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## The relationship between objectification at work and its consequences; the hypothesis of moderation by a mindset

**Abstract:** Studies on objectification most often highlight deleterious effects on people. However, there are a few studies that have revealed the functional aspect of objectification. On this basis we postulated the hypothesis of a mindset (i.e., beliefs about the positive/negative consequences of objectification) that would moderate the relationship between objectification and its consequences. We present two studies conducted with employees. We measured the perception of objectification at work, mentalization, the perception of instrumentality/humanness (Studies 1 & 2) and social value (Study 2). We have developed a scale of mindset associated with objectification. The results revealed that the negative effects of objectification are accentuated by adherence to a negative mindset. There was no moderating effect of the positive mindset. These results are discussed, and future research is proposed.

**Keywords:** *mindset, self-objectification, workplace*

### INTRODUCTION

Objectification is a form of dehumanization (Haslam & Loughnan, 2014) in which people are perceived or perceive themselves as objects and no longer as human beings (Gervais & al., 2013). Numerous studies have highlighted the deleterious effects of objectification on mental health. A few studies have also highlighted the functional aspects of objectification in particular contexts. Based on these findings, we hypothesized that there would be a mindset associated with objectification and that this mindset would be likely to moderate the relationship between objectification and the expected effects of objectification.

### THE USUAL CONSEQUENCES OF OBJECTIFICATION

There is relative consensus regarding the consequences of objectification. Sexual objectification is associated with self-objectification, poorer sexual health,

shame, depression, disordered eating, sexual harassment, and violence against women (Fredrickson & Roberts, 1997). In the more specific field of work, most studies have highlighted negative health effects. We thus observe that the level of perceived objectification is positively associated with the level of risk of occupational burnout (Baldissari & al., 2014; Szymanski & al., 2016) or sexual harassment (Wiener & al., 2013; Gervais & al., 2016). Similarly, objectification is positively associated with emotional numbing, lack of empathy and meaningful thought (Bastian & Haslam, 2011; Christoff, 2014), with dehumanization (Baldissari & al., 2014; Auzoult & Personnaz, 2016), and with the perception of people as instruments and as being deprived of humanity (Andrighetto & al., 2017; Auzoult, 2020; 2021). Finally, objectification is negatively associated with job satisfaction (Nguyen & Stinglhamber, 2018; Szymanski & Feltman, 2015) or social value (De Oliveira & Auzoult, In press).

However, there are a few studies that have highlighted the functional benefits of objectification or even associated effects that can be considered positive. On



a daily basis, sexual objectification can be a source of psychological benefits. Thus, in situations where the expectation of social validation is high, women benefit favorably from objectification relationships, the latter allowing them to confirm the social image that they wish to portray of themselves (Goldenberg & al. 2011). From this perspective, it appears that younger generations do not perceive the sexualization of advertising as a threat but display indifference to objectification in the media (Zimmerman & Dahlberg, 2008). This observation is also valid at workplace. Indeed, the sexualization of social relations does not appear to be systematically harmful for health or organizational functioning (Aquino & al. 2014). At this level it is possible to distinguish behaviors or remarks with a hostile, unwanted and threatening sexual connotation, but also a social sexualization at work, visible and shared, which can promote the feeling of belonging to a group, organizational commitment, energy, creativity, cohesion or interpersonal influence. From this point of view, sexual objectification at work can be considered either as threatening or as a source of personal or collective symbolic benefits, depending on the representations conveyed on sexualization in this context. This observation echoes that of Budesheim (2014) for whom objectification is a common experience that is not necessarily harmful for objectified people. The latter also considers that objectification can be beneficial when it allows the objectified person to achieve personal goals (Gervais & al. 2019).

In the medical field, objectification is represented as being able to be functional (Haque, & Waytz, (2012) because it facilitates difficult decision making (Haslam & Loughnan, 2014). Indeed, some types of medical care require the patient to be viewed as a mechanical system that can be acted on, especially since empathy and moral considerations are reduced by objectification. There are other examples of the perceived benefits of objectification. In the context of a job search where one seeks to increase one's desirability to others, self-objectification can increase the feeling of self-efficacy and well-being (Nistor, & Stanciu, 2017). Objectification can also increase an employee's perceived market value as well as employability for low-skill jobs (Rollero & Tartaglia, 2013). Finally, self-objectification can facilitate the exercise of power (Inesi & al. 2014). In these different contexts, where it's important to pay attention to what's visible to the person, objectification, here conceived as a reduction of the person to his or her appearance, can become a resource when used strategically to make a good impression.

