

The role of stranger harassment experiences in college women's perceived possibility of gender crimes happening to them

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Abstract

The present study examined the relation between stranger harassment experiences and college women's perceived possibility of gender and nongender crimes happening to them. Undergraduate women attending a British university completed self-report measures of stranger harassment and self-objectification (i.e., self-surveillance and body shame), and then evaluated four vignettes of various crimes on the severity of the crime and the likelihood of the crime happening to them. Results indicated that stranger harassment is a common experience for these British university women. Serial mediation analyses revealed a direct effect of stranger harassment on perceived likelihood of rape and perceived likelihood of intimate partner violence, and an indirect effect of stranger harassment on rape through self-surveillance, whereas stranger harassment and indices of self-objectification were unrelated to perceived likelihood of human trafficking and burglary. Discussion is centered on the role of objectifying experiences in perceptions of gender crimes where sexual and physical harm to women's bodies is emphasized, and the potential impact for those women on the receiving end of unwanted sexual objectification.

1 | INTRODUCTION

On an average day in 2014, a woman walking around New York for 10 hr was catcalled approximately every 6 min (Bliss & Roberts, 2014; Hollaback, 2014). Doris Chen reported a man who ejaculated on her in a carriage on the London Underground, also documented in 2014 (Sanghani, 2014). Although they vary in criminal severity, both encounters share the feature of unwanted sexual attention and illustrate the experience of sexual objectification—that is, “being treated as a body (or collection of body parts) valued predominantly through its use to (or consumption by) others” (Fredrickson & Roberts, 1997, p. 174). This specific and understudied form of sexual objectification is known as stranger harassment, which refers to a set of verbal and nonverbal sexual remarks and behaviors directed toward women and their appearance in public spaces and settings (Bowman, 1993). Stranger harassment is distinct from traditional conceptions of sexual harassment in that it is perpetuated by someone unknown to the target and typically occurs in a largely uncontrolled public space. In the present study, we advance the limited research on stranger harassment by examining its relation to women's perceptions of gender crimes happening to them.

Stranger harassment is prevalent and pervasive. Nine out of ten Canadian women have reported an experience of stranger harassment

at least once in their lives (Lenton, Smith, Fox, & Morra, 1999). In a nationally representative sample of Canadian women, over 80% reported experiences of harassment by a male stranger in public, a considerably higher rate than for nonstranger forms of harassment (Macmillan, Nierobisz, & Welsh, 2000). In a sample of women aged 18–34 living in London, 43% reported encounters of stranger harassment during the previous year (YouGov, 2012). Among a sample of U. S. college women, over 40% reported experiencing unwanted sexual attention from strangers at least once a month (Fairchild & Rudman, 2008). In an Australian sample, women reported an average of one encounter of stranger harassment every 2 days over a 7-day period (Holland, Koval, Stratemeyer, Thomson, & Haslam, 2017). Notably, sexual objectification by strangers has been associated with more negative consequences for the target than sexual objectification by acquaintances (Fuller-Tyszkiewicz, Reynard, Skouteris, & McCabe, 2012), even when the encounters were not labeled as harassment (Schneider, Swan, & Fitzgerald, 1997).

Objectification theory offers a feminist social psychological framework for examining the impact of pervasive and recurrent sexual objectification on women (Fredrickson & Roberts, 1997). Specifically, a primary psychological consequence of living in this cultural climate is self-objectification, which occurs when a woman views herself through the same sexually objectified lens. Girls and women who experience

this form of internalized sexual objectification tend to regard appearance as central to their self-concept, anticipate others' reactions to their appearance, and chronically monitor how they ought to look to others (Calogero & Watson, 2009; McKinley & Hyde, 1996; Vandenbosch & Eggermont, 2012). Extensive research has connected self-objectification to a variety of mental and physical health indices, as well as cognitive, motivational, and behavioral outcomes beyond the sphere of wellness, demonstrating a general undermining of these life domains (Calogero, Tantleff-Dunn, & Thompson, 2011; Roberts, Calogero, & Gervais, 2018).

Fairchild and Rudman (2008) offered the first examination of stranger harassment and fear of rape in the context of objectification theory, suggesting that stranger harassment and other forms of sexual objectification in women's everyday lives operate as socializing agents, shifting women's perceptions of their social environments in ways that make them more fearful and perceive more danger (Harris & Miller, 2000). Indeed, compared to men, women adopt more cautionary behaviors on a regular basis to secure their safety, such as never walking alone at night, holding keys between their fingers to form a "knuckle duster," and avoiding eye contact (Fredrickson & Roberts, 1997). In their study, Fairchild and Rudman tested whether experiences of stranger harassment predicted higher self-objectification, and whether this narrowed focus on appearance was linked to more fear of being raped, perhaps by heightening awareness of the potential for sexually motivated bodily harm. They found high prevalence rates of stranger harassment in their sample of female college students (41% at least once per month) and support for their basic hypothesis that stranger harassment was positively associated with self-objectification¹ and fear of rape. Testing a structural equation model of these associations revealed indirect effects of stranger harassment on both fear of rape (mediated by self-objectification) and voluntary restriction of movement (mediated by fear of rape). In addition, they demonstrated that the type of coping response employed in situations of stranger harassment moderated the association between stranger harassment and self-objectification: women who responded to stranger harassment with active coping strategies (e.g., confront harasser, talk it over with a friend) reported significantly less self-objectification compared to women who responded with passive coping strategies (e.g., ignoring harassment, blaming themselves, or believing nothing is wrong with it). Overall, passive coping strategies were more commonly reported than active coping strategies.

In the present research, we build on this prior work and tested the possibility that experiences of stranger harassment and self-objectification may be related to the *perceived likelihood* of being raped, as well as to perceptions of the likelihood of other gender crimes

happening to them, namely intimate partner violence (IPV) and human sex trafficking. Gender crimes refer to those crimes committed against a specific gender, and can include sexual and nonsexual attacks (Hodge, 2011). Rape, IPV, and human sex trafficking represent such crimes, whereby women are more often the victims than men, and the perpetrators of these attacks are typically men. For example, 88% of all rape victims in England and Wales between 2009 and 2012 were women (Ministry of Justice, 2013). Victims of IPV in England and Wales in 2016 were more likely to be women (1.2 million) than men (651,000)—for example, women were more likely to be murdered by their partners than men, with 73% female victims and 27% male victims documented (Office for National Statistics, 2013). Although roughly equal numbers of men and women are victims of human trafficking, they appear to be trafficked for purposes that follow gender lines. For example, among individuals trafficked to the United Kingdom between October 2015 and September 2016, 83% of women were trafficked for sexual exploitation and 94% of men were trafficked for labor exploitation (National Crime Agency, 2016a,b,2017a,b).

Each of these gender crimes represents the outcome of the physical intimidation and violation of women's bodies and physical boundaries. