

# Sexually objectifying work environments and affective commitment in a sample of Italian waitresses: The mediating role of anxiety and job satisfaction

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## Abstract

**Background:** Sexual objectification can assume various forms, from interpersonal to cultural and environmental ones. Previous research has highlighted how working in sexually objectifying environments (SOEs) can lead female workers to experience negative feelings (i.e. anxiety, job dissatisfaction). The study's main aim was to investigate the relationships between sexually objectifying work environments, job satisfaction, anxiety, and affective commitment.

**Design and method:** In this study, we investigated the role of working in sexually objectifying environments (i.e. bars and pubs) in triggering female workers' (i.e. waitresses) feelings of anxiety and in decreasing their job satisfaction and their affective organizational commitment. Our hypothesis was tested through a mediation model with a sample of (N=546) Italian restaurant/bar waitresses.

**Results:** The results supported a model in which sexually objectifying environments had a direct effect on job satisfaction and both direct and indirect effects on anxiety. Further, sexually objectifying environments indirectly affected affective commitment through both anxiety and job satisfaction.

**Conclusion:** Working in a perceived sexually objectified environment can raise waitresses' feelings of anxiety and job satisfaction. These feelings, in turn, negatively affect workers' affective commitment toward their workplace. The limitations and implications of this study were discussed. The main implication concerns the need to implement people's awareness of the existence of SOEs and the harmful effects they may have on women.

## Keywords

Sexually objectifying environments, anxiety, job satisfaction, affective commitment

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## Introduction

“Do you want to serve at the tables? You must be low-cut,”<sup>1</sup> “A bar in Stabio hires a waitress, but only if she has large breasts.”<sup>2</sup> These are just a few examples of Italian newspapers' headlines that appeared in recent years, which make evident how sexual objectification is a current pervasive phenomenon in women's lives, including their workplaces. The theoretical framework of Objectification Theory<sup>3</sup> represents a key concept to understanding how interpersonal, environmental, and cultural factors affect the sexual objectification of women. Specifically, sexual objectification is defined as a psychological mechanism that occurs when a woman's body, body parts, or sexual functions are evaluated separately from herself.<sup>4</sup>

Thus far, most research on women's sexual objectification has focused primarily on the interpersonal and cultural forms it can take. These may include having one's body visually inspected (i.e. male gaze), sexist comments, unwanted sexual advances, distorted perceptions

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and evaluations by others, and the depiction of women as sexual objects.<sup>5-7</sup> Studies on sexual objectification have recently begun investigating its immersed and environmental forms, focusing on environments that promote and condone women's sexual objectification and their experiences within these contexts.<sup>8-10</sup> These environments, better known as sexually objectifying environments (SOEs), promote sexual objectification in two ways—by regulating women's appearance and clothing to draw attention to their sexual and physical characteristics and by sanctioning men's "right" to look at, stare at, and visually examine and evaluate women's bodies, physical appearance, and sexual desirability.<sup>10</sup>

While women can be sexually objectified everywhere, there are places, such as some workplaces, where sexual objectification is more accepted and normalized. For example, women are particularly vulnerable to sexual harassment in the restaurant-bar service profession, which is generally characterized by highly sexualized work conditions.<sup>11</sup> Previous research has highlighted how working in objectifying contexts, especially in sexually objectifying restaurant environments (SOREs), can lead waitresses to experience negative feelings toward themselves and their coworkers.<sup>8</sup> Waitresses also seem to experience feelings of body dissatisfaction, body shame, and body surveillance, increasing the likelihood of developing anxiety and eating disorders.<sup>9,12,13</sup> Working in sexually objectifying contexts is also significantly related to symptoms of depression and lower levels of job satisfaction as well as the feelings of burnout and turnover intentions among waitresses.<sup>10,12</sup>

Although the immersed and environmental forms of sexual objectification are becoming progressively prevalent in Western culture, little is known about the effects and consequences that SOEs may have on women. This study wanted to extend the previous literature by investigating sexually objectifying work environments and the potential psychological and job-related outcomes in an Italian context among waitresses.

