

## When social identity threat leads to the selection of identity-reinforcing options: The role of public self-awareness



Katherine White<sup>a,\*</sup>, Madelynn Stackhouse<sup>b</sup>, Jennifer J. Argo<sup>c</sup>

<sup>a</sup> Sauder School of Business, University of British Columbia, 2053 Main Mall, Vancouver, BC V6 T 1Z2, Canada

<sup>b</sup> Department of Management, Bryan School of Business and Economics, University of North Carolina at Greensboro, 369 Bryan Building, P.O. Box 26170, Greensboro, NC 27402-6170, United States

<sup>c</sup> School of Business, University of Alberta, Edmonton, AB T6 G 2R6, Canada

### ARTICLE INFO

#### Keywords:

Social identity  
Self-consistency  
Identity threat  
Public self-awareness  
Public self-consciousness

### ABSTRACT

This research shows that activating public self-awareness leads individuals to increase their association with symbolic representations of their identity. When a social identity was threatened, participants high rather than low in public self-awareness were more likely to select options that reinforced their association with the identity (Studies 1a, 1b, and 2). This response was mediated by the desire to convey a consistent self to others (Study 2). In line with the view that the effects are driven by public self-consistency motives, the effects emerge only among those motivated to convey a consistent public self-image (Study 3) and when product choices can be viewed by others (Study 4). Finally, when identity threat occurred in the presence of an ingroup audience, those high (but not low) in ingroup identification were more likely to select identity-reinforcing options when public self-awareness was heightened (Study 5). The theoretical and practical implications of these findings are discussed.

### 1. Introduction

Imagine that while having your morning coffee at a local coffee shop, another patron mentions that she read in the news that your profession has been ranked poorly compared to other comparable professions. How would you react to this negative information that threatens an aspect of your social identity (i.e., your identity linked to your occupation)? One possible response is to engage in behavior that allows you to distance yourself from your identity as a member of the profession (e.g., you might conceal your notebook with an industry-related logo on it). Alternatively, you might respond by engaging in a behavior that reinforces your association with your professional or industry identity in light of this negative information (e.g., you might choose to hold your notebook in a way that displays your industry logo to others). The current research examines threats linked to one's identity as part of an organizational community (e.g., a university, a city, or an occupation) and examines the conditions under which individuals will reinforce their association with a social identity when it is threatened in some way.

The question of how people respond under conditions of social identity threat has received considerable research interest (e.g., Lewis & Sherman, 2003; Scheepers & Ellemers, 2005; Swann, Pelham, & Krull, 1989). Past research commonly finds evidence of

individuals protecting the self by avoiding an identity when it is threatened (e.g., Cialdini et al., 1976; White & Argo, 2009; White, Argo, & Sengupta, 2012). However, research also suggests that sometimes an associative response can occur, wherein individuals engage in behaviors that symbolically allow them to reinforce their connection with the threatened aspect of identity (e.g., Ellemers, Spears, & Doosje, 2002; White et al., 2012). The present work merges two streams of research on social identity theory (e.g., Tajfel & Turner, 1986) and self-consistency strivings (e.g., Pelham & Swann, 1989; Swann, Stein-Seroussi, & Giesler, 1992) to provide a novel account of when social identity threat can lead to an associative, identity-reinforcing response. We propose that under conditions where individuals become motivated to present a consistent view of the self to others, individuals will display a response that allows them to reinforce and associate with the threatened identity. In particular, the present research looks at the impact of social identity threat on the tendency to choose options that are symbolically linked to one's identity and proposes a novel moderator that determines individuals' responses to social identity threat: public self-awareness. We suggest that when public self-awareness is high (as opposed to low), a social identity threat will lead to the desire to display a consistent view of the self to others, resulting in the selection of products that symbolically allow individuals to reinforce their association with the aspect of their identity that has been threatened. In our earlier

\* Corresponding author.

E-mail addresses: [Katherine.White@sauder.ubc.ca](mailto:Katherine.White@sauder.ubc.ca) (K. White), [mrstackh@uncg.edu](mailto:mrstackh@uncg.edu) (M. Stackhouse), [jennifer.argo@business.ualberta.ca](mailto:jennifer.argo@business.ualberta.ca) (J.J. Argo).

example, if the negative information about one's occupation is delivered in a manner that increases public self-awareness (e.g., is given in a highly public manner), this would lead to identity-reinforcing choices and behaviors (such as selecting a product that reflects the occupational identity).

We contribute to the existing literature in three noteworthy ways. First, this work provides insight into a novel factor that influences reactions to social identity threat and highlights when individuals will reinforce their connection to a threatened aspect of identity. In particular, we demonstrate that variations in public self-awareness moderate responses to a social identity threat. Second, we go beyond looking at responses to social identity threats by examining a mechanism that explains the observed identity-reinforcing behaviors: public self-consistency. Third, we build on work on self-consistency and self-verification to show that public self-consistency motivations are heightened under conditions where public self-awareness is high, when the individual is high in ingroup identification, and when observers are ingroup members.

## 2. Responses to social identity threat

Classic social identity theorizing (e.g., [Tajfel & Turner, 1986](#); [Turner, 1985](#)) proposes that identity is composed of two levels: personal identity (i.e., identity related to a person's individual sense of self) and social identity (i.e., the various identities that are related to social groups to which a person belongs or is affiliated). Importantly, identity is composed of multiple co-existing aspects of self-identity that can become differentially activated based on situational factors (e.g., [Tajfel & Turner, 1979, 1986](#)). Thus, an individual can respond to situational demands in ways that are congruent with one's individual level of identity or one of many possible aspects of social identity (e.g., mother, teacher, Canadian; [Brewer, 1991](#); [Deaux, 1996](#)).

One key tenet of social identity theory is that not only are individuals motivated to view the individual self in a positive light, they also strive to maintain positive views of the self at the level of their social identity ([Tajfel & Turner, 1979](#)). Research drawing on this theorizing shows that when an aspect of social identity becomes threatened in some way, individuals are motivated to reconcile the threat to maintain and restore a positive social identity (e.g., [Aquino & Douglas, 2003](#); [Branscombe, Ellemers, Spears, & Doosje, 1999](#); [Ellemers et al., 2002](#); [Lewis & Sherman, 2003](#); [White & Argo, 2009](#); [White et al., 2012](#)). Although there are numerous sub-strategies people can employ to resolve a social identity threat (e.g., [Blanz, Mummendey, Mielke, & Klink, 1998](#), report twelve strategies; [Branscombe, Ellemers et al., 1999](#); [Branscombe, Schmitt, & Harvey, 1999](#), report nine strategies; [Ellemers et al., 2002](#), report twelve strategies), these strategies generally fall into two broad categories. The first category involves dissociating the self from the threatened aspect of identity—for example, by actually leaving or psychologically distancing the self from the ingroup ([Jackson, Sullivan, Harnish, & Hodge, 1996](#)) or by seeing the self as an individual rather than a group member ([Branscombe, Ellemers et al., 1999](#); [Branscombe, Schmitt et al., 1999](#)). The second category of responses involves associating or reinforcing the self with the threatened identity—for example, by disparaging the outgroup ([Branscombe & Wann, 1994](#)) or by viewing the ingroup as being more favourable ([Brewer, 1991](#); [Voci, 2006](#)). Notably, research has posited that the tendencies to both distance the self from and associate the self with a threatened identity are driven by a desire to have positive feelings about the self, but they do so via different avenues. In particular, the tendency to dissociate or distance the self from the identity under threat has been characterized as being driven by an individual-level response to enhance the individual self, while the tendency to associate with a threatened identity has been viewed as a group-level response that enhances the group level of identity (e.g., [Ellemers, Spears, & Doosje, 1997](#); [Pagliaro, Ellemers, & Barreto, 2011](#); [Spears, Doosje, & Ellemers, 1997](#)).

Previous research finds that people's responses to identity threat are often exhibited in their choices of symbolic representations of their identities, such as the material products that they use and display to others (e.g., [Belk, 1988](#); [Berger & Heath, 2008](#); [White & Dahl, 2006, 2007](#)). The existing work examining identity threat and responses to products that symbolically reflect that identity largely suggests that when under threat, people avoid identity-reinforcing products to enhance the individual self (e.g., [Cialdini et al., 1976](#); [White & Argo, 2009](#); [White et al., 2012](#)). For instance, classic research by [Cialdini et al. \(1976\)](#) found that university students were less likely to wear home university-identifying apparel after the school's football team had lost as opposed to when the team won. Further, [White and Argo \(2009\)](#) found that when individuals experienced a threat to an aspect of their social identity (e.g., they received negative information about their gender identity), they avoided products that are symbolically associated with that identity (e.g., gender-linked magazines). One question that arises is when might individuals be more inclined to show the reverse pattern, reinforcing their connection to the social identity via their selections of identity-linked options when that identity is threatened?

## 3. When do people increase association with a threatened social identity?

Past work demonstrates that one factor that leads individuals to increase their association with an ingroup after experiencing social identity threat is the ability to identify with the ingroup in some way (e.g., [Branscombe & Wann, 1994](#); [Luhtanen & Crocker, 1992](#); [Spears et al., 1997](#); [Wann & Branscombe, 1990](#); [Voci, 2006](#)). For example, those who more strongly identify with the ingroup have been shown to respond to social identity threat by displaying greater ingroup bias ([Luhtanen & Crocker, 1992](#)), categorizing the self as a prototypical group member ([Spears et al., 1997](#)), accentuating intragroup heterogeneity ([Doosje, Ellemers, & Spears, 1995](#)), as well as seeing the ingroup as homogeneous, feeling committed to the ingroup, and expressing a decreased desire to leave the group ([Ellemers et al., 1997](#)). In our work, we view ingroup identification as being distinct from another factor that moderates reactions to social identity threat: public self-awareness.<sup>1</sup>

Public self-awareness refers to a state in which an individual becomes aware of publicly displayed aspects of the self ([Crisp & Turner, 2007](#); see also [Buss, 1980](#); [Carver & Scheier, 1981](#); [Scheier & Carver, 1980, 1985](#); [White, Simpson, & Argo, 2014](#)). We predict that the degree to which one's focus of attention is on public aspects of the self will play a role in determining reactions to social identity threat. Specifically, we propose that when an individual is high as opposed to low in public self-awareness, the desire to convey a consistent and stable image of the self to others (i.e., in our context the image of a self that does not avoid an aspect of one's own identity) will be increased, which will in turn lead to more identity-reinforcing choices. This response is expected to occur because, foremost, a social identity threat conveys inconsistent information about the self in that it communicates negative information about an aspect of the self that is viewed positively ([Taylor, 1989](#);

<sup>1</sup> We view ingroup identification and public self-awareness as conceptually and empirically distinct constructs. Past work suggests that ingroup identification can be measured as both an individual difference ([Luhtanen & Crocker, 1992](#); [Ashforth & Mael, 1989](#); [Van Knippenberg & Sleebos, 2006](#)) and as a state that can be activated by contextual factors ([Castano, Yzerbyt, & Bourguignon, 2003](#)). We see ingroup identification as reflecting the degree to which the person construes the group as being part of the self-concept ([Luhtanen & Crocker, 1992](#)) and has a perception of oneness with the group ([Ashforth & Mael, 1989](#)). Public self-awareness, in contrast, involves awareness of the publicly displayed aspects of the self. Our view is consistent with past research that has found that the publicness of a situation and ingroup identification are orthogonal constructs ([Barreto & Ellemers, 2000](#); [Reicher, Spears, & Postmes, 1995](#)). While we view these as distinct constructs, we also see these factors as having interactive effects, which we outline and test in more detail in study 5.