## **MINDSET AND ITS EFFECTS**

Faced with a world made up of a flow of complex information, the individual often uses systems of selection and simplification for organizing and giving meaning to events (Gollwitzer, 1999). Mindset can be defined as "a mental framework or lens that selectively organizes and encodes information, thereby directing an individual to a unique way of understanding an experience and guiding them to corresponding actions and responses" (Crum & al.,

2013, p.717). As such, it is a set of beliefs, representations, values, goals, and expectations that individuals use in a particular domain as rules to guide their attitudes and practices in that domain. The mindset is a cognitive framework learned during the socialization of individuals during childhood (e.g., parents, teachers, etc.), or acquired by learning or training (e.g., Growth vs. Fixed mindset; Kamins & Dweck, 1999).

Depending on the mindset employed, it affects our perception of the world and influences judgment (Taylor & Gollwitzer, 1995), evaluations (Gollwitzer, 1999), health (Crum & Langer, 2007), stress (Crum & al., 2013) and behavior (Lieberman & al., 2004). The adoption of one mindset or another can influence psychological, behavioral and physiological outcomes in several areas of life and health. For example, in education, students who believe intelligence can be improved (i.e., Growth mindset) versus students who believe it is a fixed trait (i.e., Fixed mindset), value their studies more, make more effort, are more motivated, get better grades, and enjoy learning more (Aronson & al., 2002). In the field of food, mindset can influence the physiology of individuals: thinking about drinking a "high-calorie" milkshake lowers the level of ghrelin, a hormone that stimulates appetite, more than thinking that the same milkshake is "sensible and low in calories" (Crum & al., 2011).

The concept of mindset comes from research on implicit theories of intelligence (Dweck & Legget, 1988). These implicit theories refer to profane theories, world-views and mental structures of schematic knowledge that enable individuals to give meaning to the situations they encounter (Plaks & al., 2005) by attributing a more or less stable nature to various human characteristics such as intelligence (Dweck & al., 1995), emotions (Tamir & al., 2007), and stress (Crum & al., 2013). There is a distinction between incremental theories (i.e., beliefs about the malleable nature of human attributes) and entity theories (i.e., beliefs about the fixed nature of human attributes). These implicit theories are said to influence the processes of self-regulation and their outcomes (Molden & Dweck, 2006). For example, individuals with more incremental beliefs adopt more adaptive self-regulating behaviors when faced with challenges, increasing their chances of success. By contrast, individuals with entitative beliefs cannot effectively self-regulate by making internal and stable attributions, causing them to fail (Burnette & al., 2013). Although typically conceptualized at a dispositional level (Dweck, 2009), implicit theory can be modified or induced, especially in the laboratory or during interventions. Likewise, mindset is often presented as a dichotomy in order to emphasize the contrast between the two mindsets. However, mindset is located on a continuum which takes into account the strength of the belief (Dweck, 2011). Therefore, mindsets should be conceptualized as a range (strongly fixed, moderately fixed, mixed/neutral, moderately malleable, or strongly malleable) rather than a binary concept. Rather, the individual will assign a distinct mindset type per attribute, allowing them to have different mindsets depending on the attribute involved in

the situation (e.g., having a malleable mindset about their athletic abilities, and a fixist mindset about their performance in mathematics). The mindset about objectification follows a similar logic. Objectification, as reducing a person to their body or an instrumental function, is often perceived negatively due to its association with harmful psychological consequences (Fredrickson & Roberts, 1997). However, it is plausible that individuals may develop differentiated beliefs about the consequences of objectification depending on the context. For example, a person might believe that objectification is fundamentally negative in everyday life or interpersonal relationships, yet recognize its potentially positive aspects in a professional or artistic context where the focus on a specific skill or physical characteristic may be valued. Just like the mindsets about intelligence or stress, it is crucial to acknowledge that beliefs about objectification are not monolithic. An individual may have a dominant mindset that guides their interpretations in most situations, but they might also adopt an alternative mindset when the context warrants it. For instance, a person might generally believe that objectification is harmful, except, for example, in the realm of sports, where focusing on physical abilities could be seen as positive and beneficial for performance.