### ***Sexually objectifying restaurant environments: Psychological and job-related outcomes***

A qualitative study conducted by Moffitt and Szymanski<sup>8</sup> found that working in SOEs may push waitresses (average age = 21.64) to experience negative emotions, such as sadness, anxiety, humiliation, anger, insecurity, guilt, and greater self-objectification both inside and outside the restaurant as well as poor interpersonal work relationships. A few years later, this perspective received further support also from quantitative studies. Szymanski and Mikorski<sup>13</sup> found that waitresses (average age = 30.63) working in a SOE, constantly receiving unwanted sexual advances and comments on their physical appearance, internalized the thin ideal and experienced increased self-objectification.

This, in turn, led them to experience greater shame regarding their bodies and greater body dissatisfaction. Moreover, working in a SOE weakens both organizational and personal power waitresses, causing them feelings of rumination and greater anxiety (i.e. anxiety over having their bodies judged by others).<sup>14</sup> The lack of power in these contexts can negatively affect female workers' coping responses, increasing their risk of developing mental disorders that disproportionately affect women.<sup>3</sup> Accordingly, they could experience a higher depressed mood that, in turn, negatively affect their feelings of well-being and increase the likelihood of job dissatisfaction, burnout, and intention to leave.<sup>8,10,12,15</sup>

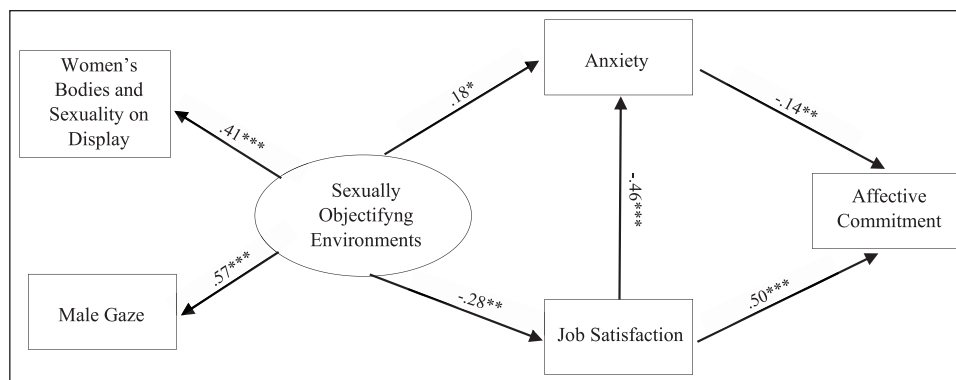
As far as we can ascertain, only a few studies have empirically investigated the relationship between sexually objectifying work environments and job-related outcomes for female workers. The literature has primarily focused on the well-being of people who work in contexts with a high probability of incurring harassment and discrimination by managers, colleagues, and customers.<sup>16-18</sup> The perception of being discriminated in the workplace is an important predictor of an employee's affective commitment to the organization and job satisfaction levels.<sup>17</sup> The literature demonstrates that job satisfaction is also associated with psychological problems that can influence workers' well-being, such as anxiety.<sup>19,20</sup> Moreover, feelings of anxiety were found related to affective commitment.<sup>21</sup>

Specifically, affective commitment refers to feelings of belonging and a sense of emotional attachment to the organization in which one works. It has been related to personal characteristics, organizational structures, and work experiences.<sup>22</sup> For example, women who perceived workplace gender discrimination had lower levels of affective commitment than their male counterparts.<sup>23</sup> Additionally, suffering sexual harassment in the workplace leads to lower affective commitment and job satisfaction.<sup>18</sup> Researchers have also shown that employees who report experiencing discrimination at work have lower levels of affective commitment.<sup>24</sup> Moreover, other studies have shown that affective commitment is both directly and indirectly related to perceived workplace discrimination<sup>25</sup> and negatively correlated with perceived racial<sup>26</sup> and age<sup>27</sup> discrimination.

In the light of these findings, and since experiences of sexual objectification in work settings represent sexual harassment and are considered a form of workplace discrimination,<sup>28</sup> it seemed reasonable to suppose that working in SOEs would also be linked to less workers' affective commitment.

### **Study overview**

So far, little attention has been paid to both understanding specific work environments where sexual objectification is encouraged and promoted and comprehending women's



**Figure 1.** Effect of sexually objectifying environments on affective commitment via anxiety and job satisfaction.  $N=546$ . \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ .

experiences in these environments. The present study focused on Italian restaurant/bar environments and aimed to verify the relationship between work experiences in sexually objectifying contexts and the psychological and job-related outcomes.

