and innocuous feedback. Individuals cannot tolerate inconsistency—negativity when it pertains to central dimensions of self-knowledge.

The present investigation indeed portrays the self as a system that will reject inconsistent information only to the extent that this information is both central and negative. This empirical generalization is compatible with Greenwald's (1980) view of the self as a closely guarded operating system that controls in a totalitarian manner inconsistent or negative information (i.e., the ego bias of beneffectance). Additionally, the present investigation portrays the self system as having an exceedingly low threshold of inconsistency-negativity potential for highly valued (i.e., central and positive) self-beliefs. This portrayal is also compatible with Greenwald's (1981) assertion that ego biases become stronger as ego involvement increases and with recent theoretical statements in the self-evaluation literature (Brown & Dutton, 1995; Campbell & Sedikides, 1999; Sedikides & Strube, 1997).

We wish to highlight the finding that self-protection is selective or strategic. As stated above, the self does not engage in an indiscriminate rejection of inconsistent information; instead, the self is quite selective about the kind of inconsistent information that is to be rejected. Only negative information that pertains to central self-dimensions is rejected.

This selective processing feature of the self deserves further attention. Research on the self has long been concerned with the question of whether the self is special. Much of this literature has examined whether the alleged specialness is cognitive (Bower & Gilligan, 1979; Ferguson, Rule, & Carlson, 1983; Higgins, Van Hook, & Dorfman, 1988; Keenan & Baillet, 1980; Rogers, Kuiper, & Kirker, 1977) and has concluded that there is no compelling evidence in support of the view that the self-concept constitutes a special cognitive structure (Bellezza & Hoyt, 1992; Greenwald & Banaji, 1989; Higgins & Bargh, 1987; Keenan, Golding, & Brown, 1992; Klein & Loftus, 1993; Prentice, 1990; Symons & Johnson, 1997). The present research suggests that the specialness of the self is found not in structural properties of the self-concept but rather in the executive function of the self (or self as subject, ego, or I; Baumeister, 1998; see also Allport, 1943; James, 1890). The executive self carries out (implicitly or explicitly) potent regulatory functions (Higgins, 1996; Sedikides & Strube, 1997). one of which is the filtering of incoming information according to its threat potential. The specialness of the self lies in its powerful and, at the same time, flexible (i.e., strategic) capacity for motivated information processing.

Recent research on self-evaluation has delineated some boundaries for self-enhancement. For example, individuals become less self-enhancing when they describe themselves on objectively verifiable attributes (Dunning, 1995), when interacting with a close other (Sedikides, Campbell, Reeder, & Elliot, 1998), and when comparing themselves with a concrete other (Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995). Self-enhancement clearly knows boundaries. Self-protection, however, may not.

Relatedly, another implication of the present work is that the two motivations (approach or self-enhancement vs. avoidance or self-protection) likely have distinct correlates and consequences, an empirical pattern established in research on self-esteem (Rhodewalt, Morf, Hazlett, & Fairfield, 1991; Tice, 1991), achievement motivation (Elliot & Church, 1997), and self-regulatory behavior (Higgins, 1997). This motive bifurcation will likely yield empirical dividends in the area of self-evaluation as well.

In the current investigation, we made the well-validated assumption that most individuals have a positive self-concept (Edwards, 1957; Kendall et al., 1989; Schwartz, 1986). Of course, this assumption does not negate the reality that individuals differ in the valence of their global or specific self-views. Nevertheless, these individual differences only partially qualify our findings. In a recent meta-analysis of the self-serving bias literature, Campbell and Sedikides (1999) identified several individual difference (as well as situational) variables that are likely to lead to an increased perception of self-threat and consequently to a magnified selfserving bias (i.e., accepting credit for personal successes but displacing blame for personal failures). Such individual difference variables are achievement orientation, locus of control, and selfesteem. To extrapolate, individuals high in achievement motivation, with an external locus of control, and high in self-esteem (Story, 1998; as well, narcissistic individuals, Rhodewalt & Morf, 1998) will be more likely to feel threatened and manifest inconsistency neglect than their counterparts. In fact, we anticipate that any variable, be it individual difference or situational, that elevates self-threat or the perception of self-threat, will induce high levels of neglect.

Implications for integration of research on self-perception and person-perception. Sometimes, bodies of literature emerge and grow rather independently of one another, despite their seeming interrelations. The literatures on person perception and selfperception are a case in point. The person-perception literature has been heavily concerned with cognitive mediation. Researchers in this tradition delve regularly into the cognitive bases of person impressions attempting to better understand the role of memorial processes, prior expectancies, and processing goals (Smith, 1998; Srull & Wyer, 1989; Wyer & Carlston, 1994). This research has illuminated how individuals encode, store, and retrieve behavioral information about another person, as well as how they combine different types of information (e.g., inconsistent information) to form an overall impression. Importantly, this research has been guided predominantly, albeit rather implicitly, by the accuracy motive: Researchers have assumed that participants' goal is to form as accurate an impression of the other (i.e., target) person as possible. In fact, often times, participants are provided with such a goal.