Thus, an individual is not limited to one mindset, but to a combination of mindsets that can develop over time.

## OBJECTIVES AND HYPOTHESIS

The process of objectification is conceived both as a relational process, reflecting the way in which others are perceived, and as a self-focused process, leading to the construction of oneself as an individual with more or less psychosocial resources. The resulting consequences depend on this interpersonal and intrapsychic attribution of value. Studies in various fields, ranging from everyday life (i.e. sexual objectification) to work (i.e. objectification at workplace), highlight consequences of objectification and self-objectification that can be more or less functional. We believe that there is a mindset associated with objectification that orients the outcome of the process towards consequences that can be either deleterious or beneficial for the (self-)objectified.

Given the impact of mindset in areas such as intelligence, emotions, health, or stress, it seems reasonable to assume that a mindset about objectification (i.e., our beliefs about the consequences, positive or negative, of objectification) could be activated depending on the context and modulate the effects of objectification. More specifically, it appears that the effects of objectification are context-dependent, which could imply that in particular contexts, the objectives underlying the social practices of objectification would be perceived as more or less profitable for the objectified targets. In most cases, objectification is harmful to health, and we must expect a predominance of negative representations of the phenomenon. On the contrary, in very specific contexts such as that of support in job search, working on reduction

to appearance can benefit those being supported. More generally, when objectification facilitates action or interactions, a positive mindset could be activated. Therefore, it seems possible that positive or negative mindsets interact with objectifying behaviors or judgments in order to accentuate the functional effects or reduce the harmful effects of objectification. We therefore postulate the existence of positive and negative mindsets associated with objectification (hypothesis 1). We also postulate that a negative mindset will increase the negative effects of objectification (hypothesis 2) and that a positive mindset will facilitate the positive effects of objectification (hypothesis 3).

We present two studies in which we measure the perception of being objectified at work as well as the consequences of self-objectification, measured on the basis of mentalization, the perception of humanness and instrumentality and the social value of the person. At the same time, we constructed a scale to measure beliefs reflecting a positive versus negative mindset associated with objectification. We expect the level of mindset to interact with the perception of being objectified.

## STUDY 1: THE MODERATING ROLE OF MINDSETS ON SELF-OBJECTIFICATION AT WORK

### Sample and Procedure

In Study 1, 310 participants, with an average age of 28 ( $SD = 6.71$ ), responded to the study (221 females). The participants had 4 years of professional experience on average, 31% worked in the public sector, 69% in the private sector, and 96% had a level of education greater than or equal to the French baccalaureate. Finally, 69% were employees or workers, 8% senior executives or managers and 22% middle managers. The study was submitted via a professional forum dedicated to the publication of job offers. Its contents indicated that the researchers were looking for volunteers to participate in a study on workplace relationships. Participants responded via an online questionnaire anonymously after being asked for their free and informed consent. They were offered the opportunity to be informed about the results. The inclusion criteria for participants were to be employees in work, to be between 18 and 62 years old (legal retirement age), work in organizations with more than 25 employees and to endorse the objective of and participation in this study. As our study is exploratory, i.e. we are seeking to characterize the mindset phenomenon on objectification, it is acceptable not to carry out a detailed power/sensitivity analysis. For this reason, we have not conducted a sensitivity analysis.

### Variables

*Perception of Objectification (PO)* – The perception of being objectified was measured using the Auzoult & Personnaz scale (2016). This scale measures the frequency of perceived behavior on the part of co-workers and the respondent's supervisor (e.g. "My boss and/or my

colleagues think more about what I can do for them than what they can do for me"; My boss and/or my colleagues never ask if I would like to work in a different way"). Participants responded using 5-point scales ranging from "not at all" (1) to "quite" (5).

**Mindset associated with objectification** – We generated a set of items reporting a positive mindset and a negative mindset associated with objectification (see Appendix 1). An exploratory factor analysis (maximum likelihood, oblimin rotation, parallel analysis) led to the choice of a two-factor structure (positive vs negative mindset) presented in Table 1, each factor comprising three items. Since we theoretically suggest that there may be 2 mindsets on objectification (a positive and a negative vision of objectification), we have formulated 16 items that may correspond to these 2 theoretical dimensions. By examining item saturations on each dimension, the AFE enables us to identify the most relevant items (strength of the relationship between each item and each dimension). We have retained items with saturations above 0.4 (with flexibility for item 1 (0.395).

The fit indices of the model to the data were satisfactory (RMSEA = 0.001; 90% CI RMSEA [0.001; 0.0662]; TLI = 1.05;  $\chi^2(4) = 2.30$ ,  $p = .68$ ). Cronbach's alphas were .494 for the negative mindset scale and .501 for the positive mindset scale, respectively. George and Mallery (2003) highlighted the fact that for a scale with few items, it is common to find a low value for Cronbach's alpha (i.e. < .50). Our items could not be considered redundant with an inter-item correlation of .23 to .30. Our scale had only six items, so the value we found for the alphas can be considered acceptable.

**Mentalization** – We measured mentalization using the 19-item SMSA scale (Baldissari & al., 2014). This scale is based on the principle that the state of objectification will result in the person's reduced perception of himself as

being capable of thinking, feeling emotions, desires or intentions, these mental states being specific to the living (as opposed to the object). So, this scale measures allusions to mental states during a working day (e.g. wants, desires, sensing a smell or having an intention). Participants responded using five-point scales ranging from "not at all" (1) to "quite" (5).

**Dehumanization** – Instrumentality and humanness were measured using the 2X5-item scale of Andrighetto, Baldissari, and Volpato (2017). To answer, participants had to indicate how they perceived themselves as a human person (human being, person, individual, subject, or guy) or an instrument (instrument, device, tool, thing and machine). Participants responded using five-point scales ranging from "not at all" (1) to "quite" (5).

## Results

We conducted a moderation analysis using the Hayes PROCESS procedure (Hayes, 2013) and a bootstrapping method (50,000 resamples, level of confidence 95%) with an analysis model 1 taking into account objectification as an independent variable, mentalization, instrumentality and humanness as dependent variables and negative and positive mindset as moderating variables.

Perception of objectification is positively associated to instrumentality ( $r = .42$ ) and negatively to humanness ( $r = -.34$ ). Instrumentality is positively associated to mentalization ( $r = .26$ ) and negatively to humanness ( $r = -.31$ ). Positive and negative mindset are associated ( $r = -.24$ ).

There is a moderation effect of the negative mindset between objectification and instrumentality ( $B = .28$ ,  $SE = .11$ ,  $t = 2.51$ ,  $p = .01$ ). Adherence to a negative mindset increases the impact of objectification on instrumentality all the more when it is low ( $M = 3.68$ ,  $Effect = .26$ ,  $SE = .11$ ,  $t = 2.39$ ,  $p = .01$ ), medium

**Table 1:** Factor loading – exploratory analysis

	Factors		Uniqueness
	1 Negative Mindset	2 Positive Mindset	
MINDN1 – Being instrumentalized by others is negative and should be avoided	0.395		0.822
MINDN4 – The fact that others use you to achieve their own goal prevents us from giving our best	0.609		0.658
MINDN6 – To be seen only as someone who can do what others want is humiliating	0.517		0.679
MINDP2 – Being considered based on physical appearance can be flattering		0.466	0.794
MINDP5 – Being seen by others only as a mindless body is positive and can be used to one's advantage		0.576	0.686
MINDP6 – Being seen only as someone who can do what others want can facilitate social relationships		0.431	0.657

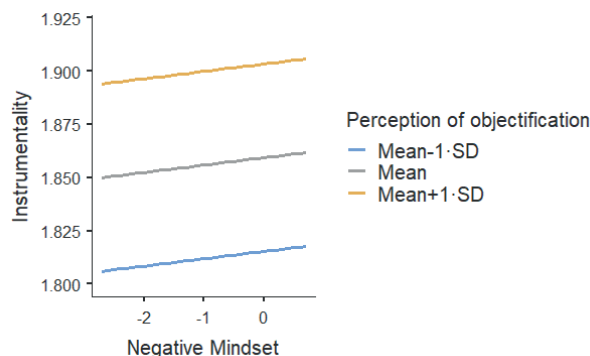
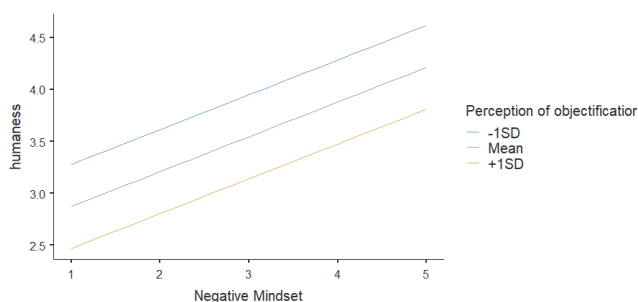
Note. 'Maximum likelihood' extraction method was used in combination with a 'oblimin' rotation

**Table 2:** Descriptive statistics and intercorrelations between all variables (Cronbach' alpha between brackets) – study 1

	M	SD	1	2	3	4	5	6
Perception of objectification	2.26	.74	(.94)	.12**	-.05	-.07	.42**	-.34**
Negative Mindset	4.31	.63		(.49)	-.24**	.06	.001	-.06
Positive Mindset	2.36	.80			(.50)	-.003	.13**	.10
Mentalization*	3.71	.62				(.90)	-.05	.26**
Instrumentality	1.85	.86					(.85)	-.31**
Humanness	3.74	.74						(.70)

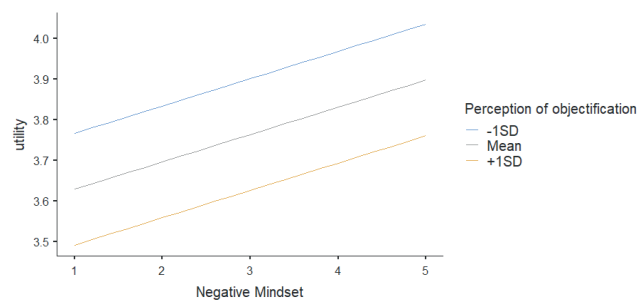
Note : Values within parentheses indicate Cronbach's alpha : \* The higher the score, the upper the mentalization ; \*\* $p < .05$

( $M = 4.31$ ,  $Effect = .44$ ,  $SE = .06$ ,  $t = 6.88$ ,  $p = .001$ ) or strong ( $M = 4.93$ ,  $Effect = .61$ ,  $SE = .07$ ,  $t = 8.15$ ,  $p = .01$ ). We do not observe a negative effect ( $B = -.13$ ,  $SE = .10$ ,  $t = -1.34$ ,  $p = .17$ ) or positive effect ( $B = .09$ ,  $SE = .07$ ,  $t = 1.42$ ,  $p = .15$ ) between objectification and humanness, nor any moderating effect of the positive mindset ( $B = -.07$ ,  $SE = .07$ ,  $t = -1.00$ ,  $p = .31$ ) between objectification and instrumentality. We do not observe a moderating effect of a negative mindset ( $B = -.001$ ,  $SE = .08$ ,  $t = -.02$ ,  $p = .98$ ) or positive mindset ( $B = .04$ ,  $SE = .06$ ,  $t = .71$ ,  $p = .47$ ) between objectification and mentalization.

**Figure 1.** Degree of instrumentality according to the level of objectification and negative mindset**Figure 2.** Degree of humanness according to the level of objectification and negative mindset

## Discussion

This first study provided important information. It was possible to highlight the existence of a negative and positive mindset. The means observed from the scale we constructed highlighted the preponderance of the negative mindset over the positive mindset. Our first hypothesis can

**Figure 3.** Degree of social utility according to the level of objectification and negative mindset

be considered validated. We also expected the level of negative mindset to interact with the level of perceived objectification and accentuate the health consequences. The two indicators of mentalization and dehumanization are common indicators of the consequences of objectification. We also expected that the level of positive mindset would interact with the level of perceived objectification, this time decreasing negative consequences or favoring positive consequences, here at the human level. The results effectively highlighted the moderating effect of the negative mindset in the relationship between objectification and dehumanization, here through instrumentality. Our second hypothesis was validated. On the other hand, we did not observe any interaction effect between objectification and positive mindset, whatever the indicator. We did not observe any effect on mentalization. As Auzoult (2021) indicates, instrumentality represents an indirect and metaphorical indicator of self-objectification, unlike mentalization, which represents a psychopathological indicator.

