



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Internalizing objectification

Citation for published version:

Loughnan, S, Baldissarri, C, Spaccantini, F & Elder, L 2017, 'Internalizing objectification: Objectified individuals see themselves as less warm, competent, moral, and human', *British Journal of Social Psychology*, vol. 56, no. 2, pp. 217-232. <https://doi.org/10.1111/bjso.12188>

Digital Object Identifier (DOI):

[10.1111/bjso.12188](https://doi.org/10.1111/bjso.12188)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

British Journal of Social Psychology

Publisher Rights Statement:

"This is the peer reviewed version of the following article: 'Internalizing objectification: Objectified individuals see themselves as less warm, competent, moral, and human', which has been published in final form at [10.1111/bjso.12188](https://doi.org/10.1111/bjso.12188). This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving."

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Internalizing Objectification: Objectified individuals see themselves as less warm, competent, moral, and human.

Steve Loughnan¹, Cristina Baldissarri², Federica Spaccatini³, & Laura Elder¹

¹Department of Psychology, University of Edinburgh, UK

²University of Milano-Bicocca, Italy

³ University of Perugia, Italy

Word count: 4,243

* Correspondence to be addressed to Steve Loughnan, School of Philosophy, Psychology, and Language Studies, University of Edinburgh, Edinburgh, UK, EH8 9JZ. Email: steve.loughnan@ed.ac.uk

Acknowledgments:

The authors wish to thank Nicole Emslie and Paraskevi Peglidou for their help with Study 2. This research was supported by a Philip Leverhulme Prize awarded to the first author.

Abstract

People objectify others by viewing them as less warm, competent, moral, and human (Heflick & Goldenberg, 2009; Vaes, Paladino, & Puvia, 2011). In two studies, we examined whether the objectified share this view of themselves, internalizing their objectification. In Study 1 (N = 114) we examined sexual objectification and in Study 2 (N = 62) we examined workplace objectification. Consistent across both studies we found that objectification resulted in participants seeing themselves as less warm, competent, moral (Study 2 only), and lacking in human nature and human uniqueness. These effects were robust to perceiver gender and familiarity (Study 1), and whether another person or a situation caused the objectification (Study 2). In short, the objectified see themselves the manner they are seen by their objectifiers: as lacking warmth, competence, morality, and humanity.

Word count: 132

Keywords: Objectification, self-perception, sexual objectification, workplace objectification.

Objectification involves seeing a person as object-like, valued primarily for what they can do rather than who they are. Philosophers (Nussbaum, 1999) and psychologists (Fredrickson & Roberts, 1997; Loughnan & Pacilli, 2014; Vaes, Loughnan, & Puvia, 2014) agree that when people objectify others they emphasize their ‘instrumental utility’ – what they can be used for – and reduce their ‘personhood’ – who they are. It is well established that when a person is objectified they are seen as lacking warmth, competence, moral standing, and humanity (e.g., Heflick, Goldenberg, Cooper, & Puvia, 2011; Heflick & Goldenberg, 2009; Loughnan et al., 2010; Loughnan, Pina, Vasquez, & Puvia, 2013; Vaes, Paladino, & Puvia, 2011), and that this can occur in sexual (Heflick & Goldenberg, 2009; Loughnan et al., 2010; 2013) and non-sexual contexts (Andrighetto, Baldissarri, & Volpato, 2016; Vaes & Muratore, 2013). This objectification, however, is in the eye of the beholder – it is what the observer *sees*, not necessarily how the observed *thinks about themselves*. As much as people may experience objectification from another, it is critical to understand the extent to which the recipient internalizes this objectification. That is, does being seen as an object and not a person link to seeing oneself as an object and not a person? Although researchers have theorized about the role that internalisation may play in objectification (Fredrickson & Roberts, 1997; Loughnan & Pacilli, 2014) the extent to which experienced objectification is internalized is currently unclear.

The objectified tend to be seen as lacking in warmth and competence (Heflick et al., 2011), two fundamental dimensions of social perception (Cuddy, Fiske, & Glick, 2007). The objectified are also seen to lack morality in two distinct regards. First, they are viewed as relatively immoral: insincere, untrustworthy, and dishonest (Heflick et al., 2011; Pacilli, Pagliaro, Loughnan, Gramazio, Spaccatini, & Baldry, 2016). Second, they are viewed as relatively amoral: undeserving of moral consideration and protection (Holland & Haslam, 2013; 2016; Loughnan et al., 2010; 2013; Pacilli

et al., 2016). This culminates in dehumanization, with people seeing the objectified as less human and more similar to objects (Andrighetto et al., 2016; Bernard, Gervais, Allen, Campomizzi, & Klein, 2012) or animals (Vaes et al., 2011). In short, the objectified are viewed by others as lacking warmth, competence, morality, and humanity.