Taylor & Brown, 1988); thus, the social identity threat will disrupt the individual's sense of self-consistency. Further, when the threat occurs in a public manner, we propose that this will heighten awareness of the self as it is presented to others (Carver & Scheier, 1981; Scheier & Carver, 1980, 1985). As a result, we anticipate that individuals will attempt to resolve this shaken sense of self-consistency by confirming to others who the self 'really is' by embracing an identity that is threatened (rather than avoiding association with the threatened aspect of identity). We propose that, under conditions of an identity threat, high (vs. low) public self-awareness will lead individuals to re-assert public self-consistency by choosing symbolic representations of their identity (e.g., in our example above, they will choose a product linked to their own occupation under conditions where their profession's status is threatened in some way).

In line with our theorizing, past research suggests that factors that increase public self-awareness lead individuals to be more motivated to display attitude-behavior consistency (e.g., Tedeschi, Schlenker, & Bonoma, 1971) and to convey consistent self-views to others (Schlenker, 1975). Moreover, the Social Identity model of Deindividuation (SIDE model) highlights that making individuals publicly accountable for their behaviors can impact responses to situations that threaten social identity (Reicher, Spears, & Postmes, 1995). We make the novel proposition that it is under conditions of both threat and high public self-awareness that the motivation to convey a consistent view of the self to others will be most strongly activated. In turn, we suggest that this public self-consistency motive will lead individuals to reinforce their identity by selecting products that are linked to that identity. Consistent with the prediction that consistency strivings will lead individuals to reinforce their identity, research borne out of the self-verification tradition finds that individuals will indeed often seek to convey information to others that is consistent with their own self-conceptions (Swann & Read 1981a, 1981b; Swann et al., 1989). In the current work, we build on these findings to predict that identity-confirming responses will be observed under conditions where one's social identity is threatened and the situation creates high (vs. low) public self-awareness. Under conditions of no identity threat, the self-concept is not shaken in any way and no differences in the tendency to reinforce one's identity should emerge as a function of public self-awareness.

#### 4. The current research

The current work highlights the conditions under which individuals will select options that symbolically allow them to reinforce their association with a threatened identity. We demonstrate that people are more likely to prefer identity-consistent products when exposed to an identity threat *and* when public self-awareness is high as opposed to low (Studies 1a and 1b). Further, we find that high versus low public self-awareness increases a desire to convey a consistent view of the self to others under conditions of identity threat (Study 2), but does not lead to differential evaluations of credibility, differences in need to belong, or increases in ingroup identification. In Studies 3 and 4 we provide further evidence for the proposed underlying role of public self-consistency motives through the demonstration that our effect only emerges among those moderate and high on a trait measure of desiring to convey a consistent view of the self to others (Study 3) and when the choice itself is viewed by others (Study 4). Finally, we examine the roles of identification and audience type (i.e., ingroup versus outgroup) in moderating the observed effects in Study 5. In particular, when identity threat occurs in the presence of an ingroup audience, those high (but not low) in ingroup identification are more likely to select identity-reinforcing options when public self-awareness is heightened. Taken together, the results across these studies demonstrate the conditions under which a desire to convey a consistent image of the self to others can lead individuals to select identity-reinforcing options in response to identity threat.

#### 5. Study 1a: University-identity threat

To provide an initial test of our predictions, in Study 1a, participants were exposed to information that either threatened or did not threaten their social identity as a student from their university. This information was conveyed in a manner that encouraged either high or low public self-awareness. We then used a real choice as our dependent variable wherein participants selected either an identity-reinforcing option or a neutral option. We predicted that under conditions of social identity threat, participants would be more likely to prefer an identity-reinforcing option when public self-awareness is high as opposed to low. Under conditions of no identity threat, no differences as a function of public self-awareness were predicted to emerge.

##### 5.1. Method

###### 5.1.1. Participants and design

One hundred ninety-one English-speaking undergraduates participated in a 2 (Identity Threat: threat vs. no threat)  $\times$  2 (Public Self-Awareness: low vs. high) between-subjects design.<sup>2</sup> Nineteen participants were removed from the sample due to problems with choosing or refusing to select a clipboard. The final sample ( $N = 172$ ) had a mean age of 21.17 years and was 54% female. A power analysis (using G\*Power version, Erdfelder, Faul, & Buchner, 1996) revealed that this sample size was sufficient ( $-\beta$  err prob = 0.97).

###### 5.1.2. Procedure

The focal social identity in this study was university student identity, which has been shown to be a form of social identity that is relevant to undergraduate students (LeBoeuf, Shafir, & Bayuk, 2010; White et al., 2012). This study was conducted in small groups (of 4–12 people) where participants were led to believe they were taking part in a study on verbal comprehension and consumer preferences. As our ostensible measure of verbal comprehension, participants were told they would be exposed to an article and would later be asked questions to test their comprehension of the article. The article served as our manipulation of identity threat and has been previously validated (White et al., 2012; see Web Appendix A). In the identity-threat (no-threat) condition, the article reported that the participant's own university performed worse than (similarly to) other universities in its class. Public self-awareness was manipulated by either having the experimenter read the article aloud to the group of participants (high public self-awareness) or by having participants independently read it silently to themselves (low public self-awareness). Participants then completed filler items (to increase the time between the manipulations and the final choice task) and demographic questions. Included in these items was a measure to test whether our public self-awareness manipulation activated the state of public self-awareness. Participants were asked: "Please respond to the following items in terms of how you are currently feeling, *right now*": "I am concerned about my style of doing things," "I'm concerned about the way I present myself," "I'm self-conscious about the way I look," "I'm concerned about what other people think of me" ( $\alpha = 0.71$ ; adapted from Scheier & Carver, 1985; on 7-point scales). As a check for the threat manipulation, participants reported how "negative" and how "threatening" the information in the article was (on 7-point scales;  $r = 0.67$ ;  $p < 0.0001$ ). In addition, participants reported their age, gender, and ethnic background.

At the end of the study, the experimenter indicated that the researchers had clipboards left over from another study. Participants were told that as thanks for participating, they could choose a clipboard to

<sup>2</sup> We decided a priori that participants who had difficulty completing the dependent measure (i.e., they did not answer or refused to take the clipboard), those who explicitly guessed hypotheses, those who failed manipulation checks, and those who did not possess the focal identity would be removed from data analysis. In each study, we indicate the total number of participants removed and their reason for exclusion.

take with them as a gift. Our dependent measure was each participant's choice of either an identity-reinforcing clipboard (i.e., it prominently displayed the university name and logo) or a neutral clipboard (i.e., it was plain and did not display a logo). These options were rated as being similar in likeability in a pretest (i.e., an average score of three items reported on 9-point scales, ranging from like to dislike, bad to good, and unfavorable to favorable,  $t(65) = 1.12, p = 0.267, M_{identity} = 5.81, SD = 1.99$  and  $M_{neutral} = 6.19, SD = 2.12, d = 0.28$ ). Participants' final selections of their products were made publically, in front of the others in the room.

## 5.2. Results

### 5.2.1. Manipulation checks

Public self-awareness was coded as 0 = low/1 = high and threat was coded as 0 = no threat/1 = threat. To assess our public self-awareness manipulation, we conducted a public self-awareness  $\times$  identity threat ANOVA on the state public self-awareness index. The results revealed only a main effect for public self-awareness, such that those in the high public self-awareness condition ( $M = 3.82, SD = 0.86$ ) reported higher levels of public self-awareness compared to those in the low public self-awareness condition ( $M = 3.50, SD = 0.86; F(168), 5.91, p = 0.016, d = 0.38$ ). Similar analysis on the threat manipulation revealed only a main effect for threat, such that those in the identity threat condition reported higher levels of threat ( $M = 5.26, SD = 1.50$ ) than did those in the no identity threat condition ( $M = 1.62, SD = 0.95; F(168), 359.16, p < 0.0001, d = 2.48$ ). This suggests that our manipulations of public self-awareness and social identity threat do operate as intended.

### 5.2.2. Product choice

If the individual chose the identity-reinforcing option this was coded as 1, and if the individual chose the neutral option this was coded as 0. Binary logistic regression predicting product choice was used to analyze the results. Demographics were included in Step 1, which revealed that only age was a significant predictor of choice ( $B = -0.21, 95\%CIs [-0.397, -0.070], Wald = 6.68, p = 0.01$ ).<sup>3</sup> In Step 2, identity threat and public self-awareness were entered into the equation, and there was a main effect for public self-awareness ( $B = 0.34, 95\%CIs [0.024, 0.688], Wald = 4.27, p = 0.039$ ). In Step 3 the interaction between identity threat and public self-awareness was included as a predictor in the equation. As anticipated, the interaction term was significant ( $B = 0.47, 95\%CIs [0.121, 0.888], Wald = 7.47, p = 0.006$ ; refer to Fig. 1 and see Table 1 for all the variables in the final equation). Under conditions of identity threat, a greater percentage of participants selected the identity-reinforcing product when public self-awareness was high (81.6%) as opposed to low (41.7%,  $\chi^2 = 14.00, p < 0.0001, 95\%CIs [0.205, 0.656], d = 0.89$ ). Under conditions of no threat, no significant differences emerged in the tendency to select the identity-reinforcing product when public self-awareness was high (48.7%) versus low (55.3%;  $\chi^2 = 0.37, p = 0.542; 95\%CIs [-0.145, 0.270], d = 0.13$ ). Looking at the data another way, when we selected for high public self-awareness, a greater percentage of participants selected the identity-reinforcing option when under threat (81.6%) as opposed to no threat (48.7%;  $\chi^2 = 9.13, p = 0.003, 95\%CIs [0.118, 0.506], d = 0.70$ ). When we selected for low public self-awareness, there was no difference in choices when under threat (41.7%) as opposed to no threat (55.3%;  $\chi^2 = 1.78, p = 0.183; 95\%CIs [-0.068, 0.342], d = 0.29$ ).

<sup>3</sup> Across all the studies, we included the demographic variables measured as control variables in our analysis. This was done to control for variance based on membership in other identity-relevant groups. Omitting the controls does not alter the patterns of results in any of the studies.

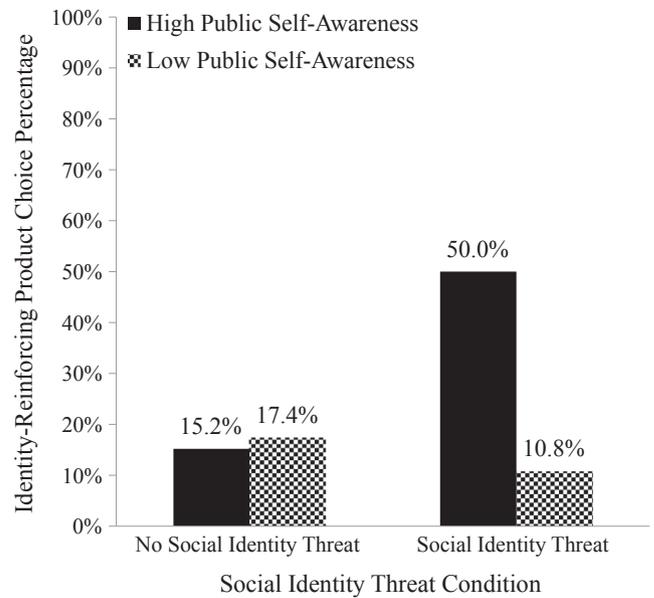


Fig. 1. Study 1a: Identity-reinforcing product choice (i.e., university clipboard choice) as a function of social identity threat and public self-awareness.

Table 1  
Variables in the equation for Study 1a.