On this basis, it seems that mindset has an effect on the representational plane of the consequences of objectification. In the second study, we took up this observation and we introduced, in addition to the two indicators of dehumanization, two new indicators that describe the social value of objectified people. Just like instrumentality and humanness, indicators of social values, here social desirability and social utility, describe the representation of oneself at relational level. Specifically, social utility and social desirability are two evaluative dimensions (Beauvois, 2002) which express the fact that an object or a person is sought or avoided, or even felt as having pleasant or unpleasant relationships (i.e. social desirability) or designate the value of

adaptability with regard to the object or the person's adequacy with regard to social functioning (i.e. social utility). These two dimensions are expressed through judgments and self-defining traits, most often in assessment situations where they are relevant. From a personological point of view, desirable traits refer to sociability (warmth, sympathy) or morality (honesty, coldness) while utility refers to skill (intelligence, efficiency) or power (dominance, ambition) (Cambon, 2006). Utility and desirability traits carry important information in evaluation situations. Social utility traits are relevant in school or professional assessment situations while social desirability is associated with the perception of friendliness (Pansu, & Dompnier, 2011).

In this second study, we therefore measured the perception of objectification at work as well as indicators of dehumanization and social value, again testing our hypotheses 2 and 3.

## STUDY 2: THE MODERATING ROLE OF MINDSETS BETWEEN OBJECTIFICATION AND DESIRABILITY/UTILITY

### Sample and Procedure

104 participants (average age 42 years and one month, 68 females) voluntarily participated in this study. 97% had a French baccalaureate or higher. 66% were employees or workers, 8% were senior executives or managers and 25% were middle managers.

The procedure and conditions for participation were identical to those of Study 1.

### Variables

*Perception of Objectification (PO):* The measurement was identical to the 1<sup>st</sup> study.

*Mindset associated with objectification:* We performed a confirmatory analysis based on the model of the first study. The fit indices of the model to the data were satisfactory ( $\chi^2(8) = 2.13$ ,  $p = .97$ ;  $RMSEA = 0.001$ ;  $CFI = 1.00$ ;  $TLI = 1.13$ ;  $SRMR = 0.0234$ ;  $AIC = 1825$ ,  $BIC = 1875$ ). Cronbach's alphas were .65 for the negative mindset and .57 for the positive mindset.

*Dehumanization:* The measurements were identical to the 1<sup>st</sup> study.

*Social value:* We used Le Barbenchon, Cambon and Lavigne's (2005) traits to measure social desirability and social utility. These traits referred to Desirability (Pleasant, Open, Sympathetic), Social Utility (Dynamic, Ambitious, Hardworking), Lack of Desirability (Petty, Boastful, Annoying), and Lack of Social Utility (Shy, Unstable, Vulnerable). Participants were asked to describe themselves as a person using a 5-point scale ranging from 1 "does not describe me at all" to 5 "fully describes me". Negative scores were reversed and averaged with positive scores.

### Results

The moderation analyses were similar to those of the previous study (Hayes PROCESS method).

Perception of objectification is positively associated to instrumentality ( $r = .55$ ) and negatively to humanness ( $r = -.43$ ). Instrumentality is negatively associated to humanness ( $r = -.43$ ). Positive and negative mindset are associated ( $r = -.43$ ). Social utility is positively associated to positive mindset ( $r = .27$ ), humanness ( $r = .31$ ), social desirability ( $r = .42$ ) and negatively associated to instrumentality ( $r = -.32$ ). Social desirability is positively associated to humanness ( $r = .40$ ) and negatively to perception of objectification ( $r = -.43$ ).