Despite this clear evidence that objectifiers have a negative, dehumanizing view of their targets, little empirical work has explored whether being objectified will be internalized as self-dehumanization. Previous work has shown that people can self-dehumanize, for instance when ostracised (Bastian & Haslam, 2010) or engaged in aggression (Bastian, Jetten, & Radke, 2012). Two notable recent papers suggest this might also occur in objectification. First, Chen, Teng, and Zhang (2013) found that having women recall or experience objectification undermined their perceived moral self-worth. Women who received comments purely based on their physical appearance (*vs.* general character) were more likely to report feeling less moral and more sinful. Second, Baldissarri and colleagues (2014) found that experiencing objectification from an employer was positively correlated with worker self-objectification (*i.e.*, workers perceiving themselves as lacking mental states). These findings align with prior research showing that objectified women are viewed as less moral and engaged in diminished mental activity (Loughnan et al., 2013; Heflick et al., 2011; Pacilli et al., 2016). Combined, we can see that the objectified are not only perceived as morally inferior and lacking mind by others but also perceive themselves to be morally inferior and lacking in mind. The present study suggests that these findings potentially capture part of a far broader phenomenon.

Researchers have thoroughly studied self-objectification, the extent to which people adopt a sexualized, third-person's perspective on their body (Fredrickson & Roberts, 1997). People, particularly women, do chronically and situationally adopt this perspective and it has a raft of negative consequence for their wellbeing (for recent reviews see Moradi & Huang, 2008; Calogero

et al., 2011). We suggest that people also internalize the more dehumanizing aspects of objectification – less warmth, competence, morality, and humanity – not only adopting the visual perspective of the viewer but their psychological judgments as well. In sum, we believe that the traditional conceptualization of self-objectification (Fredrickson & Roberts, 1997) can be expanded to include self-dehumanization.

In sum, it has been shown that objectified people are perceived to be less warm, competent, moral, and human (Heflick et al., 2011; Heflick & Goldenberg, 2009; Vaes et al., 2011; Loughnan et al., 2010). The present study extends these findings to examine whether people internalise these perceptions. Do the objectified see *themselves* as lacking in warmth, competence, morality, and humanity?

Study 1

In Study 1 we sought preliminary evidence that objectification is internalized. We focused on gender and sexual objectification, the primary domain of prior objectification research (Loughnan & Pacilli, 2014; Vaes, Loughnan, & Puvia, 2014). To explore the robustness of any internalisation effect we additionally examined whether the gender (male, female) or closeness (stranger, known other) of the objectifier influenced the extent of internalisation. We choose to look at men and women as objectifiers as both groups objectify women (Loughnan, Fernandez, Vaes, Anjum, Aziz, Harada, et al., 2015). The inclusion of strangers versus known others reflects findings that people feel more self-conscious in the presence of strangers than friends (Fuller-Tyszkiewicz, Reynard, Skouteris, & McCabe, 2012), and thus may alter perceptions of the self more in the presence of strangers. We hypothesized that women would report internalising objectification such that they viewed themselves as less warm, competent, moral, and human.

Method

Participants

One-hundred and fourteen women ($M_{\text{age}}=36.96$; $SD_{\text{age}}=10.81$) participated via Amazon MTurk for payment (\$2). We recruited women only, consistent with prior internalized objectification work (Chen et al., 2013). Thirteen participants were excluded for not describing an experience (final $N=101$). This left at least 23 participants per cell, a sample size in line with other objectification studies (e.g., Gervais, Vescio, & Allen, 2011). All the participants were native English speakers. Eighty-five participants self-reported as White Caucasian, nine as African American, five as Asian and two as another ethnicity.

Procedure and Measures

A 2 (self-perception: baseline vs. objectified) x 2 (observer gender: male vs. female) x 2 (observer closeness: known vs. unknown) mixed factorial experimental design was used with self-perception as a within-subjects factor. Participants rated their humanity, warmth, competence, and morality before and after the self-perception manipulation¹.

Baseline self-perception. Participants completed basic demographics and then rated themselves on four scales. All questionnaires were adapted by changing the tense to fit the appropriate condition (baseline v post-manipulation). Participants were instructed to indicate the extent to which they agreed with each statement on a 5-point scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*).

Warmth, Competence, Morality. Scales measuring warmth and competence were adapted from Fiske, Cuddy, Glick, and Xu (2002). Four items addressed warmth (e.g., “I am good natured”; $\alpha=.78$) and five items addressed competence (e.g., “I am independent”; $\alpha=.72$). For morality, two items were adapted from Chen and colleagues (2013): “I am morally pure” and “I am sinful” (reversed scored), $r(99) = .35, p < .001$.

¹ All materials are available from the Open Science Framework (osf.io/un57d). The study also included other measures, which fall beyond the focus of this paper, but are available via the OSF. None of the excluded variables measured the constructs of the hypothesis.

Humanity. Participants' self-perception of humanity was assessed using a 12-item scale adapted from Bastian and Haslam (2010). Six items captured human nature (e.g., "I feel like I have interpersonal warmth"; $\alpha = .77$), and six items captured human uniqueness (e.g. "I feel like I am refined and cultured"; $\alpha = .77$).

Manipulation task. After the baseline self-perception measures, participants recalled an experience in their lives in which they felt objectified by another person. Here, participants were asked to "*describe an experience in which a (male/female) who you (know/don't know) focused only on your body and physical appearance rather than your personality*". They received examples of settings in which objectification may occur ("*this experience could have taken place in a gym, a nightclub or a number of other settings*") and were asked to write a minimum of three sentences describing the experience. This manipulation was constructed for the purpose of this study, drawing on work by Chen et al. (2013).