	B	Standard Error	Wald	p-value
<i>Study 1a: All Variables in the Equation for the Final Step of Regression Analysis</i>				
Gender	-0.41	0.34	1.46	0.228
Age	-0.18	0.08	4.49	0.034
Ethnic background	-0.15	0.17	0.77	0.381
Threat	0.23	0.17	1.77	0.184
PSA	0.38	0.17	4.71	0.030
Threat * PSA	0.47	0.17	7.47	0.006
Constant	4.90	1.76	7.72	0.005

Note: The above results reflect binary logistic regression results in study 1a with all variables in the analysis. Threat is coded as 0 = no threat and 1 = threat. Public Self-Awareness (PSA) is coded as 0 = low and 1 = high.

## 5.3. Discussion

The results of study 1a demonstrate that when an aspect of social identity was threatened, participants were more likely to select the identity-reinforcing option when public self-awareness was high as opposed to low. Under conditions of no threat, no differences in choice patterns emerged as a function of public self-awareness. These results provide support for our basic premise that under conditions of high (but not low) public self-awareness, a social identity threat leads individuals to reinforce their association with the threatened aspect of identity by selecting products that symbolically display their social identity to others.

## 6. Study 1b: City-identity threat

In study 1b we ran a conceptual replication of study 1a with a new focal identity (i.e., city of residence). We included a new choice task wherein participants had to decide between a product that was identity-relevant and a product that was associated with an alternative identity. This methodological change was designed to (a) increase the generalizability of the findings and (b) to allow us to test whether there is a difference in identity-reinforcing choices when under conditions of threat when the other option is associated with an alternative identity. It is possible, for example, that people might exhibit greater avoidance of the identity-linked option under conditions of low public self-awareness and threat if the alternative choice is associated with another identity. Once again, we anticipate that when under conditions of social

**Table 2**  
Variables in the equation for Study 1b.

	B	Standard Error	Wald	p-value
<i>Study 1b: All Variables in the Equation for the Final Step of Regression Analysis</i>				
Gender	−1.08	0.53	4.20	0.040
Ethnic background	−0.02	0.08	0.06	0.811
Threat	−0.62	0.79	0.62	0.429
PSA	−0.14	0.71	0.04	0.845
Threat * PSA	2.06	1.00	4.17	0.041
Constant	0.45	1.16	0.15	0.701

Note: The above results reflect binary logistic regression results in study 1b with all variables in the analysis. Threat is coded as 0 = no threat and 1 = threat. Public Self-Awareness (PSA) is coded as 0 = low and 1 = high.

identity threat, participants would be more likely to prefer an identity-reinforcing option when public self-awareness is high as opposed to low. Under conditions of no identity threat, no differences as a function of public self-awareness are predicted to emerge.

## 6.1. Method

### 6.1.1. Participants and design

One hundred thirty-four undergraduates who were currently living in the focal city of interest took part in a 2 (Identity Threat: threat vs. no threat) × 2 (Public Self-Awareness: low vs. high) between-subjects design in exchange for course credit. Six participants were removed from the analysis due to failure to choose or difficulty in choosing a product. The final sample ( $N = 128$ ) was 79% female. Power analysis revealed that this sample size was sufficient ( $-\beta$  err prob = 0.86).

### 6.1.2. Procedure

As with the preceding study, participants were led to believe they were taking part in a study on verbal comprehension. The ostensible verbal-comprehension task involved reading a press release that served as our identity-threat manipulation. The article indicated that “city” citizens were less likely to volunteer and give their time (threat condition) or equally likely to volunteer their time (no-threat condition) compared to other cities, based on research data provided by the national government (see Web Appendix B). In the high public-awareness condition, the experimenter read the article aloud to participants (see Study 1a). In the low public-awareness condition, each participant read the article alone in a small breakout room. Next, participants were instructed to “take a break” from the study and enter a draw for products ostensibly left over from a previous study placed in the main room. In fact, the draw entry assessed our dependent variable. Participants had the choice of entering to win one of two mugs: one mug had a large city logo placed on it (identity-reinforcing option) and the other mug had a university logo placed on it (alternative-identity option). If the participant selected the identity-reinforcing product this choice was coded as 1, while the alternative-identity product was coded as 0. Participants then finished the survey, which included some unrelated questionnaires, demographic items, and manipulation check questions.<sup>4</sup> After all study sessions were completed, a draw was held and the winning participants were contacted and given the products they chose.<sup>5</sup>

<sup>4</sup> We note that trait ingroup identification was measured in studies 1b and 3. In both of these studies the interaction between public self-awareness and threat has a distinct predictive ability from the role of ingroup identification. We do not report the three-way interaction including ingroup identification in these studies because we do not have the statistical power to do so. In Study 5, we have a large enough sample to report the interactions with ingroup identification and we do report those analyses in detail in that study.

<sup>5</sup> Manipulation checks were included for both threat and public self-awareness. ANOVA revealed that only the threat manipulation predicted the threat check ( $F(1, 124) = 310.88, p < 0.0001, M_{\text{threat}} = 5.25, SD = 1.47$  and  $M_{\text{no\_threat}} = 1.35, SD = 0.87$ ) and only the public self-awareness manipulation predicted the public self-awareness check ( $F(1, 124) = 4.95, p = 0.028, M_{\text{high}} = 5.85, SD = 1.33$  and  $M_{\text{low}} = 4.96, SD = 1.11$ ).

## 6.2. Results

In this study we used gender and ethnicity as covariates (age was not recorded) and used binary logistic regression to examine participants’ mug choices. In Step 1 demographics were entered into the equation, and this indicated that only gender was a significant predictor of choice ( $B = -1.34, 95\%CIs [-2.451, -0.409], Wald = 7.96, p = 0.005$ ). In Step 2 threat and public self-awareness were entered into the equation, and this revealed that only public self-awareness was a significant predictor of choice ( $B = 1.02, 95\%CIs [-0.039, 2.581], Wald = 3.99, p = 0.046$ ). In Step 3 the interaction term was entered as a predictor, and this revealed that the interaction between threat and public self-awareness did significantly predict choice ( $B = 2.06, 95\%CIs [0.328, 5.526], Wald = 4.17, p = 0.041$ ; refer to Table 2). Under conditions of identity threat, a greater percentage of participants selected the focal identity-reinforcing product (rather than alternative-identity product) when public self-awareness was high (50%) as opposed to low (10.8%,  $\chi^2 = 11.75, p = 0.002, 95\%CIs [0.181, 0.587], d = 0.92$ ; refer to Fig. 2). Under conditions of no threat, no significant differences emerged in the tendency to select the focal identity-reinforcing product (rather than the alternative-identity product) when public self-awareness was high (15.2%) as opposed to low (17.4%;  $\chi^2 = 0.038, p = 0.47, 95\%CIs [-0.251, 0.249], d = 0.05$ ). Looking at the data another way, when we selected for high public self-awareness, people were more likely to choose the focal identity-reinforcing option under threat (50.0%) as opposed to no threat (15.2%;  $\chi^2 = 9.25, p = 0.002, 95\%CIs [0.133, 0.549], d = 1.08$ ). When we selected for low

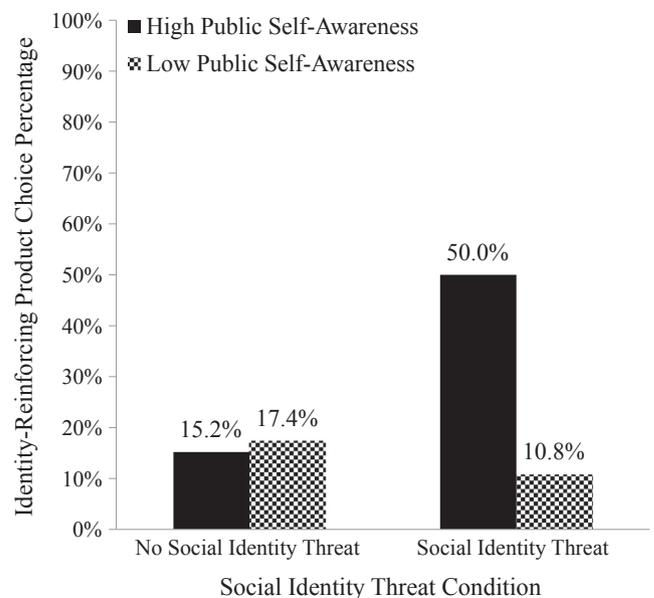


Fig. 2. Study 1b: Identity-reinforcing product choice (city mug choice) as a function of social identity threat and public self-awareness.

public self-awareness, there was no significant difference in selecting the focal identity-reinforcing option when under threat (10.8%) as opposed to no threat (17.4%;  $\chi^2 = 0.53$ ,  $p = 0.47$ , 95% CIs [−0.145, 0.307],  $d = 0.06$ ).

### 6.3. Discussion

Taken together, both studies 1a and 1b provide converging support for our predictions. Using a different type of identity threat, study 1b shows that when under social identity threat, high (vs. low) public self-awareness leads individuals to choose the identity-reinforcing option. Under conditions of no threat, no differences in choice patterns emerged as a function of self-awareness. We note that we find similar results when the alternative product option is a neutral product (study 1a) and when it is associated with an alternative aspect of identity (study 1b). That is, we did not observe avoidance of the identity linked product under conditions of low public self-awareness and threat, even when the alternative option was linked to another identity.

Past research finds that people often dissociate with identity-linked items under threat when the context is relatively private in nature (e.g., White & Argo, 2009). One question, then, is why do we not find evidence of individuals being less likely to select identity-reinforcing options under identity threat (vs. no threat) under conditions of low public self-awareness in Studies 1a and 1b? One possible explanation is that our low public self-awareness condition is not completely private in nature. While the information (i.e., the threatening or neutral information) is conveyed in a relatively less public manner in the low public self-awareness condition, this condition is not truly private given that the choice task is still completed in the presence of other people. Indeed, as we discuss and test in Study 4, our effects are contingent on the product choice being observed by others. In the next study, we turn to providing initial evidence that the observed effect is driven by public self-consistency motives as our conceptualization suggests.

## 7. Study 2: City-identity threat via a newscast

In Study 2 we sought to increase the external validity of the findings through the use of a more realistic manipulation of identity threat. To achieve this, we employed the assistance of a well-known local news anchor who recorded two professional versions of our identity-threat manipulation (e.g., threat and no-threat conditions). As in Study 1b, we again threatened one's identity as a citizen of a particular city, although we changed the dependent variable to be whether or not participants chose a bottle of city-branded water. Finally, we sought to provide insight into the mechanism underlying the effect observed in Studies 1a and 1b. As mentioned earlier, we expect that when social identity threats are received when public self-awareness is high, this activates the desire to convey a consistent view of the self to others, and this desire for self-consistency leads to associative responses. Thus, in this study, we employed a state measure of the desire to convey a consistent view of the self to others.

In addition to our predicted mediator (i.e., public self-consistency motives), we included several measures that allowed us to examine the explanatory role of other potential alternative mechanisms for the observed effects: perceived credibility, state need to belong, state ingroup identification, and loyalty to the ingroup. First, it is possible that the combination of threatening information and high public self-awareness will make the news story appear more credible. Second, it may be that belongingness needs (i.e., to affiliate with the group) can lead people to associate with the ingroup under threat (e.g., White et al., 2012). Third, given that past research links group-identification with the reinforcement of the ingroup identity under threat (e.g., Branscombe & Wann, 1994; Voci, 2006; Wann & Branscombe, 1990), it could be that our effects are driven by state identification with the ingroup. Finally, we examined whether the effects were driven by loyalty to the ingroup (e.g., Van Vugt & Hart, 2004). We anticipate that the desire to convey a

consistent self-image to others will mediate the results, rather than perceived credibility, state differences in belongingness, state ingroup identification, or loyalty to the ingroup.<sup>6</sup>

### 7.1. Method

#### 7.1.1. Participants and design

One hundred sixty-three undergraduates participated in a 2 (Identity Threat: threat vs. no threat) × 2 (Public Self-Awareness: low vs. high) between-subjects design. Seven participants who reported that they were not from the focal city were removed from the analysis. The final sample ( $N = 156$ ;  $-\beta$  err prob = 0.96) had a mean age of 22.51 years (ranging from 19 to 65) and was 45% female.