We did not observe a moderating effect of the positive mindset between objectification and instrumentality ( $t = .32$ ,  $p = .74$ ), humanity ( $t = -1.35$ ,  $p = .17$ ), social desirability ( $t = -.78$ ,  $p = .43$ ) or social utility ( $t = 1.01$ ,  $p = .31$ ). We observed a tendential moderating effect of the negative mindset between objectification and humanity ( $t = -1.71$ ,  $p = .08$ ) and between objectification and social utility ( $t = -1.72$ ,  $p = .08$ ). In this case we observed that the relationship between objectification and the perception of humanity was all the more negative when the level of negative mindset was low ( $M = 3.35$ ,  $Effect = -.34$ ,  $SE = .17$ ,  $t = -1.97$ ,  $p = .05$ ), medium ( $M = 4.02$ ,  $Effect = -.52$ ,  $SE = .11$ ,  $t = -4.73$ ,  $p = .001$ ) or strong ( $M = 4.68$ ,  $Effect = -.70$ ,  $SE = .12$ ,  $t = -5.71$ ,  $p = .001$ ). Similarly, the relationship between objectification and the perception of social utility was all the more negative when the level of negative mindset was low ( $M = 3.35$ ,  $Effect = -.03$ ,  $SE = .12$ ,  $t = -.24$ ,  $p = .80$ ), medium ( $M = 4.02$ ,  $Effect = -.15$ ,  $SE = .07$ ,  $t = -2.00$ ,  $p = .04$ ) or strong ( $M = 4.68$ ,  $Effect = -.28$ ,  $SE = .08$ ,

**Table 3:** Descriptive statistics and intercorrelations between all variables (Cronbach' alpha between brackets) – study 2

	M	SD	1	2	3	4	5	6	7
Perception of objectification	2.23	.69	(.93)	.21*	-.18	.55*	-.43*	-.17	-.25
Negative Mindset	4.02	.67		(.65)	-.32*	.06	.17	.36*	.03
Positive Mindset	2.61	.69			(.57)	.07	.05	.05	.27*
Instrumentality	2.10	.98				(.87)	-.43*	-.15	-.32*
Humanness	3.88	.82					(.77)	.40*	.31*
Social desirability	4.30	.52						(.82)	.42*
Social Utility	3.83	.51							(.77)

Note : Values within parentheses indicate Cronbach's alpha : \* $p < .05$

$t = -3.26, p = .001$ ). We did not observe a moderating effect of the negative mindset between objectification and instrumentality ( $t = -.49, p = .62$ ) nor between objectification and social desirability ( $t = -.25, p = .80$ ).

## DISCUSSION

This second study confirmed and completed the results observed in the first study. Again, we found that the level of adherence to the negative mindset moderated the relationship between the perception of being objectified and the consequences in terms of dehumanization. Taking both studies into account, the greater was the adhesion to the negative mindset, the more we saw negative consequences in terms of dehumanization as the perception of objectification increased. The second hypothesis was thus again validated. The second study also confirmed that it is difficult to demonstrate an effect of positive mindset. Hypothesis 3 was invalidated in both studies. In both studies, there was an asymmetry in the measurement of negative and positive mindsets. In both studies the level of negative mindset was much higher than the level of belief accounting for the positive mindset. Therefore, we can consider that the negative mindset constitutes a dominant representation of the phenomenon in our societies. This predominance of one mindset over the other was also observed for the stress mindset, for which beliefs about the negative (vs. positive) consequences of stress were more frequent. This would explain why it is easier to observe the moderation of the negative mindset rather than that of the positive mindset. In both studies we have invoked the level of mindset. We can consider that the fact of activating a positive mindset about the positive consequences of objectification in specific favorable contexts (i.e., as we do to induce a positive stress mindset), should influence the perception of the situation and should highlight the impact of the positive mindset. We have also emphasized the fact that mindsets should be conceptualized on a spectrum (strongly fixed, moderately fixed, neutral, moderately malleable, strongly malleable) rather than as a binary concept. The interpretation of the results obtained should therefore be made based on this model, rather than in a binary way by opposing the two types of mindsets.