Follow up measures. Participants were presented with a similar set of self-perception scales as before, however, here items addressed how the participant thought of themselves at the time of the objectifying experience. Items were adapted to measure warmth (e.g., "I was good natured"; $\alpha = .81$), competence (e.g., "I was independent"; $\alpha = .81$), and morality ("I was morally pure"; "I was sinful" (reversed scored), $r(99) = .38, p < .001$). Likewise, human nature (6 items: e.g. "I felt like I had interpersonal warmth"; $\alpha = .81$) and human uniqueness (6 items: e.g. "I felt like I was refined and cultured"; $\alpha = .78$) were rewritten for the objectifying experience.

Results

A 2 (self-perception: baseline vs. objectified) x 2 (observer gender: male vs. female) x 2 (observer closeness : known vs. unknown) mixed model ANOVA was conducted for each of the dependent variables (warmth, competence, morality, human nature, and human uniqueness) with

self-perceptions as the within-subjects variable² (for correlations between all the variables see Table 1, for the exact means and standard errors see Table 2, for mean differences see Figure 1).

Warmth. The ANOVA revealed the predicted main effect of self-perception, $F(1, 97) = 57.23, p < .001, \eta_p^2 = .371$. Women reported similar changes in their perceived warmth regardless of the gender of observer, $F(1, 97) = 1.01, p = .318, \eta_p^2 = .010$ and closeness of observer, $F(1,97) = .39, p = .531, \eta_p^2 < .01$. The higher order three-way interaction (self-perception X gender of observer X closeness of observer) was not significant, $F(1,97) = .33, p = .567, \eta_p^2 < .01$.

Competence. The ANOVA showed the predicted significant main effect of self-perception, $F(1, 97) = 52.32, p < .001, \eta_p^2 = .350$. Additionally, observer closeness qualified this effect, $F(1, 97) = 6.11, p = .015, \eta_p^2 = .059$. Following Field's (2013) recommendations, simple effects analysis were performed, showing the effect of both known observer ($F(1, 97) = 10.69, p = .002, \eta_p^2 = .099$) and unknown observers, but unknown observers elicited a larger change difference in participants' perceived competence compared to known observers, $F(1, 97) = 50.57, p < .001, \eta_p^2 = .343$. There was no interaction with gender, $F(1,97) = .11, p = .739, \eta_p^2 < .01$. The higher order three-way interaction was not significant, $F(1,97) = .43, p = .514, \eta_p^2 < .01$.

Morality. Contrary to our hypothesis, the main effect of self-perception, $F(1,97) = 19.19, p < .001, \eta_p^2 = .165$, showed that participants perceived themselves to be *more* moral when objectified. Moreover, gender qualified this effect, $F(1,97) = 6.78, p = .011, \eta_p^2 = .065$, specifically simple effects analysis revealed that women objectified by females tended to report a larger positive change of perceived self-morality than those objectified by males, $F(1,97) = 25.10, p < .001, \eta_p^2 = .206$. No interaction between objectification and closeness of observer emerged, $F(1,97) = .09, p = .769, \eta_p^2 < .01$, and the higher order three-way interaction was not significant, $F(1,97) = .34, p = .564, \eta_p^2 < .01$.

² All data are available from the Open Science Framework (osf.io/un57d).

Humanity

Human Nature

The ANOVA showed the predicted significant main effect of self-perception, $F(1, 97) = 104.74, p < .001, \eta_p^2 = .519$. This difference was not qualified by gender, $F(1, 97) = 1.06, p = .306, \eta_p^2 = .011$ or observer closeness, $F(1,97) = .31, p = .582, \eta_p^2 < .01$. The higher order three-way interaction was not significant, $F(1,97) = 1.23, p = .270, \eta_p^2 = .013$.

Human Uniqueness

As predicted, the ANOVA revealed a main effect of self-perception, $F(1, 97) = 45.12, p < .001, \eta_p^2 = .317$. The effect was not qualified by gender of observer, $F(1, 97) < .001, p = .995, \eta_p^2 < .01$, nor closeness of observer, $F(1,97) = .60, p = .441, \eta_p^2 < .01$. The higher order three-way interaction was not significant, $F(1,97) = .21, p = .649, \eta_p^2 < .01$.

Discussion

In general, women reported internalizing their experience of objectification; they saw themselves as less warm and competent, and as lacking in human nature and human uniqueness. This reflects the intrapersonal equivalent of prior research which has shown that objectified women are viewed as less warm (Heflick & Goldenberg, 2009; Heflick et al., 2011), competent (Heflick et al., 2011; Loughnan et al., 2010), and human (Bernard et al., 2012; Vaes et al., 2011). Interestingly, the effect for morality was less clear. Unlike Chen and colleagues (2013), our participants reported seeing themselves as *more* moral following objectification. The anomalous findings in Study 1 might reflect the specific nature of this recall task. Women find experiencing objectification aversive and seek to avoid those who objectify them (Teng, Chen, Poon, & Zhang, 2015). If part of this aversion is a belief that objectifiers are acting immorally (e.g., it is morally wrong to objectify people), we may be observing a 'contrast effect' (Mussweiler, Ruter, & Epstude, 2004), whereby the self seems more moral than the perpetrator of objectification. This may be

consistent with the finding that the effect is strongest when the objectifier is female, as she poses a more relevant other to contrast against.