#### 7.1.2. Procedure

This study was conducted in the concourse area of a business school building. Passers-by were recruited by a research assistant to take part in a short 5-min study in exchange for their choice of a free candy bar and a bottle of water. Small groups of 2–6 people took part in the study at a time. Participants were told this was a study being conducted in conjunction with the journalism school and that they would evaluate a news story. We employed the assistance of a well-known local news anchor who professionally video-recorded two versions of our identity-threat manipulation (e.g., threat and no-threat conditions). The video clip either reported that residents of the focal city performed poorly on a valued behavior (e.g., volunteering) or that they performed average on this behavior. These constituted our threat and no-threat conditions, respectively. The video recordings were done at the news desk, were of professional quality, and lasted approximately 40 s each (see Web Appendix C).

Public self-awareness was manipulated by having participants either watch the video clip of the newscast on large public video screens permanently fixed on the wall in the concourse area (high public self-awareness) or by privately reading a transcript of the newscast to themselves (low public self-awareness). Participants then answered questions about the news story in line with our cover story. In addition, we embedded items to assess the potential mediating variables (anchored on 7-point scales), including the credibility of the newscast (“credible,” “reliable,” and “trustworthy”;  $\alpha = 0.90$ ). To tap into state variables, participants were instructed “Please respond to the following items in terms of how you are currently feeling, *right now*.” Participants completed measures of public self-consistency motives (“I want to show others that I am consistent,” “I want to convey a consistent self to others,” and “I want to convey my ‘true’ self to others”;  $\alpha = 0.71$ ; developed based on face validity), need to belong (“I want other people to accept me,” “I have a strong need to belong”;  $r = 0.68$ ; adapted from Leary, Cottrell, & Schreindorfer’s (2013) Need to Belong Scale), and state ingroup identification (“Being \_\_\_\_\_ has a great deal to do with how I feel about myself,” “Being \_\_\_\_\_ is an important part of my self-image,” “Being \_\_\_\_\_ is important to my sense of the kind of person I am,” “I strongly identify with \_\_\_\_\_”;  $\alpha = 0.93$ ; adapted from Luhtanen & Crocker, 1992). As a measure of state loyalty, participants responded to the item: “I am loyal to \_\_\_\_\_.” At the end of the survey, participants reported if they were from the city of interest and responded to manipulation checks.

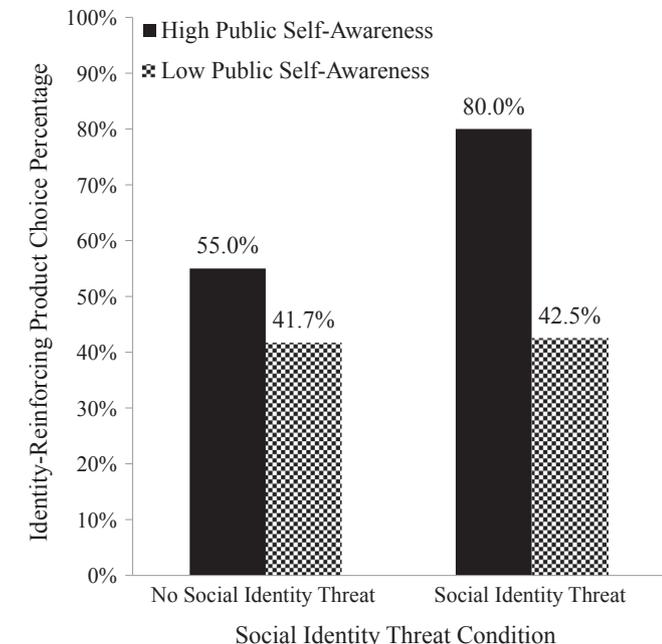
At the conclusion of the study, participants were offered their choice of a candy bar and a bottle of water as thanks for participating. There were two brands of bottled water to choose from—one that was branded with the name of the focal city and one that was branded with the name of another nearby city. Pretesting confirmed that both water

<sup>6</sup> Manipulation checks were included for both threat and public self-awareness. Analysis revealed that only the threat manipulation predicted the threat check ( $F(1, 152) = 170.75$ ,  $p < 0.0001$ ,  $M_{\text{threat}} = 5.00$ ,  $SD = 1.20$  and  $M_{\text{no\_threat}} = 2.48$ ,  $SD = 1.21$ ) and only the public self-awareness manipulation predicted the public self-awareness check ( $F(1, 152) = 5.08$ ,  $p = 0.026$ ;  $M_{\text{high}} = 5.16$ ,  $SD = 1.20$  and  $M_{\text{low}} = 4.66$ ,  $SD = 1.55$ ).

**Table 3**  
Variables in the equation for Study 2.

	B	Standard Error	Wald	p-value
<i>Study 2: All Variables in the Equation for the Final Step of Regression Analysis</i>				
Gender	−0.76	0.35	4.57	0.033
Age	−0.04	0.03	1.92	0.166
Threat	−0.17	0.49	0.12	0.725
PSA	0.48	0.48	0.99	0.318
Threat * PSA	1.34	0.71	3.56	0.059
Constant	1.07	0.79	1.82	0.178

Note: The above results reflect binary logistic regression results in study 2 with all variables in the analysis. Threat is coded as 0 = no threat and 1 = threat. Public Self-Awareness (PSA) is coded as 0 = low and 1 = high.



**Fig. 3.** Study 2: Identity-reinforcing product choice (city-branded bottled water) as a function of social identity threat and public self-awareness.

brands were viewed as being equally desirable (using the same items as in the Study 1a pretest,  $t(49) = 0.14, p = 0.890, M_{identity} = 7.60, SD = 1.60$ , and  $M_{neutral} = 7.55, SD = 1.66, d = 0.04$ ). Our key dependent variable was whether or not participants chose the bottle of water that displayed the name of their city (coded as 1) or the other water (coded as 0).

**7.2. Results**

**7.2.1. Product choice**

Binary logistic regression was carried out with gender and age entered as predictors in Step 1, which revealed that only gender significantly predicted choice ( $B = -0.69, 95\%CIs [-1.420, -0.017], Wald = 4.30, p = 0.038$ ). Identity threat and public self-awareness were entered in Step 2, which revealed that only public self-awareness predicted choice ( $B = 1.12, 95\%CIs [0.440, 1.906], Wald = 10.45, p = 0.001$ ). In Step 3, the interaction term was entered into the analysis (see Table 3). This revealed that the interaction term marginally predicted product choice ( $B = 1.34, 95\%CIs [-0.018, 3.104], Wald = 3.56, p = 0.059$ ; refer to Fig. 3). Chi-square analysis revealed that, under conditions of social identity threat, a greater percentage of participants selected the identity-reinforcing product when public self-awareness was high (80.0%) versus low (42.5%,  $\chi^2 = 11.85, p < 0.001, 95\%CIs [0.170, 0.557], d = 0.82$ ). Under conditions of no threat, no significant differences emerged in the tendency to select the identity-reinforcing

product when public self-awareness was high (55.0%) versus low (41.7%;  $\chi^2 = 1.35, p = 0.25, 95\%CIs [-0.088, 0.333], d = 0.26$ ).

**7.2.2. The role of public self-consistency motives**

To test our prediction that public self-consistency is the mechanism underlying our effects, we looked at whether the interaction between public self-awareness and identity threat predicted product choice indirectly through public self-consistency motives. We conducted a moderated mediation analysis using Preacher, Rucker, and Hayes’ (2007, Hayes, 2012) bootstrapping methodology in PROCESS for SPSS (Model 8, 10,000 bootstrapped samples). The interaction between public self-awareness and threat significantly predicted public self-consistency motives ( $B = 1.09; SE = 0.34; t = 3.19, p = 0.002, d = 0.50$ ). In addition, public self-consistency motives significantly predicted product choice ( $B = 0.36; SE = 0.17, z = 2.08, p = 0.037$ ). The direct effect was not significant when considering the mediating path ( $B = 0.99; SE = 0.74, p = 0.18$ ). As anticipated, the indirect effect was significant at high levels of threat ( $B = 1.69, SE = 0.53, 95\%CIs [0.003, 0.507], p = 0.002$ , but not at low levels of threat ( $B = -0.21, SE = 0.17, 95\%CIs [-0.672, 0.001]$ ; please see Web Appendix E for a table displaying the moderated mediation analysis). Similar analyses revealed that the interaction did not predict perceived credibility ( $B = -0.07; t = 0.18, p = 0.86; 95\%CIs [-0.176, 0.861], d = 0.03$ , state levels of need to belong ( $B = 0.11; t = 0.30, p = 0.77; 95\%CIs [-0.658, 0.842], d = 0.05$ , state ingroup identification ( $B = -0.22; t = 0.46, p = 0.649; 95\%CIs [-1.192, 0.772], d = 0.07$ , or state loyalty ( $B = -0.66; t = 1.14, p = 0.25; 95\%CIs [-1.760, 0.471], d = 0.18$ ). These results are consistent with our reasoning that these variables do not appear to act as mediating mechanisms.

**7.3. Discussion**

Study 2 demonstrated, using an externally valid manipulation of threat, that among individuals who received a social identity threat, those in a context that activated high public self-awareness were more likely to select identity-reinforcing products versus those in a context that activated low public self-awareness. As anticipated, the indirect effect of public self-awareness was significant at high levels of threat, but did not reach significance for low levels of threat. In addition, our results demonstrate that while public self-consistency motives mediate the effects, other constructs such as state need to belong, state ingroup identification, and perceived credibility do not readily account for the observed effects.

**8. Study 3: Individual differences in public self-consistency strivings**

In Study 3, we use a moderation approach to provide additional support for our conceptualization that the effects are driven by a desire to convey a consistent public self-image to others. We measured trait individual differences in the desire to convey a consistent self-image to others (Cialdini, Trost, & Newsom, 1995) and predicted that these would interact with public self-awareness under conditions of social identity threat. We anticipated that our effects would be strongest for those dispositionally high in the desire to convey a consistent self-image to others (i.e., when public self-awareness was high). We anticipated that the effect would be mitigated among those who are low in the trait tendency to be concerned with public self-consistency.