In contrast, research on self-perception and, more specifically, self-evaluation has postulated that accuracy is but one of several motives that direct the impressions individuals form about themselves. These other motives include self-enhancement/self-protection, self-verification, and self-improvement (Sedikides & Strube, 1997). Nonetheless, despite this welcome development (a development that we recommend be transported into the domain of person perception), research on self-evaluation typically has been concerned with demonstrations and qualifiers of self-protection or self-enhancement biases. The self-evaluation literature is replete with documenting the ingenuity with which individuals defend or enhance the self-concept (Brown & Dutton, 1995; Sedikides & Strube, 1997; Taylor & Brown, 1988). Little has been done in virtue of cognitive mediation of such biases.

Knowing that individuals self-protect (or self-enhance) is not enough; we need to know how they do so. The results of this investigation demonstrate that individuals protect the positivity of their self-concept by neglecting feedback that is inconsistent with their prior held (central positive) self-conceptions. Self-protection is secured by allocating minimal processing time to this threatening information and by neglecting the implications of this information for self-impressions. We hope that these findings shed light into the cognitive underpinnings of self-enhancement biases. More importantly, we hope that our attempt to bridge the gap between the two relatively disparate research traditions of self-perception and person perception will instigate like-minded empirical pursuits.

Concluding Remarks

Josh Billings was correct when he pronounced that, "It's not only the most difficult thing to know one's self, but the most inconvenient." Individuals are inconvenienced even by a mere hypothetical challenge posed to their valued self-beliefs. However, Quentin Crisp's statement is in need of revision. He proclaimed that, "The very purpose of existence is to reconcile the glowing opinion we have of ourselves with the appalling things that other people think about us." This is not so. The human information processor is not concerned with reconciliation. Instead, he or she strives to neglect the appalling impression that other individuals may have of her or him, even when this impression is hypothetical.

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Appendix A

Behaviors Used in Experiments 1-3 and Partially in Experiment 4

Untrustworthy and Trustworthy Behaviors

X would borrow other people's belongings without their knowledge.

X would be unfaithful when in an intimate relationship.

X would often lie to X's parents.

An employer would not rely on X to have an important project completed by the deadline.

X would keep secrets when asked to.

X would follow through on a promise made to friends.

A teacher would leave X alone in a room while taking a test and not be afraid that X would cheat.

People would be willing to tell X embarrassing things about themselves in confidence.

Unkind and Kind Behaviors

X would make fun of others because of their looks.

X would purposely hurt someone to benefit X.

X would refuse to lend classnotes to a friend who was ill.

X would make an obscene gesture to an old lady.

X would offer to care for a neighbor's child when the babysitter couldn't come.

X would help people by opening a door if their hands were full.

X would help a handicapped neighbor paint his or her house.

X would volunteer time to work as a big brother or big sister to a child in need.

Immodest and Modest Behaviors

X would act in a condescending manner to other people.

X would point out others' weaknesses to make X look better.

X would talk more about X than about others.

X would show off in front of others.

X would take the focus off X and redirect it to others.

X would let some of X's achievements go by unaccredited.

X would give others the credit for a group success.

X would never openly brag about X's accomplishments.

Complaining and Uncomplaining Behaviors

X would look for faults even if X's life was going well.

When X would not like to do something, X would constantly mention it.

X would constantly talk about how much stuff there is to be done.

X would pick only the bad points to describe the classes X attends.

X would rarely inform others about physical ailments.

X would overlook the bad points about a roommate.

X would minimize bad experiences when telling about them.

X would tolerate situations even when not having a good time.

Note. X refers to either self (i.e., "I") or Chris.

Appendix B

Behaviors Used Partially in Experiment 4

Untrustworthy and Trustworthy Behaviors

- X would completely forget about an important meeting at work.
- X would not report a large source of income on X's income taxes.
- X would not pay back money that X owed to a friend.
- X would gossip about a good friend to other people.
- X would remember to pick things up for a friend.
- X would handle confidential tasks at work successfully.

When X found a wallet containing a lot of money, X would track down the owner and return it.

Even though X had a lot of work, X would not cheat on a homework assignment,

Unkind and Kind Behaviors

- X would ignore someone at a party that X didn't know very well.
- X would criticize a friend's boyfriend or girlfriend in front of X's friend.
- X would refuse to lend money to a brother or sister.
- X would get in a heated argument with someone over a minor issue.
- X would take care of a sick friend for several days.
- X would drive a friend around while the friend's car was being repaired.
- X would help X's roommate study for a difficult exam even though X had a great deal of work to do.
- X would take care of a friend's pet for the entire summer.

Immodest and Modest Behaviors

- X would openly brag to friends about a good grade.
- X would look down on some people because of their background or dress.
- X would boast about winning a game or sporting contest.
- X would ignore certain types of people at a party.
- X would change the subject if someone praised X.
- X wouldn't publicize it to many people if X got an award or honor.
- X would talk about a friend's successes more than X's own.
- X would downplay X's good performance at work.

Complaining and Uncomplaining Behaviors

- X would complain about X's boss to coworkers.
- X would gripe when a roommate didn't keep the place neat and clean.
- X would criticize a friend if she or he was late meeting X.
- X would get irritated and comment loudly if the weather was bad.
- X wouldn't say anything if food was overcooked at a restaurant.
- X wouldn't get mad if a friend promised to call but forgot.
- X would simply smile if someone was rude to X.
- X wouldn't really comment negatively about politicians that X disliked.

Note. X refers to either self (i.e., "I") or Chris.

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