Study 2

Our aims in Study 2 were twofold. First, we sought to replicate our basic effect that people feel less warm, competent, and human following objectification. We made several changes from Study 1 to test the breadth of this effect. First, given that the result for morality in Study 1 is in direct opposition to previous research, in Study 2 we sought to replicate this unexpected result. For Study 2 we employed a more established measure of morality, widely used alongside warmth and competence (cf. Heflick et al., 2011) such that all measures were drawn from the stereotype content literature. Second, we sought to examine whether the effect is limited only to sexual objectification. Prior research has shown that people can objectify others in a workplace context (e.g., Andrighetto et al., 2016; Baldissarri et al., 2014). Thus, in Study 2 we shifted our focus from sexual objectification to workplace objectification to increase the range of objectifying settings investigated. In particular, we considered two sources of workplace objectification: the relationship with the employer and the performed activity. In fact, both these sources have been shown to be related to an increase of other- and self-objectification (Andrighetto et al., 2016; Baldissarri, Andrighetto, Gabbiadini, & Volpato, 2016; Baldissarri et al., 2014). Third, consistent with prior workplace objectification studies (Andrighetto et al., 2016; Baldissarri et al., 2014), we recruited both male and female participants. We hypothesized the same effects as Study 1: recalling experiences of objectification will result in lesser perceived warmth, competence, morality, and humanity.

Method

Participants

Sixty-two participants (26 females) completed an online questionnaire via Prolific Academic in exchange for payment (£1). This left at least 30 participants per cell, a sample size in line with other objectification studies (Gervais, et al., 2011; Loughnan et al., 2015). Their ages ranged from 18 to 60 years ($M_{age} = 35.02$; $SD_{age} = 10.70$). All the participants were native English speakers. Sixty participants self-reported as White Caucasian and two as Asian.

Procedure and Measures

A 2 (self-perception: baseline vs. objectified) x 2 (objectification source: employer vs. activity) mixed factorial experimental design was used with the objectification source as a between-subjects factor. Participants rated their humanity, warmth, competence, and morality before and after the objectification source manipulation³. Participants were randomly assigned to one of the two objectification source levels in which they were asked to recall an objectifying experience.

Baseline self-perception. Participants were first asked various demographic questions and then presented with a series of questions designed to reveal how they viewed themselves generally. Participants were instructed to indicate the extent to which they agreed with each statement on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*).

Warmth, Competence, Morality. Scales measuring the three Stereotype Content Model (SCM) dimensions were adapted from Leach, Ellemers and Barreto (2007). Three items addressed warmth (e.g., “I am friendly”; $\alpha = .76$), three items addressed competence (e.g., “I am competent”; $\alpha = .80$) and three items assessed morality (e.g., “I am trustworthy”; $\alpha = .81$).

Humanity. Participants’ self-perception of humanity was assessed using the same scale as Study 1, capturing both human nature ($\alpha = .69$), and human uniqueness ($\alpha = .55$).

Manipulation task. After the general self-perception measures, participants were asked to recall an experience in which they felt themselves to have been objectified in a workplace setting.

³ All materials are available from the Open Science Framework (osf.io/un57d).

We devised these manipulations to capture the key element of workplace objectification identified by prior research (cf. Andrighetto et al., 2016; Baldissarri et al., 2014). To increase the generalizability of our findings, we examined two potential sources of objectification: an individual (as in Study 1) or an activity. Depending on the condition, participants were asked to recall an experience in which an employer (n=30) or the activity they were performing (n=32) led them to feel objectified.

In particular, in the employer condition, participants were asked to “*Describe a workplace experience in which your boss or senior co-workers treated you as a mere instrument, object, cog in the machine, or tool rather than as a person.*” In the activity condition participants were asked to “*Describe a workplace experience in which performing your job make you feel as a mere instrument, object, cog in the machine, or tool rather than a person. It might be that the job was highly repetitive, involved completing a lot of little steps, or was totally directed by someone else.*” Participants were asked to write a minimum of three sentences about their experience.

Follow up measures. Participants then were presented with an adaptation of the self-perception scales addressing how the participant remembered thinking of themselves at the time of the objectifying experience rather than in general. Participants were instructed to indicate the extent to which they agreed with each statement on a 5-point scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*). The SCM items (Leach et al., 2007) were adapted to measure warmth (e.g., “I was friendly”; $\alpha = .84$), competence (e.g., “I was skilled”; $\alpha = .70$) and morality (e.g., “I was honest”; $\alpha = .71$) during the objectifying event. As in Study 1, the general self-perception of humanity (Bastian & Haslam, 2010) was adapted capturing self-perception of human nature ($\alpha = .82$) and human uniqueness ($\alpha = .61$) during the objectifying experience.

Results

In order to control for participants' gender, we first conducted a 2 (self-perception: baseline vs. objectified) x 2 (objectification source: employer vs. activity) x 2 (gender: male vs. female) mixed model ANOVA for all the dependent variables. These analyses did not show any effect of participants' gender on any of the dependent variables, and so participant gender was excluded from the main analyses.