**8.1. Method**

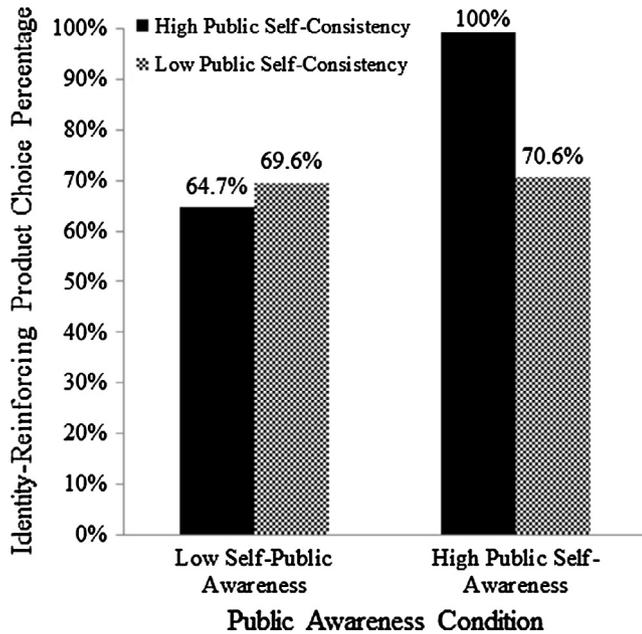
**8.1.1. Participants and design**

Eighty-one undergraduates took part in this study in exchange for course credit ( $-\beta$  err prob = 0.76). This study used a one factor design (Public Self-Awareness: low vs. high) and examined continuous trait desire for public self-consistency as a moderator. Two participants were

**Table 4**  
Variables in the equation for Study 3.

	B	Standard Error	Wald	p-value
<i>Study 3: All Variables in the Equation for the Final Step of Regression Analysis</i>				
Gender	0.57	0.96	0.34	0.557
Age	0.06	0.08	0.62	0.432
Ethnic background	0.16	0.44	0.14	0.709
PSA	1.22	0.70	3.10	0.083
PSC	0.42	0.37	1.31	0.253
PSA * PSC	-1.36	0.63	4.67	0.031
Constant	-1.46	2.10	0.49	0.486

Note: The above results reflect binary logistic regression results in Study 3 with all variables in the analysis. Public Self-Awareness (PSA) is coded as 0 = low and 1 = high. PSC = Public Self-Consistency, which was centered for analysis.



**Fig. 4.** Study 3: Identity-reinforcing product choice (university-branded padfolio) as a function of self-consistency and public self-awareness. In order to depict the proportions of individuals choosing different options, we used a median split on the public self-consistency measure (see White & Argo, 2009).

removed from the data set because one failed to follow instructions regarding the dependent variable in this study and the other correctly guessed the hypothesis. The final sample ( $N = 79$ ) had an average age of 21.65 years and was 34% female.

### 8.1.2. Procedure

Participants completed the study in small groups. Identity threat was held constant as present across all conditions and was conveyed using the same procedure utilized in Study 1a. Participants received the public self-awareness manipulation as in Study 1a. Participants were told that they would be entering a draw for a prize. The focal product in this study was a padfolio that either had the university name and logo prominently displayed (identity-reinforcing product) or had no logo (neutral product). Participants' selections of the products could be viewed by others in the room. If the individual chose the identity-reinforcing option this was coded as 1, and if the individual chose the neutral option this was coded as 0. Participants then completed a number of filler items. Embedded in these items was an individual difference measure assessing the desire to convey a consistent self-image to others (Cialdini et al., 1995). This section of the questionnaire was entitled "*Personality Measures*" and participants were instructed: "Please respond to the following items based on *how you usually feel*." Thus, while public self-consistency was measured as a state construct in

Study 2, it is measured as a trait construct in this study. The items included were: "I want to be described by others as a stable, predictable person," "I make an effort to appear consistent to others," "The appearance of consistency is an important part of the image I present to the world," "I don't like to appear as if I am inconsistent," "Even if my attitudes and actions seemed consistent with one another, it would bother me if they did not seem consistent in the eyes of others," "It is important to me that others view me as a stable person," "It is important to me that those who know me can predict what I will do" ( $\alpha = 0.85$ ). Participants then completed manipulation checks and demographic items. A draw was conducted after data collection and winners collected their prizes.<sup>7</sup>

## 8.2. Results

### 8.2.1. Product choice

To test our prediction that trait public self-consistency moderated our effects, we used binary logistic regression. In Step 1 we entered demographics, and in Step 2 we entered the main effects for public self-awareness and public self-consistency motives. This analysis revealed only a marginal main effect for public self-awareness ( $B = 1.09$ , 95% CIs  $[-0.053, 3.618]$ , Wald = 2.88,  $p = 0.090$ ). In Step 3, we entered the interaction into the equation, and this demonstrated that the interaction between public self-awareness and public self-consistency motives was significant ( $B = -1.36$ , 95% CIs  $[-4.614, 3.618]$ , Wald = 4.67,  $p = 0.031$ ; see Table 4 and Fig. 4). In addition, we conducted a moderation analysis using Preacher, Rucker, and Hayes' (2007; Hayes, 2012) bootstrapping methodology in PROCESS for SPSS (Model 1, 10,000 bootstrapped samples). The direct effect was non-significant at low levels ( $-1$  SD) of trait public self-consistency,  $B = 0.11$ ,  $SE = 0.77$ , 95% CIs  $[-1.401, 0.621]$ . The direct effect became significant at mean levels of trait public self-consistency ( $B = 1.34$ ,  $SE = 0.65$ , 95% CIs  $[0.062, 2.623]$ ) and was strongest at high levels of trait public self-consistency ( $B = 2.57$ ,  $SE = 1.00$ , 95% CIs  $[0.609, 4.540]$ ). These results are depicted in Fig. 4 as proportions of individuals choosing the identity-reinforcing option.

## 8.3. Discussion

Our framework proposes that it is the desire to convey a consistent image of the self to others that leads to the desire to select identity-reinforcing options in response to a threat that occurs under conditions of high (as opposed to low) public self-awareness. Study 3 provides additional evidence for this process. In particular, we find that individuals who are high in the trait desire to convey a consistent self-image to others show a greater tendency to select the identity-reinforcing option when social identity is threatened under conditions of high (vs. low) public self-awareness. In contrast, individuals who are lower in the trait desire for self-consistency do not differ in their selections of identity-related products when social identity is threatened, regardless of the level of public self-awareness activated by the context.

## 9. Study 4: The moderating role of observability

In Study 4, we extend the results of the previous studies by providing further evidence for the notion that individuals under conditions of high versus low public self-awareness are selecting identity-reinforcing options as a means of conveying a consistent self-image to others. In particular, given that our proposed process involves concerns for being seen to be consistent with one's own identity in the eyes of others, our effects should emerge only when others can view the individual's

<sup>7</sup> A manipulation check was included for public self-awareness. ANOVA revealed that the public self-awareness manipulation predicted the public self-awareness check ( $F(1, 75) = 2.21$ ,  $p = 0.030$ ;  $M_{high} = 5.21$ ,  $SD = 1.21$  and  $M_{low} = 4.47$ ,  $SD = 1.66$ ).

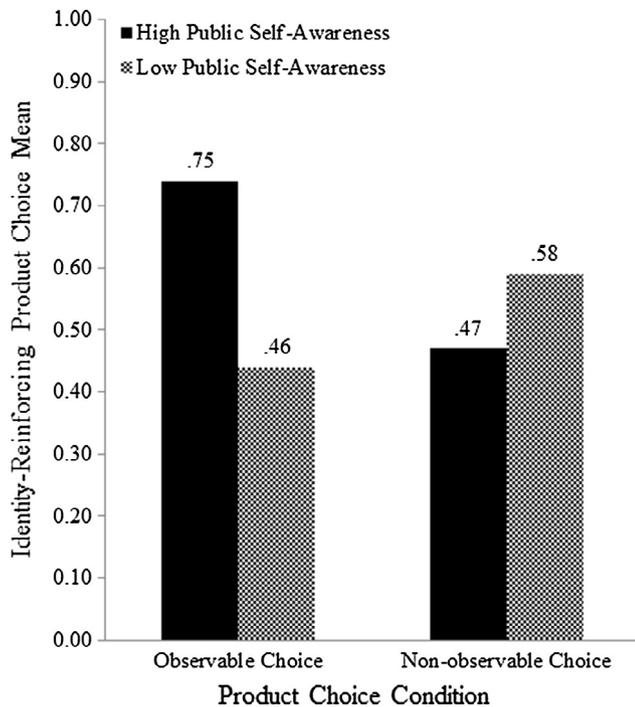


Fig. 5. Study 4: Identity-reinforcing product choice as a function of public self-awareness and the observable nature of the choice.

product choice and not when the product choice is unobserved. Previous research has shown that when behaviors are observable, individuals are particularly motivated to convey consistent self-views to others (Schlenker, 1975; Tedeschi et al., 1971). Drawing on this reasoning, we predict that under conditions of identity threat and high public self-awareness, individuals will select identity-reinforcing products when others can observe the product selections, but that this effect will be mitigated when product selections are not observed by others. Thus, in this study we manipulated whether others can observe the final product selection. We note that in the previous studies, other individuals in the context could view participants' selection of products.

## 9.1. Method

### 9.1.1. Participants and design

Seventy-two undergraduates took part in a 2 (Public Self-Awareness: low vs. high)  $\times$  2 (Product Choice: observable vs. unobservable) between-subjects experimental design in exchange for course credit ( $-\beta$  err prob = 0.71). Identity threat was held constant as present. One participant was removed from the analyses because of a failed manipulation check (indicating that the university performed positively in the threat condition). The final sample ( $N = 71$ ) had a mean age of 21.42 years and was composed of 37% females.

### 9.1.2. Procedure

Participants were informed that they would be taking part in a study examining the relationship between their personality and verbal comprehension. At the beginning of this study, all participants were exposed to the threat, and public self-awareness was manipulated as discussed in Study 1a. After exposure to the article, participants were advised that they would take a short break and have an opportunity to enter a draw to win products ostensibly left over from a previous study. Participants were told that, as thanks for participating, they could enter three draws with the possibility of winning one of the products in each draw: (1) a padfolio with a university logo or a padfolio without any logo, as described in Study 2, (2) a red USB drive or an orange USB drive, and (3) a pen and pencil set with a university logo or a pen and

pencil set without any logo. In fact, the padfolio choice and pen and pencil set choice served as our dependent variable measure (i.e., identity-reinforcing product vs. neutral product), and the USB drive choice served as a distractor choice item. All paired product options were matched on price and were pretested as being similar in likeability (padfolio choice differences [ $p = 0.473$ ] and pen and pencil choice differences [ $p = 0.711$ ]). Participants in the non-observable choice condition entered their choice of which products they would select if they won each draw by indicating their choices on their draw entry ticket and privately placing the ticket in a single draw box at the back of the room. Participants in the observable-choice condition placed their draw ticket into a draw box corresponding to their draw entry choice in a manner that was highly visible to others (i.e., the boxes were clearly marked as to which choice they represented and were displayed at the front of the room where they could clearly be viewed). Draw choices that were identity-reinforcing (i.e., logo on the padfolio and pen/pencil set) were coded as 1, and neutral choices (i.e., no logo on the padfolio and pen/pencil set) were coded as 0. An identity-reinforcing option preference score was calculated by computing the proportion of the participant's selections that were identity-reinforcing. After completing the draw entry, participants were instructed to return to their seat and complete the rest of the survey, which included filler measures, our control variables, and manipulation-check questions. After all study sessions were completed, a draw was held and the winning participants collected their prize.<sup>8</sup>

## 9.2. Results

A 2 (Public Self-Awareness: low vs. high)  $\times$  2 (Product Choice: observable vs. non-observable) ANCOVA (including age, gender, and ethnic background as covariates) on the measure of participants' preferences for identity-reinforcing options revealed a significant interaction ( $F(1, 63) = 4.46, p = 0.039$ ; refer to Fig. 5). Follow-up contrasts revealed that under publicly observable conditions, participants were more likely to select the identity-reinforcing options when public self-awareness was high ( $M = 0.75, SD = 0.39$ ) as compared to low ( $M = 0.46, SD = 0.39$ ; 95% CIs [0.036, 1.01]);  $t(63) = 2.14, p = 0.036, d = 0.53$ ). When selections were non-observable, no significant differences in preferences for identity-reinforcing options arose as a function of public self-awareness ( $M_{\text{high self-awareness}} = 0.47, SD = 0.40, M_{\text{low self-awareness}} = 0.58; SD = 0.46$ ; 95% CIs [-0.035, 0.606]);  $t(63) = 0.52, p = 0.61, d = 0.13$ ). Looking at the contrasts another way, we see that those in the high self-awareness condition were more likely to select identity-reinforcing options when the choice was publicly observable as opposed to not observable ( $t(63) = 2.17, p = 0.037, 95\% \text{CIs} [0.043, 1.018]$ ),  $d = 0.53$ ). Among those in the low self-awareness condition, no differences emerged in the selection of identity-reinforcing options when the choice was publicly observable as opposed to not observable ( $t(63) = 0.0, ns$ ).