Specifically, our study had two main aims. First, we assessed the reliability, validity, and factor structure of the Italian version of the Sexually Objectifying Environments Scale-Restaurant Version (SOES-RV) in a sample of Italian waitresses. Second, we investigated the relationships among SOEs, job satisfaction, anxiety, and affective commitment among Italian waitresses, providing meaningful evidence for the external validity (see Figure 1).

In the light of the extant literature, we hypothesized that the perception of working in a sexually objectifying environment (i.e. pub/bar) would be related to greater anxiety, lower job satisfaction, and lower affective commitment.

## Design and methods

### Participants

The present study was carried out between December 2019 and February 2020. The sample included 546 Italian restaurant-bar and pub waitresses who completed an online questionnaire. The age of the participants ranged from 18 to 58 years ( $M_{age}=28.6$ ,  $SD_{age}=7.5$ ). The education levels ranged from 14% with an elementary school qualification, 71% with a high school qualification, and 15% with a university degree. The sampling was non-probabilistic and involved women who voluntarily participated. No incentives were provided for participation in the study.

### Measures

**Sexually objectifying work environments.** The Sexually Objectifying Environment Scale—Restaurant Version (SOES-RV) was adapted for this study.<sup>10</sup> The original version was comprised of 15 items rated on a 7-point Likert

scale ranging from 1 (strongly disagree) to 7 (strongly agree), including two subscales: Women's Bodies and Sexuality on Display (e.g., “*In the restaurant I work, female servers/waitresses are expected to project their sexuality through their appearance and dress*”) and Male Gaze (e.g., “*In the restaurant I work, male customers evaluate the appearance of female servers/waitresses*”). For this study, we translated the SOES-RV items into Italian using a forward and backward translation process to guarantee semantic correspondence between the Italian and English versions. Precisely, two Italian university teachers who did not participate in the study autonomously translated the items from English into Italian. Then, the two versions were compared, and discussed until agreement was reached on each item, thereby achieving a single version of each in Italian. Then, the Italian versions were back-translated into English by an expert translator whose first language is English but who was not familiar with the original versions of the scales. The original and the translated Italian versions were considered to be the same. Both subscales' internal consistency coefficients were satisfactory (Women's Bodies and Sexuality on Display  $\alpha=0.83$ ; Male Gaze  $\alpha=0.92$ ).

**Anxiety.** Anxiety was assessed using the Italian version of the State-Trait Anxiety Inventory (STAI-S).<sup>29</sup> This 20-item scale assessed the “anxiety experienced in a particular situation, or a ‘palpable reaction or process taking place at a given time and level of intensity.’” The participants were asked to report how they felt “right now,” on a 4-point scale ranging from “almost never” to “almost always” (e.g. “*I am tense; I am worried*”). Items were summed to form a scale score. In this study, the internal consistency coefficient was satisfactory ( $\alpha=0.92$ ).

**Affective commitment.** We assessed affective commitment with the affective subscale from the Italian version of the organizational commitment scale.<sup>30</sup> The subscale consists of 10 items evaluated using a 5-point Likert scale (1 = very

disagree; 5 = very much agree). An example of an item in this scale is: “*I would be very happy to spend the rest of my career with this organization.*” In this study, the internal consistency coefficient was satisfactory ( $\alpha=0.87$ ).

**Job satisfaction.** Job satisfaction was assessed using the Generic Job Satisfaction Scale (GJSS),<sup>31</sup> which was developed as a measure that could be used within a varied range of occupation types. The scale consists of 10 items evaluated using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). An example of an item in this scale is: “*I feel good about working at this company*” In this study, the internal consistency coefficient was satisfactory ( $\alpha=0.88$ ).

### Procedure

The data were collected using an online investigation between December 2019 and February 2020. An invitation to participate in the study was sent out via personal contacts and online forums oriented toward the Italian waitresses’ community. The individuals who received the invitation were also asked to forward the e-mail to their networks and contacts. In this way, we achieved many participants and collected a large and diverse convenience sample of Italian waitresses.

The participation was voluntary and anonymous. Participants were informed that responses would be reserved and that they should not attempt to look at others’ answers or discuss responses while the questionnaire was being administered. They had the right not to answer any questions that distressed them and were asked to answer the questions as honestly as possible.