A 2 (self-perception: baseline vs. objectified) x 2 (objectification source: employer vs. activity) mixed model ANOVA was conducted for each of the dependent variables (warmth, competence, morality, human nature, and human uniqueness) with self-perception as the within-subjects variable, and with the source of objectification as the between-subjects variable⁴. For all DVs there emerged a significant effect of self-perception, whereas the between-subjects variable revealed no significant differences. This indicates that both sources of objectification were equally powerful in eliciting the objectification effect (for correlations between all variables see Table 3, for the exact means and standard errors see Table 4, for mean differences see Figure 2).

Warmth. As predicted, the ANOVA on warmth revealed that participants perceived themselves as less warm when objectified, compared to how they felt generally, $F(1, 60) = 59.78, p < .001, \eta_p^2 = .499$. No significant interaction emerged, and thus participants reported similar perception regardless the source of objectification, $F(1, 60) = .16, p = .694, \eta_p^2 < .01$.

Competence. As predicted, the ANOVA showed a significant main effect of self-perception, $F(1, 60) = 33.86, p < .001, \eta_p^2 = .361$. In particular, participants perceived themselves as less competent when objectified, than how they perceived themselves generally. Again, no significant interaction with the source of objectification emerged, $F(1, 60) = .40, p = .529, \eta_p^2 < .01$.

Morality. The ANOVA on morality showed a significant main effect of self-perception, $F(1, 60) = 38.54, p < .001, \eta_p^2 = .391$. In particular it revealed that participants saw themselves as less

⁴ All data are available from the Open Science Framework (osf.io/un57d).

moral when objectified, compared to how they perceived themselves generally. Again, the source of objectification did not interact with the change in perceived self-morality, $F(1, 60) = .66, p = .420, \eta_p^2 = .011$.

Humanity

Human Nature. The ANOVA on human nature revealed that participants attributed themselves human nature to lesser extent when objectified compared to how they perceived themselves generally, $F(1, 60) = 137.99, p < .001, \eta_p^2 = .690$. Once again, there was no significant interaction with the source of objectification, $F(1, 60) = .98, p = .326, \eta_p^2 = .016$.

Human Uniqueness. The ANOVA on human uniqueness revealed that participants attributed themselves human uniqueness to a lesser extent when experiencing objectification compared to how they thought of themselves generally, $F(1, 60) = 76.09, p < .001, \eta_p^2 = .559$. Again, this did not interact with the source of objectification, $F(1, 60) = .08, p = .779, \eta_p^2 < .01$.

Discussion

All hypotheses were supported and we replicated all of the Study 1 effects except for our unexpected morality effect. Regardless of whether they were objectified by an individual or the work itself, people recalling objectifying experiences reported themselves as less warm, competent, moral, and human. These results mirror the findings of prior workplace objectification research which has shown that people come to view workers as less than fully human (Andrighetto et al., 2016). Expanding on the work of Baldissarri and colleagues (2014), it appears that objectified worker's share the perspective of others; people report that workplace objectification extends beyond the eye of the beholder and into one's self perception. We observed these results using another measure of the SCM which included a new measure of morality. Observing similar effects with alternate measures increases our confidence that the results are not limited to a specific measurement approach.

General Discussion

Across two studies we found good evidence that people internalize their objectification. After recalling sexual or workplace objectification, people reported seeing themselves as less warm, competent, and human. Results for morality were mixed, with participants seeing themselves as more moral in Study 1 and less moral in Study 2. In general however, the pattern of results was clear: the objectified see *themselves* as more object-like.

Importantly, we demonstrated that this effect is robust across a range of conditions. Consistent with prior work which has shown that men and women are equally likely to engage in the objectification of others at both an explicit (e.g., Loughnan et al., 2015) and cognitive level (e.g., Bernard et al., 2012), we found that the experience of objectification was typically equally impactful when carried out by men or women. Likewise, being on familiar terms with the recipient conferred no additional or reduced impact of objectification. Study 2 even hints that objectifying environments and activities – without clearly specified perceivers – are sufficient to change self-perception. The possibility that environments can cause objectification to be internalized lends support to the longstanding claim that cultures can be objectifying (Fredrickson & Roberts, 1997; Loughnan et al., 2015) even in the absence of clear, single agents to carry out that objectification.

Limitations and future directions. These studies employed a recall paradigm whereby participants reported how they viewed themselves following objectification. This technique has been used by past research and validated by having participants experience objectification in the laboratory (see Chen et al., 2013). Having participants recall naturally occurring objectification confers several advantages, most notably ecologically valid experiences which may be unethical or impractical to conduct under laboratory conditions. As with any recall task there is the risk of misremembering. However, it seems unlikely that simple misremembering would produce the results observed here; we replicated a specific pattern of results rather than a general increase in

variability in peoples' ratings. Nevertheless, future research may wish to have people experience laboratory-based objectification and measure changes in warmth, competence, morality, and humanity.

Future research should also consider other measures of humanity. In fact, we should note as limitation of Study 2 that the reliability of the humanity scales are rather low, in particular for human uniqueness. Therefore we encourage future research to replicate our findings with different and more reliable humanity measures. Further, given the divergent results for morality across the studies it would be important to disentangle the effect of measurement from scenario (sexual or workplace) to identify the point of divergence.