## 9.3. Discussion

The results of Study 4 provide evidence for the important role of participants' product selections being observable by others, as it was only under this condition that participants demonstrated preferences for identity-reinforcing options when the threat was communicated under conditions of high (vs. low) self-awareness. When the product choice could not be observed by others, no differences emerged in the selections of options that reinforced the threatened aspect of identity when public self-awareness was high as opposed to low. This provides

<sup>8</sup> In this study we included a manipulation check item for the product choice condition ("What is the likelihood that others noticed your product choices") on a 7 point item scale (1 = definitely did not notice, 7 = definitely noticed). The results revealed that product choice condition predicted the manipulation check item: ( $F(1, 63), p = 0.009$ ;  $M_{\text{observable}} = 3.20, SD = 1.51$  and  $M_{\text{not-observable}} = 2.17, SD = 1.26$ ).

evidence that the effects emerge only when the product choice offers the opportunity (or creates the unavoidable choice) to convey a consistent self-view to others.

One unexpected finding that emerged in this study is that the contrast between the high self-awareness/observable choice condition is not significantly higher than the low self-awareness/non-observable choice condition. It is possible that, under conditions of low self-awareness and low observability, participants chose products in a non-conscious manner that tended to be in-line with their ascribed social group or that people made selections based on their own true underlying preferences because they were not impacted by external, social factors.

## 10. Study 5

Study 5 had three objectives. First, we examine a new type of identity threat—threat to occupational identity—in order to enhance the generalizability of our effects. To do so, our sample was composed of participants who were all the same profession (i.e., accountants), and we held identity threat as constant as being present, wherein all participants received information that cast their profession in a negative light. Second, we wished to examine the potential role of ingroup identification. As noted earlier, one consistent finding in the literature is that those high in ingroup identification often engage in a variety of actions that allow them to increase their association with the ingroup, and such responses are intensified under conditions of threat. For example, in response to threatening circumstances, those high (vs. low) in identification report greater commitment to the group, are more likely to stereotype themselves as a typical group member, and are less motivated to leave the group (Doosje et al., 1995; Ellemers et al., 1997; Spears et al., 1997). Authors of these studies have suggested that this is because low identifiers are more likely to be motivated to defend the individual level of the self by decreasing the connection between the self and a threatened ingroup, whereas those who are high in ingroup identification are more likely to display a group-level response of associating with the ingroup that they refer to as “sticking together.” In the current study, we hold threat as constant and anticipate a main effect of ingroup identification, wherein those high in identification will show a tendency to select identity-reinforcing products.

In addition, we examine whether the influence of identification is moderated by both public self-awareness and the group membership of the audience. In our previous studies, high public self-awareness was manipulated by the public nature of the context. Arguably, the other people who were present in the high public self-awareness condition were ingroup members (in relation to the participant). Given this, we test for the possibility that group membership of the audience is a boundary condition for our effect by manipulating whether the audience consists of ingroup or outgroup members. We anticipate that under conditions of high public self-awareness and an ingroup audience, those who are higher in ingroup identification will be more likely to select identity-reinforcing options than their low-identification counterparts in response to identity threat. This is because those high in ingroup identification often embrace and reinforce their group association under threat (Doosje et al., 1995; Spears et al., 1997), particularly under conditions where they are publically accountable to the ingroup (Reicher et al., 1995). In sum, under conditions of identity threat, we predict a three-way interaction between public self-awareness, audience, and ingroup identification.

### 10.1. Method

#### 10.1.1. Participants and design

The study held threat constant and used a 2 (Public Self-Awareness: low vs. high)  $\times$  2 (Audience: ingroup vs. outgroup) between-subjects

experimental design, with a continuous trait measure of ingroup identification as a moderator. Two hundred eighty-seven accountants recruited through an online software company (Qualtrics) participated in exchange for \$7. A power analysis revealed that this sample size was sufficient ( $-\beta$  err prob = 0.81). The sample was 62.7% female and the average age was 36.94 years.

#### 10.1.2. Procedure

Participants were told that they were taking part in a study on their perceptions of the labor market, conference attitudes, and personality. They were then asked to complete some items to support the cover story and a trait measure of ingroup identification. They were asked: “Please respond to the following items based on **how you usually feel**”: “Being an accountant has a great deal to do with how I feel about myself,” “Being an accountant is an important part of my self-image,” “Being an accountant is important to my sense of the kind of person I am,” “I strongly identify with being an accountant”;  $\alpha = 0.93$ ; adapted from Luhtanen & Crocker, 1992). Participants then were asked to imagine that they have chosen to attend a conference as part of their personal career development—the annual Deloitte Industry Outlook Conference (a real company was used to enhance believability), described as providing industry perspectives on the key trends, challenges, and opportunities for industries. In fact, the labour market items served as distractor items and the conference information was used to convey the identity threat. Specifically, all participants were told that accountants are worse than people in other job roles at operations management (i.e., managing equipment, logistics, information, and technology) and people management (i.e., relating to others and handling interpersonal relationships). They also learned that accountants have the lowest job prospects for the current year.

Our public self-awareness manipulation was achieved by telling those participants in the high condition that an executive from Deloitte presented this information in their first session in front of a group, while participants in the low condition were told that they read this information from a pamphlet on their way to their first session. Participants in the low public self-awareness condition were told that the exhibition space was deserted and that there was a series of information kiosks and several pamphlets about industry trends to choose from. To achieve the audience manipulation, participants in the ingroup (outgroup) audience condition were told that they were assigned to spend their day with a group of other accountants (a group of people from several different occupations such as marketing, health care, administration, and sales) and that the presentation was in front of the group of accountants (group from a variety of different occupations). See Web Appendix D for the specific wording of the conditions. Participants then read that they had been selected as a winner in a draw at the conference and were asked to choose between pairs of products that either did or did not represent the accountant identity: a neutral mug or a mug that reflected the accounting identity (it said “I am an accountant, what’s your superpower?”), and a neutral mouse pad or a mouse pad that reflected the accountant identity (it said, “eat, sleep, accounting”). As our dependent measure we computed a measure of the total number of items people chose that reflected their ingroup identity.<sup>9</sup>

<sup>9</sup> We included manipulation checks for both public self-awareness and audience type. The results revealed only a significant main effect of public self-awareness on the self-awareness check ( $F(1, 283) = 22.12, p < 0.0001; M_{low} = 2.81, SD = 1.14$  and  $M_{high} = 3.47, SD = 1.22$ ). In addition, people were more likely to report that they were in the presence of “other accountants” in the ingroup versus the outgroup condition ( $F(1, 283) = 11.12, p = 0.001; M_{ingroup} = 3.37, SD = 1.21$  and  $M_{outgroup} = 2.90, SD = 1.19$ ) and that they were in the presence of “people from several different occupations” in the outgroup versus the ingroup condition ( $F(1, 283) = 22.13, p < 0.0001; M_{ingroup} = 2.84, SD = 1.26$  and  $M_{outgroup} = 3.53, SD = 1.24$ ).

**Table 5**  
Variables in the equation for Study 5.

	B	Standard Error	t-value	p-value
<i>Study 5: All Variables in the Equation for the Final Step of Regression Analysis</i>				
Constant	1.06	0.24	4.50	0.000
Age	0.01	0.01	2.02	0.045
Gender	-0.01	0.08	-0.08	0.938
Ethnic Background	-0.02	0.02	-0.85	0.396
Education	0.01	0.03	0.34	0.731
Months in profession	-0.01	0.01	-0.92	0.357
PSA	-0.03	0.09	-0.34	0.734
Audience	-0.03	0.10	-0.28	0.781
Identification	0.13	0.05	2.72	0.007
PSA * Audience	-0.08	0.14	-0.53	0.595
PSA * Identification	-0.08	0.06	-1.37	0.173
Identification * Audience	-0.13	0.07	-1.90	0.059
PSA * Audience * Identification	0.24	0.09	2.59	0.010

Note: The above results reflect linear logistic regression results in study 5 with all variables in the analysis. Public Self-Awareness (PSA) is coded as 0 = low and 1 = high. Audience is coded as 0 = outgroup and 1 = ingroup. The ingroup identification measure was centered for analysis.

10.2. Results

10.2.1. Identity-reinforcing selections

Using linear regression analyses, we entered variables into the equation in four steps. In Step 1, we entered all the demographic control variables that were collected in this study (gender, age, ethnic background, level of education, and number of months in the profession). This revealed that only age was a significant predictor of choice ( $B = 0.02$ , 95%CIs [0.002, 0.027],  $t = 2.13$ ,  $p = 0.034$ ,  $d = 0.25$ ). In Step 2 we entered the main effects for public self-awareness, audience, and the mean-centered identification measure. This revealed that, as anticipated, a main effect emerged for ingroup identification ( $B = 0.08$ , 95%CIs [0.035, 0.0120],  $t(279) = 3.44$ ,  $p = 0.001$ ,  $d = 0.41$ ). In Step 3 we entered all two-way interactions, and in Step 4 we entered the three-way interaction (see Table 5). Importantly, the predicted three-way interaction emerged ( $B = 0.24$ , 95%CIs [0.074, 0.403],  $t(275) = 2.59$ ,  $p = 0.010$ ,  $d = 0.31$ ; see Fig. 6).

To examine our effects in more detail, we conducted a moderation analysis using Preacher, Rucker, and Hayes' (2007; Hayes, 2012) bootstrapping methodology in PROCESS for SPSS (Model 1, 10,000 bootstrapped samples). As predicted, when selecting for those in the ingroup-audience condition, the interaction between public self-awareness and ingroup identification was significant ( $B = 0.15$ , 95%CIs [0.008, 0.300];  $t = 2.12$ ,  $p = 0.036$ ,  $d = 0.35$ ; refer to Fig. 6). Simple slopes analysis shows that when public self-awareness was high, the simple slope for ingroup identification was significant ( $B = 0.15$ ,  $SE = 0.05$ ,  $t = 2.96$ ,  $p = 0.004$ ). When public self-awareness was low, the simple slope was not significant ( $B = -0.0009$ ,  $SE = 0.05$ ,  $t = 0.02$ ,  $p = 0.99$ ). The effect of public self-awareness was significant at low levels (-1 SD) of trait ingroup identification ( $B = -0.30$ ,  $SE = 0.15$ ,  $t = 2.05$ ,  $p = 0.042$ ), indicating an avoidance effect for those low in identification and in the high self-awareness condition. The effect of public self-awareness became insignificant at mean levels of trait ingroup identification ( $B = -0.08$ ,  $SE = 0.10$ ,  $t = 0.80$ ,  $p = 0.425$ ) and high levels (+1 SD) of trait ingroup identification ( $B = 0.12$ ,  $SE = 0.15$ ,  $t = 0.92$ ,  $p = 0.357$ ). When selecting for those in the outgroup-audience condition, the two-way interaction between public self-awareness and ingroup identification was not significant ( $B = -0.07$ , 95%CIs [-1.711, 0.034];  $t = 1.18$ ,  $p = 0.240$ ).