### Data analysis

The data were preliminarily screened for outliers and errors. Multiple imputation (MI)<sup>32</sup> was used to handle missing data. Prior to executing MI, the data were assessed to confirm that missing values were missing at random (MAR). Consequently, the level of missing data was examined to guarantee that less than 10% of data were missing across scale scores. The postulation of MAR was met, and the frequency of missing data across scales (2–3%) was appropriate. Forty multiply imputed data sets were created. Means, standard deviations, and corrected item-total correlations (CITC) for each item were calculated. The internal consistency reliability of each subscale was examined using Cronbach’s alpha. Values greater than 0.3 and 0.7 were considered acceptable for CITC and internal consistency reliability, respectively.<sup>33</sup>

In order to examine whether the Italian version of SOES-RV supported the construct of the two factors of the original English version of SOES-RV, we used confirmatory factor analysis (CFA) on the dataset of the 546 participants. A two-factor model with items corresponding to the

Women’s Bodies and Sexuality on Display and Male Gaze scales were fitted to the covariance matrix of the corresponding SOES-RV items. As a measure of reliability, the internal consistency of the Italian SOES-RV was examined by computing Cronbach’s alpha correlation coefficient for each subscale and for the full scale.

At the multivariate level, the pattern of relationships specified by our hypothesized model (see Figure 1) was examined through a series of path analyses. The hypothesized model included one latent factor (sexually objectifying environments), two observed mediator variables (anxiety and job satisfaction), and one observed outcome variable (affective commitment).

The CFA and the evaluation of model fit were performed using AMOS SPSS and the maximum likelihood estimation method. Specifically, the adequacy of the model fit was assessed by the chi-square statistic plus suggested criteria for a set of fit indices, the comparative fit index (CFI), and the Tucker Lewis Index (TLI)  $\geq 0.90$ , which indicate a proper fit of the model. The root mean square error of approximation (RMSEA) with values  $\leq 0.05$  can be considered a good fit, values between 0.05 and 0.08 can be considered a good fit, and the standardized root mean square residual (SRMSR  $< 0.10$ ).<sup>34</sup> To compare two or more models, the Akaike Information Criterion (AIC)<sup>35</sup> was used for the smaller values representing a more suitable fit for the hypothesized model, and the Expected Cross-validation Index<sup>36</sup> was used for the smallest values exhibiting the greatest potential for replication.

## Results

### Psychometric characteristics of SOES-RV Italian version

Means, standard deviations, CITC, and confirmatory factor analysis are presented in Table 1. All CITC for individual items were above 0.3, indicating that all items correlated adequately with the rest of the corresponding subscale. A Confirmatory Factor Analysis (CFA) was performed. A two-factor solution emerged with adequate factor loadings and optimal fit indices:  $\chi^2=281.38$ ,  $df=89$ ,  $p=0.001$ , CFI=0.95, IFI=0.94, RMSEA=0.06 [90% CI=0.05–0.07], SRMR=0.04. All factor saturations were significant at  $p < 0.01$  (ranging from 0.43 to 0.87).

Cronbach’s alpha coefficients were calculated to assess the scale’s internal consistency within its two dimensions. The results showed satisfactory internal consistency (total scale  $\alpha=0.80$ , Women’s Bodies and Sexuality on Display  $\alpha=0.83$ ; Male Gaze  $\alpha=0.92$ ).

### Path models

Descriptive statistics and bivariate correlations among all study variables are shown in Table 2. We found that

**Table 1.** Factorial loadings, means, standard deviations, corrected item-total correlations for Italian Sexually Objectifying Environment Scale—Restaurant Version (SOES-RV).

| Item   | Factor loadings | M   | SD   | Corrected Item-total correlation | $\alpha$ if item deleted |
|--|-----------------|-----|------|----------------------------------|--------------------------|
| Factor I Women's Bodies and Sexuality on Display |                 |     |      |                                  |                          |
| 1.   | 0.62            | 1.2 | 0.78 | 0.56                             | 0.81                     |
| 3.   | 0.58            | 1.1 | 0.64 | 0.54                             | 0.81                     |
| 5.   | 0.56            | 1.2 | 0.70 | 0.52                             | 0.82                     |
| 7.   | 0.81            | 1.1 | 0.50 | 0.73                             | 0.79                     |
| 8.   | 0.49            | 1.1 | 0.47 | 0.43                             | 0.82                     |
| 9.   | 0.74            | 1.1 | 0.32 | 0.60                             | 0.81                     |
| 10.  | 0.59            | 1.0 | 0.25 | 0.50                             | 0.82                     |
| 11.  | 0.43            | 1.1 | 0.52 | 0.40                             | 0.82                     |
| 13.  | 0.52            | 1.2 | 0.69 | 0.47                             | 0.82                     |
| 14.  | 0.77            | 1.1 | 0.37 | 0.68                             | 0.81                     |
| 15.  | 0.43            | 1.1 | 0.47 | 0.38                             | 0.82                     |
| Factor II Male Gaze                              |                 |     |      |                                  |                          |
| 2.   | 0.85            | 4.3 | 2.2  | 0.81                             | 0.89                     |
| 4.   | 0.85            | 3.1 | 2.0  | 0.80                             | 0.89                     |
| 6.   | 0.86            | 3.7 | 2.1  | 0.82                             | 0.89                     |
| 12.  | 0.87            | 3.4 | 2.1  | 0.83                             | 0.89                     |