Finally, we employed a within-subjects design with a baseline condition, rather than a between-subjects design. Although this is a powerful approach, it leaves several important questions for future research, such as the potential role of demand effects. It seems to us that primary amongst future questions is whether other, negative manipulations will elicit similar effects. We now know that being the recipient of ostracism (Bastian & Haslam, 2010) and objectification increase self-dehumanization. It may be that experiencing mistreatment in general elicits more negative self-perceptions, including a lack of warmth, competence, morality, and humanity. This would not invalidate the findings of this research – it would remain the case that experiencing objectification leads people to see themselves in line with how they are viewed by others – but would locate our effect alongside Bastian and Haslam's (2010) as two instances of a broader phenomenon.

We know a great deal about how people see themselves (self-objectification; Fredrickson & Roberts, 1997; self-dehumanization; Bastian & Haslam, 2010) and how people see others (other-objectification; Loughnan & Pacilli, 2014; Vaes et al., 2013). The current project helps bridge the gap between these findings. When someone is objectified they not only experience the baneful

gaze of another, they also come to see themselves as more object-like. Objectification also appears to reside in the eye of the receiver.

References

- Andrighetto, L., Baldissarri, C., & Volpato, C. (2016). (Still) modern times: Evidence of objectification in the work domain. *European Journal of Social Psychology*. Advance online publication. doi: 10.1002/ejsp.2190
- Baldissarri, C., Andrighetto, L., & Volpato, C. (2014). When work does not ennoble man: Psychological consequences of working objectification. *Testing, Psychometrics, Methodology in Applied Psychology*, 21, 327-339. doi: 10.4473/XXXX
- Baldissarri, C., Andrighetto, L., Gabbiadini, A., & Volpato, C. (2016). Work and freedom. Work and Freedom? Working Self-Objectification and Belief in Personal Free Will. *British Journal of Social Psychology*, Advance online publication. doi: 10.1111/bjso.12172
- Bastian, B., & Haslam, N. (2010). Excluded from humanity: The dehumanizing effects of social ostracism. *Journal of Experimental Social Psychology*, 46, 107-113. doi:10.1016/j.jesp.2009.06.022
- Bastian, B., Jetten, J., & Radke, H. (2012). Cyber-dehumanization: Violent video game play diminishes our humanity. *Journal of Experimental Social Psychology*, 48, 486-491. doi: 10.1016/j.jesp.2011.10.009
- Bernard, P., Gervais, S., Allen, J., Campomizzi, S., & Klein, O. (2012). Integrating sexual objectification with object versus person recognition: The sexualized body-inversion hypothesis. *Psychological Science*, 23, 469-471. doi:10.1177/0956797611434748
- Chen, Z., Teng, F., & Zhang, H. (2013). Sinful flesh: Sexual objectification threatens women's moral self. *Journal of Experimental Social Psychology*, 49, 1042-1048. doi:10.1016/j.jesp.2013.07.008

- Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of personality and social psychology, 92*, 631-648. doi: 10.1037/0022-3514.92.4.631
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of personality and social psychology, 82*, 878-902. doi: 10.1037/0022-3514.82.6.878
- Fuller-Tyszkiewicz, M., Reynard, K., Skouteris, H., & McCabe, M. (2012). An examination of the contextual determinants of self-objectification. *Psychology of Women Quarterly, 36*, 76-87. doi: 10.1177/0361684311426721
- Fredrickson B.L. & Roberts T.A. (1997). Objectification theory. Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*, 173-206. doi: 10.1111/j.1471-6402.1997.tb00108.x
- Gervais, S. J., Vescio, T. K., & Allen, J. (2011). When what you see is what you get: The consequences of the objectifying gaze for women and men. *Psychology of Women Quarterly, 35*, 5-17. doi:10.1177/0361684310386121
- Heflick, N. A. e Goldenberg, J. L. (2009). Objectifying Sarah Palin: Evidence that objectification causes women to be perceived as less competent and less fully human. *Journal of Experimental Social Psychology, 45*, 598-601. doi:10.1016/j.jesp.2009.02.008
- Heflick, N. A., Goldenberg, J. L., Cooper, D. P., & Puvia, E. (2011). From women to objects: Appearance focus, target gender, and perceptions of warmth, morality and competence. *Journal of Experimental Social Psychology, 47*, 572-581. doi:10.1016/j.jesp.2010.12.020