10.3. Discussion

The results of Study 5 revealed the predicted main effect for ingroup identification under conditions where threat was held constant

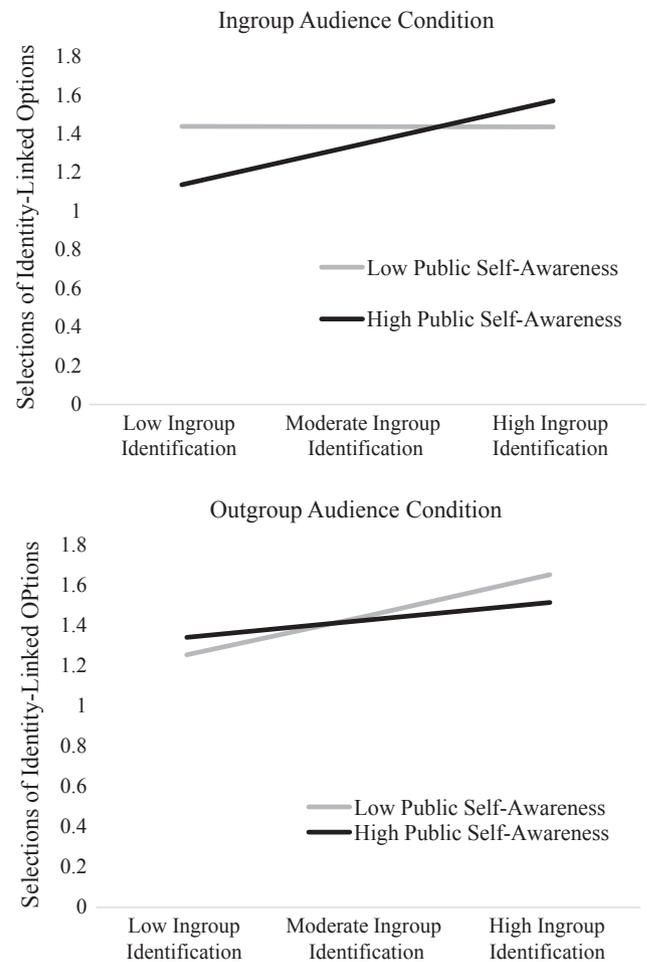


Fig. 6. Identity-reinforcing product choice as a function of public self-awareness, ingroup identification, and audience type in Study 5.

as being high, conceptually replicating past research demonstrating that those high in ingroup identification engage in behaviors that support the ingroup (e.g., Ellemers et al., 1997; Spears et al., 1997; Wann & Branscombe, 1990). This finding appears to hold both in the presence of an ingroup audience and an outgroup audience. Second, the results revealed a significant three-way interaction between public self-awareness, audience, and ingroup identification. Interestingly, when the audience was an ingroup, there were significant differences in the tendency to select identity-reinforcing options between those low and high in ingroup identification only under conditions of high public self-awareness. When the public self-awareness was low, such differences did not emerge. This finding is congruent with other work concluding that people are more sensitive to social identity threats under conditions where they might be made accountable for their choices (Reicher et al., 1995). Interestingly, it is also the case that those low in ingroup identification appear to avoid the product more when public self-awareness is high as opposed to low, particularly in the presence of an ingroup audience. This is in line with the finding that while people who are low in ingroup identification will often avoid association with an identity when threatened, high identifiers maintain their affiliation with the identity when it is threatened (Spears et al., 1997; White & Argo, 2009). Importantly, we extend this work to confirm that this avoidance effect is most pronounced when the audience is an ingroup and public self-awareness is high (as opposed to low). In the outgroup condition, the interaction between public self-awareness and ingroup identification did not reach significance.

## 11. General discussion

The current research draws upon classical social identity theory and integrates this with work on self-consistency strivings to predict a novel condition under which social identity threats could encourage people to select products that reinforce a threatened identity. Specifically, we theorized that, under conditions of identity threat, individuals would be more likely to select an identity-reinforcing option when public self-awareness is high as opposed to low. We propose that this is driven by a desire to convey a consistent image of the self to others.

In Studies 1a and 1b, we demonstrate the basic effect whereby, when under threat, individuals are more likely to choose an identity-reinforcing option over an alternative option when public self-awareness is high as opposed to low. The subsequent studies provide converging evidence that the observed effects are driven, at least in part, by a desire to convey a consistent view of the self to others. In particular, we show that while threats conveyed under conditions of high public self-awareness activate a desire to present a consistent image of the self to others (Study 2), threats conveyed under low public self-awareness do not activate this tendency. Moreover, we find that the effects only emerge among those who are high in individual differences, reflecting the general desire to convey a consistent view of the self to others (Study 3), when the identity selections can be observed by others (Study 4). Finally, we find that ingroup identification and the audience both moderate the effects, wherein when the audience was an ingroup and public self-awareness is high, we observe those high in ingroup identification being more likely to select identity-reinforcing options and those low in ingroup identification to be less likely to do so (Study 5).

### 11.1. Theoretical contributions

The current research extends prior work examining social identity threat that largely finds evidence of individuals *avoiding* symbolic markers of a particular social identity when it is viewed negatively or threatened in some way (Cialdini et al., 1976; Snyder, Lassegard, & Ford, 1986; White & Argo, 2009; White et al., 2012). We expand upon this paradigm by demonstrating that situational factors—such as whether the context activates a high or low public self-awareness—alter people's reactions to a social identity threat. When a social identity threat is received under conditions of high public self-awareness, individuals demonstrate more positive preferences for identity-reinforcing options as compared to when the threat is incurred under conditions of low public self-awareness. One potential limitation of the current research is that some of our studies have smaller sample sizes. Unfortunately, this was due to limitations in data-collection resources. Thus, there should be some caution in interpreting the reliability of some results. That being said, there is also strength in taking the results across all of the studies as a whole. We computed the effect size for our identity-reinforcing consumption results (i.e., comparing across the low versus high public self-awareness conditions) across our six studies ( $r = 0.40, 0.31, 0.39, 0.23, 0.25, \text{ and } 0.20$  from studies 1 a/1 b–5, respectively) in order to compute a meta-analytic effect size (Howard, Maxwell, & Fleming, 2000). The overall size of the effect of public self-awareness is in the medium range ( $r = 0.29; d = 0.59$ ).

Our theorizing suggests that, under conditions of social identity threat, high public self-awareness activates the desire to convey a consistent image of the self to others. In making this prediction, we integrate findings in the social identity literature that focus on the nuances of individual reactions to identity threat (e.g., Branscombe, Ellemers et al., 1999; Branscombe, Schmitt et al., 1999; Ellemers et al., 2002) with other work that explores how consistency motivations can be important determinants of behavior (e.g., Cialdini et al., 1995; Festinger, 1957; Newby-Clark, McGregor, & Zanna, 2002). We make the novel prediction that public self-consistency motives are highest under conditions of both identity threat and high public self-awareness, and

demonstrate the behavioral consequences. Our results directly build on findings in the social identity literature that have thus far been largely limited to demonstrating identity-reinforcing responses to social identity threat among those high (but not low) in ingroup identification. Such responses include displaying greater ingroup favoritism and outgroup derogation (Luhtanen & Crocker, 1992), categorizing the self as a prototypical group member (Spears et al., 1997), and increasing commitment to the group (Spears et al., 1997). The current findings spotlight a different moderator that increases identity-reinforcing responses—public self-awareness—in the domain of selecting options that symbolically allow the individual to reflect and communicate an ingroup identity to others. In our Study 5, ingroup identification heightened the tendency to choose identity-linked options in front of an ingroup (vs. and outgroup) under conditions of heightened public self-awareness.

This work also builds upon research borne out of self-verification theory (Bosson & Swann, 1999; Swann et al., 1992), according to which people strive to be known and understood by others as they see themselves. Self-verification theory posits that individuals are particularly motivated to convey an image of the self to others in a way that is consistent with their own self-views (Swann & Hill, 1982; Swann & Read, 1981a, 1981b; Swann et al., 1989, 1992). Arguably, in our studies, participants are driven by a desire to choose identity-reinforcing options in ways that allow them to convey a consistent self-image to others, which is a type of self-verification response. We note, however, that while traditionally research has pitted self-verification motives directly against other motives such as self-enhancement (e.g., Swann et al., 1989, 1992), our research simply aims to highlight that the nature of the specific image of the self that people strive to convey to others under conditions of social identity threat and high public self-awareness is one that is most strongly linked to consistency. In our case, we suggest that the selection of identity-reinforcing options under conditions of high public self-awareness and threat is driven by the desire to convey a consistent image to others.

There are a few potential alternative explanations for the effects that are worth noting. First, given that participants in our studies selected options in front of other people, it is possible that we are capturing a conformity effect. While this is a reasonable prediction and we cannot completely rule it out, the results of Study 5, where people could not view the selections of others, cast doubt on this possibility. Future research might profitably examine the conditions under which identity reinforcement occurs to follow the behaviors of others. Another alternative explanation is that people are simply showing that they are loyal to the ingroup under conditions of identity threat and high public self-awareness. We do not necessarily see this as incongruent with our conceptualization, and we do believe that responses to identity threat are likely multiply determined. It may be the case that, under identity threat, showing loyalty to the ingroup and showing others that one is being consistent result in similar actions. That being said, our effects are mediated by public self-consistency motives, but not by loyalty in Study 2. In addition, the effects are moderated by individual differences in the desire to convey a positive self-image to others in Study 3. Taken together, the results converge on the conclusion that the effects appear to be driven, at least in part, by public self-consistency strivings.

### 11.2. Managerial implications and future research

From a practical standpoint, the current research suggests that a social identity threat might impact people's preferences in everyday and organizational contexts. In professional organizational contexts, responses that reinforce the relationship between employee and the organizational identity have been shown to be associated with a range of benefits (Ashforth, Harrison, & Corley, 2008; Riketta, 2005) such as in-organization cooperation (e.g., Dukerich, Golden, & Shortell, 2002), and decreased turnover and turnover intent (e.g., Mael & Ashforth, 1995). However, the prevalence of benchmarking productivity and

revenue data between firms and professions to improve corporate strategies and compete in a hyper-competitive market (e.g., Drew, 1997) carry the potential for conveying negative intergroup comparisons that threaten the organizational or professional identity. Given that we found people more likely to associate with symbolic representations of their identity when this identity was negatively imbued, but public self-awareness was activated, it is possible that organizations have the opportunity to positively influence employees' positive reactions to the organization or profession when negative information is somehow conveyed in a public forum. Under these conditions, a response consistent with solidarity rather than distancing should be observed and may help lead to positive impacts on productivity and performance (Ashforth et al., 2008). Thus, the results of the current work suggest that any threatening information regarding organizational or social identity is best conveyed in a manner that heightens public self-awareness, and that it might be important to give people a means with which to respond to the threat that is observable in nature. Moreover, our results suggest that negative information might lead to the most positive responses when it is conveyed in front of other group members (e.g., other employees or others in the same occupational group) and to those who are high in ingroup identification. Any threatening or negative information, then, could be communicated under conditions that are most likely to lead to a supportive rather than a distancing response. In particular, the combination of high public self-awareness and the presence of ingroup members can encourage people, particularly those high in ingroup identification, to have a more positive reaction to social identity threat.