waitresses working in SOEs were at greater risk for anxiety and minor job satisfaction and affective commitment at the bivariate level.

A direct-effect model was used to assess the effect of the independent latent variable (sexually objectifying environments) on the dependent variable (affective commitment) in the absence of mediators (anxiety and job satisfaction). It was necessary to determine that there was a direct connection between the independent variable and the dependent variable. If the path coefficient from sexually objectifying environments to affective commitment was not statistically significant, no mediational effect could exist. The direct path coefficient from sexually objectifying environments to affective commitment ( $b = -0.28$ ,  $p < 0.01$ ) was statistically significant.

Next, in order to find the best model, we assessed three alternative models (see Table 3). First, a partially mediated model (Model A) with two mediators and a direct path from sexually objectifying environments to affective commitment showed an inappropriate fit:  $\chi^2 = 20.86$ ,  $df = 3$ ,  $p < 0.001$ , CFI = 0.96, TLI = 0.87, RMSEA = 0.11 (90% [CI]: 0.07–0.15), SRMR = 0.05. However, it is important to note that there was no significant direct effect of sexually objectifying environments to affective commitment in this model:  $b = 0.10$ ,  $p > 0.05$ . A fully mediated model (Model B) was tested subsequently with this path constrained to zero, which revealed an adequate fit to the data:  $\chi^2 = 23.64$ ,  $df = 4$ ,  $p < 0.001$ , CFI = 0.96, TLI = 0.89, RMSEA = 0.10 (90% [CI]: 0.06–0.14), SRMR = 0.05. When we compared the chi-square differences, no

significant difference between the partially (Model A) and the fully (Model B) mediated models ( $\Delta\chi^2 = 2.78$ ,  $df = 1$ ,  $p > 0.05$ ) was found.

In line with research that showed that people with low levels of job satisfaction were more likely to experience anxiety,<sup>21</sup> a path from job satisfaction to anxiety was added to the fully-mediated model (Model C), and the results showed a very good fit to the data:  $\chi^2 = 3.41$ ,  $df = 3$ ,  $p > 0.05$ , CFI = 0.99, TLI = 0.99, RMSEA = 0.02 (90% [CI]: 0.0–0.08), SRMR = 0.02.

A comparison between Model B and Model C ( $\Delta\chi^2 = 20.23$ ,  $df = 1$ ,  $p < 0.001$ ) indicated that this additional path significantly contributed to the model. The standardized path coefficient from job satisfaction to anxiety was statistically significant ( $b = -0.47$ ,  $p < 0.001$ ). The slightly smaller  $\chi^2$  and AIC values (Table 3) implied that Model C was better than Models A and B. Therefore, Model C was designated as the best model.

In Model C, job satisfaction and anxiety mediated the link between sexually objectifying environments and affective commitment. Specifically, in this model (Figure 1), sexually objectifying environments had a direct effect on job satisfaction and both direct and indirect effects on anxiety through job satisfaction ( $b = -0.14$ ,  $SE = 0.03$ ,  $p = 0.001$ , 95% CI = -0.21 to -0.09), and an indirect effect on affective commitment ( $b = -0.20$ ,  $SE = 0.04$ ,  $p = 0.005$ , 95% CI = -0.28 to -0.12) through job satisfaction and anxiety. Finally, job satisfaction had both direct and indirect effects through anxiety on affective commitment ( $b = -0.23$ ,  $SE = 0.03$ ,  $p = 0.003$ , 95% CI = -0.29 to -0.18).