The second study highlights an impact of mindset with regard to social value, in this case social utility. This dimension of value is particularly relevant for understanding professional evaluation behaviors. Overall, the perception of objectification results in a perception of oneself as having the characteristics of an object and as being deprived of traits describing a human being with a social value which enables performance in organizations. This relationship is promoted by adherence to beliefs that describe objectification in a negative light. This result is important because it highlights the existence of a mindset that can impact the processes involved in objectification and its consequences.

In these two studies, the process involving mindset concerns the transformation of self-representations. It was

not possible to highlight an impact with regard to mentalization. The indicators of dehumanization and mentalization are presented as pertaining to self-objectification, which is internalization with regard to the self in relationships referred to as objectification. We note once again (see Auzoult, 2019, 2021) that these different indicators are not interchangeable, mentalization relating to the deterioration of mental health, dehumanization being a symbolic indicator accounting for self-representation.

## THEORETICAL DEVELOPMENT

On the basis of this new result, it is possible to conclude that objectification at the relational level takes place in contexts where relational uncertainty requires to evaluate how to act with others. This evaluation of action potential (Auzoult, 2021, De Oliveira & Auzoult, In press) is thus likely to occur when power relations are at stake, when the activity requires coordination of conduct with others, or when it is difficult to predict others' reactions on the basis of their subjectivity. In this context, objectification enables us to perceive others on sufficiently simple bases to establish an action potential, i.e. a predictability of others' behavior. Most of the time, these relations of objectification lead to a symbolic self-perception as an individual devoid of human characteristics, in this case a self-objectification in the form of humanness or instrumentality. Sometimes these consequences affect the functioning of mental health. These negative consequences appear all the more strongly when they are supported by a negative mindset about objectification, i.e. beliefs about the negative consequences of objectification.

## CONCLUSION

The two studies that we present highlight for the first time the existence of a mindset associated with objectification. This mindset, when it describes negative content, impacts the relationship between the perception of objectification at work and its consequences with regard to self-representation. It remains for future studies to consider how the mindset can impact the process of objectification at other levels. It also remains for future studies to consider whether this type of mindset can be modified with a view to its deconstruction to limit negative consequences. It is true that this question is not unequivocal from an ethical point of view. On the one hand, the existence of a negative mindset favors the negative consequences of objectification. At the same time, it seems difficult to totally deconstruct and foster a positive representation of objectification.

This question depends on the demonstration of a positive impact of the mindset. We were not able to highlight the impact of a positive mindset, but it is possible to consider on the basis of the literature that there are contexts where the norms in force describe objectification in a favorable light. We have mentioned the case of



employment support schemes, but we can extend the reasoning to all contexts where the management of appearance can promote social interactions. It is also possible that this type of mindset can be effective in other contexts where reduction to the body is important, such as the sports field. The work context that relies on salaried workers is in fact directly based on the instrumentalization of people. Future research will have to clarify the role played by this type of mindset.

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## APPENDIX 1: BUILT SCALE OF MINDSET ON THE PHENOMENON OF OBJECTIFICATION

Please rate to what extent you agree or disagree with the following statements. For each question, choose from the following alternatives: (0) Strongly disagree; (1) Disagree; (2) Neither agree nor disagree; (3) Agree; (4) Totally agree

1. Being instrumentalized by others is negative and should be avoided
2. Being considered based on your physical appearance can lead to low self-esteem
3. Being treated like you don't think and/or feel anything is stressful
4. The fact that others use you to achieve their own goal prevents us from giving our best
5. Being considered by others only as a mindless body is demeaning
6. Being seen only as someone who can do what others want is humiliating
7. Being seen as interchangeable with someone else or with a machine can lead to feeling useless
8. Being treated as if you can't be self-sufficient saves mental and physical resources
9. Being instrumentalized by others can make you feel useful
10. Being considered based on your physical appearance can be flattering
11. Being treated like you don't think and/or feel anything is restful
12. The fact that others use you to achieve their own goal can help highlight its qualities
13. Being seen by others only as a mindless body is positive and can be used to one's advantage
14. Being seen only as someone who can do what others want can facilitate social relationships
15. Being seen as interchangeable with someone else or with a machine can lead to feeling versatile
16. Being treated as if you can't exercise autonomy allows you to have peace of mind by leaving the decisions to others