- Holland, E., & Haslam, N. (2016). Cute little things: The objectification of prepubescent girls. *Psychology of Women Quarterly, 40*, 108-119. doi: 10.1177/0361684315602887
- Holland, E., & Haslam, N. (2013). Worth the weight: The objectification of overweight versus thin targets. *Psychology of Women Quarterly, 37*, 462-468. doi: 10.1177/0361684312474800
- Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group virtue: The importance of morality (vs. competence and sociability) in the positive evaluation of in-groups. *Journal of personality and social psychology, 93*, 234-249. doi:10.1037/0022-3514.93.2.234
- Loughnan, S., Fernandez, S., Vaes, J., Anjum, G., Aziz, M., Harada, C., Holland, E., Puvia, E., Singh, I., & Tsuchiya, K. (2015). Exploring the role of culture in sexual objectification: A seven nation study. *International Review of Social Psychology, 28*, 125-152.
- Loughnan, S., & Pacilli, M. G. (2014). Seeing (And Treating) Others as sexual objects: Toward a more complete mapping of sexual objectification. *TPM: Testing, Psychometrics, Methodology in Applied Psychology, 21*, 309-325. doi:10.4473/TPM21.3.
- Loughnan, S., Haslam, N., Murnane, T., Vaes, J., Reynolds, C., & Suitner, C. (2010). Objectification leads to depersonalization: The denial of mind and moral concern to objectified others. *European Journal of Social Psychology, 40*, 709–717. doi: 10.1002/ejsp.755
- Loughnan, S., Pina, A., Vasquez, E. A., & Puvia, E. (2013). Sexual objectification increases rape victim blame and decreases perceived suffering. *Psychology of Women Quarterly, 37*, 455-461. doi: 10.1177/0361684313485718.
- Mussweiler, T., Ruter, K., & Epstude, K. (2014). The ups and downs of social comparison: Mechanisms of assimilation and contrast. *Journal of Personality and Social Psychology, 87*, 832-844. doi.org/10.1037/0022-3514.87.6.832

- Nussbaum, M. (1999). Women and equality: The capabilities approach. *International Labour Review*, 138, 227-245. doi: 10.1111/j.1564-913X.1999.tb00386.x
- Pacilli, M.G., Pagliaro, S. Loughnan, S. Gramazio, S. Spaccatini, F., & Baldry, A.C. (2016). Sexualization reduces helping intentions towards female victims of intimate partner violence through mediation of moral patiency. Revise and resubmit for the Special Issue on Objectification in the *British Journal of Social Psychology*.
- Teng, F., Chen, Z., Poon, K-T., & Zhang, D. (2015). Sexual objectification pushes women away: The role of decreases likability. *European Journal of Social Psychology*, 45, 77-87. doi: 10.1002/ejsp.2070
- Vaes, J., Loughnan, S., & Puvia, E. (2014). The inhuman body: When sexual objectification becomes dehumanizing. In P. Bain, J. Vaes, & J-Ph. Leyens (Eds.), *Advances in understanding humanness and dehumanization* (pp. 186-204). New York: Psychology Press.
- Vaes, J., Paladino, P., & Puvia, E. (2011). Are sexualized women complete human beings? Why men and women dehumanize sexually objectified women. *European Journal of Social Psychology*, 41, 774-785. doi: 10.1002/ejsp.824.

Table 1
Correlations between all variables. Study 1

Self-perception	Warmth Before	Competence Before	Morality Before	Human Nature Before	Human Uniqueness Before	Warmth After	Competence After	Morality After	Human Nature After	Human Uniqueness After
Warmth Before	-	-	-	-	-	-	-	-	-	-
Competence Before	.57***	-	-	-	-	-	-	-	-	-
Morality Before	.00	.01	-	-	-	-	-	-	-	-
Human Nature before	.51***	.45***	-.14	-	-	-	-	-	-	-
Human Uniqueness Before	.53***	.71***	-.04	.63***	-	-	-	-	-	-
Warmth After	.23*	.31**	-.12	.24*	.38***	-	-	-	-	-
Competence After	.37***	.58***	-.08	.22*	.51***	.71***	-	-	-	-
Morality After	.31**	.31**	-.10	.30**	.44***	.29**	.40***	-	-	-
Human Nature After	.32**	.32**	-.06	.32**	.36***	.65***	.62***	.32**	-	-
Human Uniqueness After	.34**	.52***	-.05	.29**	.54***	.59***	.74***	.54***	.74***	-

Notes. *** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$

Table 2

Mean and standard error in self-perceptions before and after objectification for each experimental condition. Study 1

Specific condition			Means and standard error in self-perceptions before and after objectification				
Observer Closeness	Observer Gender	Self-perception	Warmth <i>M (SE)</i>	Competence <i>M (SE)</i>	Morality <i>M (SE)</i>	Human Nature <i>M (SE)</i>	Human Uniqueness <i>M (SE)</i>
Known	Male	Before	4.14 (.54)	3.72 (.69)	3.15 (.65)	4.02 (.75)	3.74 (.72)
		After	3.45 (.89)	3.41 (.74)	3.39 (.80)	3.19 (.85)	3.33 (.84)
	Female	Before	4.22 (.46)	3.64 (.66)	2.75 (.55)	3.31 (.49)	3.84 (.75)
		After	3.60 (.83)	3.28 (.90)	3.46 (.92)	3.46 (.66)	3.36 (.70)
Unknown	Male	Before	4.20 (.52)	3.98 (.60)	3.00 (.73)	4.16 (.56)	3.80 (.63)
		After	3.28 (.95)	3.22 (.99)	3.17 (1.02)	3.04 (.83)	3.20 (.79)
	Female	Before	4.40 (.55)	4.41 (.58)	2.84 (.69)	4.32 (.61)	4.16 (.63)
		After	3.78 (.93)	3.52 (.80)	3.75 (.84)	3.57 (.92)	3.63 (.94)