## Discussion

The current study was designed to investigate the relationships among SOEs, anxiety, job satisfaction, and affective commitment in a sample of Italian waitresses.

The best model from the present study supported the mediational effects of both anxiety and job satisfaction on the relationship between SOEs and affective commitment. These results strongly suggest that SOE influences affective commitment via two pathways: the impact of SOE mediated by anxiety and the impact of SOE mediated by job satisfaction. In other words, a SOE produces a work context where waitresses experience high levels of anxiety and job dissatisfaction, which, for its part, leads to a decrease in their affective commitment. These results indicate that affective commitment appears to be the outcome of different interconnected psychological factors and not a direct effect of the SOE.

Another significant result of the current study concerns the path of SOE  $\rightarrow$  job satisfaction  $\rightarrow$  anxiety  $\rightarrow$  affective commitment, which was shown to be significant. This path could underline that the waitresses who work in a SOE may experience low levels of job satisfaction that may lead to them experiencing higher anxiety levels. In turn, this condition could lead to a lower affective commitment.

**Table 2.** Means, standard deviations, and correlations for all study variables.

|  | M (SD)     | 1       | 2       | 3       | 4       | 5 |
|--|------------|---------|---------|---------|---------|---|
| 1. Male Gaze                               | 3.6 (1.8)  | —       |         |         |         |   |
| 2. Women's Bodies and Sexuality on Display | 1.1 (0.33) | 0.25**  | —       |         |         |   |
| 3. Affective commitment                    | 3.6 (0.72) | -0.16** | -0.14*  | —       |         |   |
| 4. Anxiety                                 | 2.2 (0.60) | 0.15*   | 0.13*   | -0.40** | —       |   |
| 5. Job satisfaction                        | 3.2 (0.82) | -0.15*  | -0.16** | 0.59**  | -0.51** | — |

\*\* $p < 0.001$ ; \* $p < 0.01$ .

Therefore, it seems clear that lessening waitresses' feelings of job satisfaction is critical to their feelings of anxiety and affective commitment. Our results are also in line with literature which found that working in sexualized and objectifying restaurants was directly and indirectly related to less job satisfaction for waitresses.<sup>10</sup> Furthermore, the environment in which the waitresses work can significantly impact their anxiety levels. In fact, objectifying environments are contexts dominated mainly by men, where the male gaze is recognized and condoned. In this situation, waitresses will feel constantly observed and judged, leading them to feel anxious.<sup>14</sup>

Analyzing the current study's results, it could be interesting to consider the outcomes in the framework of the study's limitations. First, self-report scales were used. Even though this is a commonly used method of studying workers' psychological factors, biased responses due to social desirability may not be excluded. Second, participation in the study was voluntary; subsequently, the sample configuration may not characterize the features of Italian waitresses in general. Third, the study's cross-sectional design does not permit any solid assumptions of causality. Additional research should confirm and reinforce results, including longitudinal and experimental studies.

Moreover, to provide a more complete model, future studies should include interpersonal (i.e. self-objectification) and cultural forms of sexual objectification in addition to the environmental one. It is also important to remark that the present study has focused on a specific type of sexually objectifying environment (i.e. sexualized workplaces). Future research should consider the effects of other types of sexually objectifying environments, such as social and/or virtual environments. For example, a recent study shows how social media platforms have been regarded as an excessively objectifying environment.<sup>37</sup> Thus, this may be worthy of deep empirical investigations.

Additionally, researchers should keep in mind that women may react to sexual objectification in different ways. Personal differences in age, race, class, sexual orientation, personal sensibility, or personal life history can

**Table 3.** Fit indices among the competing models.

| Fit indices  | Model A   | Model B   | Model C*  |
|--------------|-----------|-----------|-----------|
| $\chi^2$     | 20.86     | 23.64     | 3.41      |
| df           | 3         | 4         | 3         |
| CFI          | 0.96      | 0.96      | 0.99      |
| TLI          | 0.87      | 0.89      | 0.99      |
| RMSEA        | 0.11      | 0.10      | 0.02      |
| CI for RMSEA | 0.08–0.15 | 0.06–0.14 | 0.00–0.18 |
| SRMR         | 0.04      | 0.05      | 0.02      |
| AIC          | 44.87     | 45.64     | 27.41     |
| ECVI         | 0.08      | 0.09      | 0.05      |
| CI for ECVI  | 0.06–0.12 | 0.06–0.12 | 0.05–0.07 |

$N = 546$ . \*Represents the best model.