The present research opens the door to further research on the contextual effects that alter the impact of a social identity threat on preferences for symbolic markers of identity. One avenue for future research may be to investigate whether the source of the social identity threat impacts the degree to which individuals select identity-reinforcing options. It may be that those exposed to a threat from a dissociative reference group (i.e., a group to which they are motivated to *not be* associated with) show even greater ingroup preferences in response to the threat, as compared to a neutral source. Participants may also respond differently to a threat from a prototypical group member compared to a less prototypical, deviant group member, or prototypical outgroup member. For instance, because prototypical group members are seen to confer and embody group norms (see Marques, Abrams, Paez, & Martinez-Taboada, 1998), individuals may avoid selecting identity-linked products in response to a social identity threat that stems from an ingroup member.

One other potential direction for future research might be to examine whether all threats are created equal in terms of their downstream consequences. For example, research might wish to systematically vary the intensity of the threat or even whether the threat is perceived to be something that is mutable or transient in nature. If the threat is very intense and is unlikely to be mutable in nature, then conditions of high public self-awareness might lead to a desire to dissociate or distance the self from the threatened identity. It is also possible that identity-reinforcing reactions to social identity threat are curvilinear in nature, such that while low intensity threat does not lead to reinforcing responses, as this intensity increases, so too does the tendency to reinforce association with the threatened identity. When the threat is very intense, individuals might no longer exhibit identity-reinforcing responses.

In addition to examining the role of the intensity of threat, future research might also examine reactions to qualitatively different types of identity threat. Further, we note that the current work examines threats to what other researchers have referred to as the status of the ingroup (Scheepers & Ellemers, 2005; Spears et al., 1997). Threats that impact our views of group status might arguably have different consequences to the group than other, qualitatively different types of threats. For example, Spears et al. (1997) find evidence that not only can individuals be threatened by comments and actions aimed at status, they

can also have defensive reactions to threats to the group's perceived uniqueness. Branscombe, Ellemers et al., 1999; Branscombe, Schmitt et al., 1999 suggest that there are four distinct types of identity threat that can emerge: categorization threat, distinctiveness threat, a threat to the value of social identity, and acceptance threat. Research might continue to explore the consequences of these qualitatively different types of social identity threats. Taken together, the current work shows that whether one is low or high in public self-awareness can determine the degree to which social identity threat leads the individual to select options that allow him or her to reinforce and display that identity to others. We hope this research spurs future work examining the nuances of reactions to social identity threat.

## Acknowledgement

The authors are thankful for funding from the Social Sciences and Humanities Research Council (SSHRC). We thank Jonah Berger for helpful comments on a previous version of this manuscript.

## Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.obhdp.2017.09.007>.

## References

- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, 90(1), 195–208.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management*, 34(3), 325–374.
- Barreto, M., & Ellemers, N. (2000). You can't always do what you want: Social identity and self-presentational determinants of the choice to work for a low-status group. *Personality and Social Psychology Bulletin*, 26, 891–906.
- Belk, R. (1988). *Possessions and Self*. United States: John Wiley & Sons Ltd.
- Berger, J., & Heath, C. (2008). Who drives divergence? Identity signaling, outgroup dissimilarity, and the abandonment of cultural tastes. *Journal of Personality and Social Psychology*, 95(3), 593–607.
- Blanz, M., Mummendey, A., Mielke, R., & Klink, A. (1998). Responding to negative social identity: A taxonomy of identity management strategies. *European Journal of Social Psychology*, 28(5), 697–729.
- Bosson, J. K., & Swann, W. B. (1999). Self-liking, self-competence, and the quest for self-verification. *Personality and Social Psychology Bulletin*, 25(10), 1230–1241.
- Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threat. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social Identity: Context, Commitment, Content* (pp. 35–58). Oxford, England: Blackwell.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, 77, 135–149.
- Branscombe, N. R., & Wann, D. L. (1994). Collective self-esteem consequences of outgroup derogation when a valued social identity is on trial. *European Journal of Social Psychology*, 24, 641–657.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475–482.
- Buss, A. H. (1980). *Self-consciousness and social anxiety*. San Francisco: Freeman.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: a control-theory approach to human behavior*. New York: Springer-Verlag.
- Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology*, 34(3), 366–375.
- Cialdini, R. B., Trost, M. R., & Newsom, J. T. (1995). Preference for consistency: The development of a valid measure and the discovery of surprising behavioral implications. *Journal of Personality and Social Psychology*, 69(2), 318–328.
- Crisp, R. J., & Turner, R. N. (2007). *Essential social psychology*. London: Sage Publications.
- Deaux, K. (1996). *Social identification*. New York: Guilford.
- Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology*, 31, 410–436.
- Drew, S. A. W. (1997). From knowledge to action: The impact of benchmarking on organizational performance. *Long Range Planning*, 30, 427–441.
- Dukerich, J. M., Golden, B. R., & Shortell, S. M. (2002). Beauty is in the eye of the beholder: The impact of organizational identification, identity, and image on the cooperative behaviors of physicians. *Administrative Science Quarterly*, 47(3), 507–533.
- Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: Ingroup identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology*, 72(3), 617–626.
- Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology*, 53(1), 161–186.

- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers*, 28, 1–11.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Hayes, A. F. (2012). Mediated Moderation Macro, (accessed August 8, 2012), [available at < <http://www.afhayes.com/spss-sas-and-mplus-macros-and-code.html> > ].
- Howard, G. S., Maxwell, S. E., & Fleming, K. J. (2000). The proof of the pudding: An illustration of the relative strengths of null hypothesis, meta-analysis, and Bayesian analysis. *Psychological Methods*, 5(3), 315–332.
- Jackson, L. A., Sullivan, L. A., Harnish, R., & Hodge, C. N. (1996). Achieving positive social identity: Social mobility, social creativity, and permeability of group boundaries. *Journal of Personality and Social Psychology*, 70(2), 241–254.
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. *Journal of Personality Assessment*, 95(6), 610–624.
- LeBoeuf, R. A., Shafir, E., & Bayuk, J. B. (2010). The conflicting choices of alternating selves. *Organizational Behavior and Human Decision Processes*, 111(1), 48–61.
- Lewis, A. C., & Sherman, S. J. (2003). Hiring you makes me look bad: Social-identity based reversals of the ingroup favoritism effect. *Organizational Behavior and Human Decision Processes*, 90(2), 262–276.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18(3), 302–318.
- Mael, F. A., & Ashforth, B. E. (1995). Loyal from day one: Biodata, organizational identification, and turnover among newcomers. *Personnel Psychology*, 48(2), 309–333.
- Marques, J., Abrams, D., Paez, D., & Martinez-Taboada, C. (1998). The role of categorization and ingroup norms in judgments of groups and their members. *Journal of Personality and Social Psychology*, 75(4), 976–988.
- Newby-Clark, I. R., McGregor, I., & Zanna, M. P. (2002). Thinking and caring about cognitive inconsistency: When and for whom does attitudinal ambivalence feel uncomfortable? *Journal of Personality and Social Psychology*, 82(2), 157–166.
- Pagliaro, S., Ellemers, N., & Barreto, M. (2011). Sharing moral values: Anticipated ingroup respect as a determinant of adherence to morality-based (but not competence-based) group norms. *Personality and Social Psychology Bulletin*, 37, 1117–1129.
- Pelham, B. W., & Swann, W. B. (1989). From self-conceptions to self-worth: On the sources and structure of global self-esteem. *Journal of Personality and Social Psychology*, 57, 672.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227.
- Reicher, S. D., Spears, R., & Postmes, T. (1995). A social identity model of deindividuation phenomena. *European Review of Social Psychology*, 6, 161–198.
- Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 66(2), 358–384 s.
- Scheepers, D., & Ellemers, N. (2005). When the pressure is up: The assessment of social identity threat in low and high status groups. *Journal of Experimental Social Psychology*, 41(2), 192–200.
- Scheier, M. F., & Carver, C. S. (1980). Private and public self-attention, resistance to change, and dissonance reduction. *Journal of Personality and Social Psychology*, 39(3), 390–405.
- Scheier, M. F., & Carver, C. S. (1985). The self-consciousness scale: A revised version for use with general populations. *Journal of Applied Social Psychology*, 15(8), 687–699.
- Schlenker, B. R. (1975). Self-presentation: Managing the impression of consistency when reality interferes with self-enhancement. *Journal of Personality and Social Psychology*, 32(6), 1030–1037.
- Snyder, C. R., Lassegard, M., & Ford, C. E. (1986). Distancing after group success and failure: Basking in reflected glory and cutting off reflected failure. *Journal of Personality and Social Psychology*, 51(2), 382–388.
- Spears, R., Doosje, B., & Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: The role of group identification. *Personality and Social Psychology Bulletin*, 23(5), 538–553.
- Swann, W. B., & Hill, C. A. (1982). When our identities are mistaken: Reaffirming self-conceptions through social interaction. *Journal of Personality and Social Psychology*, 43(1), 59–66.
- Swann, W. B., Pelham, B., & Krull, D. S. (1989). Agreeable fancy or disagreeable truth? How people reconcile their self-enhancement and self-verification needs. *Journal of Personality and Social Psychology*, 57, 781–791.
- Swann, W. B., & Read, S. J. (1981a). Self-verification processes: How we sustain our self-conceptions. *Journal of Experimental Social Psychology*, 17(4), 351–372.
- Swann, W. B., & Read, S. J. (1981b). Acquiring self-knowledge: The search for feedback that fits. *Journal of Personality and Social Psychology*, 41(6), 1119–1128.
- Swann, W. B., Stein-Seroussi, A., & Giesler, R. B. (1992). Why people self-verify. *Journal of Personality and Social Psychology*, 62(3), 392–401.
- Tajfel, H., & Turner, J. C. (1986). *The social identity theory of intergroup behavior*. Chicago, IL: Nelson-Hall.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In M. A. Hogg, & D. Abrams (Eds.). *Intergroup relations: Essential readings: Key readings in social psychology* (pp. 94–109). New York: Psychology Press.
- Taylor, S. E. (1989). *Positive illusions: Creative self-deception and the healthy mind*. New York: Basic Books.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193–210.
- Tedeschi, J. T., Schlenker, B. R., & Bonoma, T. V. (1971). Cognitive dissonance: Private ratiocination or public spectacle? *American Psychologist*, 26(8), 685–695.
- Turner, J. C. (1985). *Social categorization and the self-concept: A social cognitive theory of group behavior*. Greenwich, CT: JAI Press.
- Van Knippenberg, D., & Sleebos, E. (2006). Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *Journal of Organizational Behavior*, 27(5), 571–584.
- Van Vugt, M., & Hart, C. (2004). Social identity as social glue: The origins of group loyalty. *Journal of Personality and Social Psychology*, 86(4), 585–598.
- Voci, A. (2006). The link between identification and in-group favoritism: Effects of threat to social identity and trust-related emotions. *British Journal of Social Psychology*, 45(2), 265–284.
- White, K., & Argo, J. J. (2009). Social identity threat and consumer preferences. *Journal of Consumer Psychology*, 19(3), 313–325.
- White, K., Argo, J. J., & Sengupta, J. (2012). Dissociative versus associative responses to social identity threat: The role of consumer self-construal. *Journal of Consumer Research*, 39(4), 704–719.
- White, K., & Dahl, D. W. (2006). To be or not to be? The influence of dissociative reference groups on consumer preferences. *Journal of Consumer Psychology*, 16(4), 404–414.
- White, K., & Dahl, D. W. (2007). Are all outgroups created equal? Consumer identity and dissociative influence. *Journal of Consumer Research*, 34(4), 525–536.
- White, K., Simpson, B., & Argo, J. (2014). The motivating role of dissociative outgroups in encouraging positive consumer behaviors. *Journal of Marketing Research*, 51, 433–447.