Table 3
Correlations between all variables. Study 2

Self-perception	Warmth Before	Competence Before	Morality Before	Human Nature Before	Human Uniqueness Before	Warmth After	Competence After	Morality After	Human Nature After	Human Uniqueness After
Warmth Before	-	-	-	-	-	-	-	-	-	-
Competence Before	.47***	-	-	-	-	-	-	-	-	-
Morality Before	.25*	.47***	-	-	-	-	-	-	-	-
Human Nature before	.60***	.39**	.25*	-	-	-	-	-	-	-
Human Uniqueness Before	.38**	.69***	.42***	.52***	-	-	-	-	-	-
Warmth After	.40***	.18	-.05	.01	.21	-	-	-	-	-
Competence After	.16	.39**	.14	.09	.33**	.50***	-	-	-	-
Morality After	.11	.16	.28*	.04	.11	.41***	.66***	-	-	-
Human Nature After	.21	.26*	-.05	.09	.33**	.55***	.29*	.30*	-	-
Human Uniqueness After	.09	.33**	.11	.02	.27*	.48***	.50***	.52***	.60***	-

Notes. *** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$

Table 4

Means and standard error in self-perceptions before and after objectification for each experimental condition. Study 2

Specific condition		Means and standard error in self-perceptions before and after objectification				
Source	Self-perception	Warmth <i>M (SE)</i>	Competence <i>M (SE)</i>	Morality <i>M (SE)</i>	Human Nature <i>M (SE)</i>	Human Uniqueness <i>M (SE)</i>
Employer	Before	3.93 (.61)	4.09 (.39)	4.36 (.46)	4.14 (.53)	3.86 (.37)
	After	3.03 (.85)	3.39 (.92)	3.81 (.74)	2.89 (.89)	3.07 (.58)
Activity	Before	4.08 (.63)	4.02 (.72)	4.29 (.57)	4.08 (.53)	3.71 (.57)
	After	3.27 (.94)	3.46 (.87)	3.58 (.78)	2.59 (.71)	2.97 (.69)

Figure 1

Mean differences and standard error in self-perceptions from how women perceive themselves generally to how women perceive themselves when objectified, for each experimental condition. Negative scores show lower ratings under objectification (DVs)

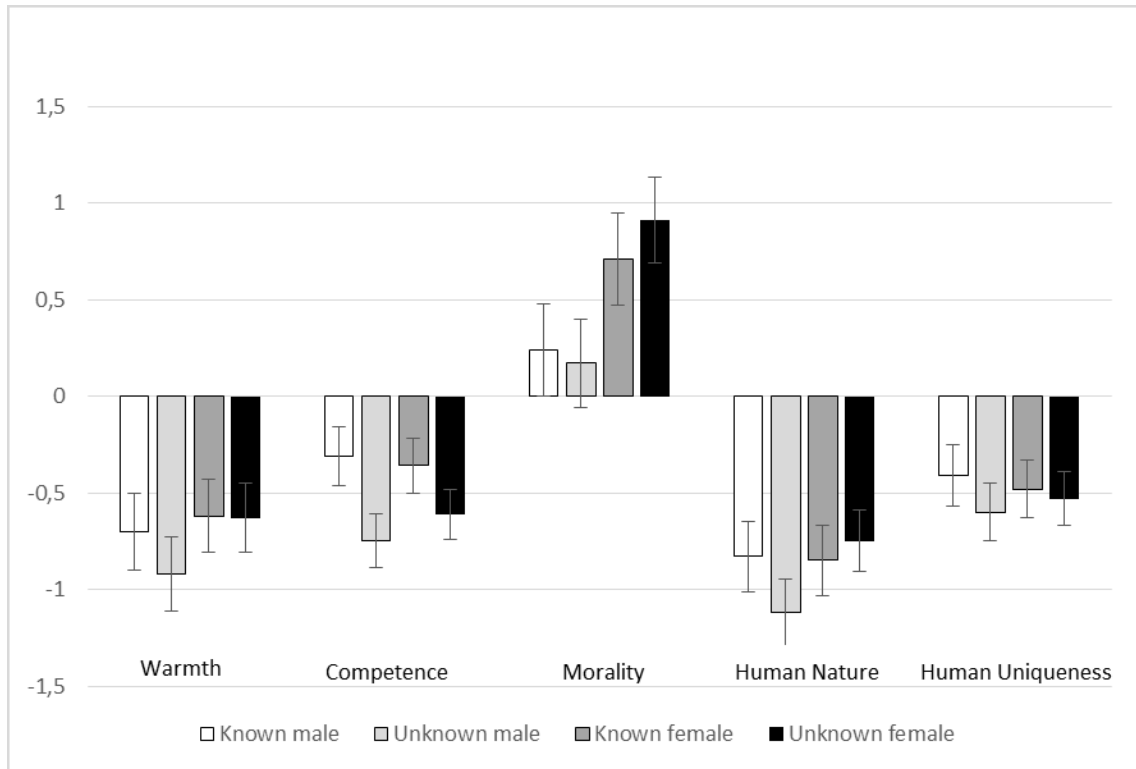


Figure 2

Mean differences and standard error in self-perceptions from how people perceive themselves generally to how people perceive themselves when objectified, for each experimental condition. Negative scores show a negative effect of objectification on the self-perception (DVs)