AIC: Akaike information criterion; CFI: comparative fit index; CI: confidence interval; ECVI: expected cross validation index; RMSEA: root-mean-square error of approximation; SRMR: standardized root-mean square residual; TLI: Tucker Lewis Index.

influence women's responses to sexual objectification. For example, the average age of waitresses surveyed in the cited previous studies and in the present one ranged from 21 to 30 years. Since self-objectification was found to be lower among older women,<sup>38</sup> it should be interesting to investigate how older female workers may react to sexual objectification experienced in their workplaces. Future studies should account for such dissimilarities.

The present study adds to a broad research base<sup>3,9,15</sup> and suggests that sexual objectification in its various forms, including the environmental and immersed ones, could be harmful to women. Our results warrant further research to effectively develop adequate policies to prevent psychosocial risks in sexually objectifying work environments. Notably, our findings highlight the importance of developing training programs designed to improve the awareness of the different forms of sexual objectification (i.e., interpersonal, cultural, immersed) and their effects to prevent sexually objectifying behaviors and attitudes. Furthermore, given that committed and satisfied employees are generally high performers who contribute to organizational productivity, it would also be advisable to instruct leaders on the potentially harmful effects of sexual objectification on the organization. In fact, performance reductions due to employees' job dissatisfaction, anxiety, and stress could result in economic losses. Increased awareness could act as a protective factor for people regularly exposed to immersed forms of sexual objectification, such as the waitresses in our study. Public health intervention and prevention programs could be promoted, focused on the various locations in which sexual objectification can be perpetuated and sustained. For example, interpersonal interactions emerge as a significant source of support for sexual objectification and related processes. Other strangers, as well as significant others such as lovers and parents, can perform the namely objectifying gaze. Thus, on the one hand, it is crucial to

focus on the various sources of support for sexual objectification (e.g., media, peers, family), fostering the knowledge and the awareness of this phenomenon. People who learn to understand and recognize sexual objectification and its potential repercussions learn to avoid and combat it. On the other hand, it is critical to identify protective variables in order to reduce the impact of sexual objectification, implementing interventions from primary schools with a view to preventing discomfort and promoting health. Not for nothing, some recent research suggests that participating in certain sports activities<sup>39</sup> and practicing yoga<sup>40</sup> can help to reduce self-objectification and concerns about physical appearance. Promoting these activities could be an effective method for intervening and counteracting the vicious circle of sexual objectification in advance.

In the specific case of workplaces, prevention programs could start from the organization itself. In some countries, such as California, there are mandatory training programs to teach employees and employers which behaviors represent physical, psychological, and sexual abuse and which attitudes generate a sexualized work environment (<https://www.dfeh.ca.gov/shpt/>). The attendance of courses has reduced sexual harassment and has increased the identification of misconduct.

We are optimistic that future research will continue to shed light on the interpersonal, cultural, and environmental factors that support sexual objectification in the workplace. Further findings may allow the change of workplace cultures and the development of effective interventions to prevent sexually objectifying work environments.

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Not applicable.

### Authors contributions

C. Cabras: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Wrote the paper. C. Sechi: Analyzed and interpreted the data; Wrote the paper. S. Mula: Conceived and designed the experiments; Performed the experiments; Wrote the paper. All authors read and approved the final manuscript.

### Declaration of conflicting interests

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### Ethical approval

All procedures performed in the present study involving human participants were applied following the ethical guidelines and standards of the institutional and national research committee and the 1964 Declaration of Helsinki and its later amendments or

comparable ethical standards. Informed consent was obtained from all participants involved in the present study.

### Patient consent for publication

Not applicable.

### Informed consent

Written informed consent was obtained from a legally authorized representative(s) for anonymized patient information to be published in this article

### Significance for public health

Sexual objectification theory shows that women's sexual objectification can harm women's health. Sexual objectification, and the various forms it can assume, is associated with negative emotions, such as depression, anxiety, humiliation, anger, insecurity, and guilt. The significance for Public Health of the paper is that it identified potential unhealthy consequences, like feelings of anxiety and job dissatisfaction. This, in turn, was found to impact waitresses' affective commitment to their workplace. The study results can be used to provide guidance for preserving female workers' psychological health and implementing training programs to improve their awareness of sexual objectification and its consequences.

### Availability of data and material

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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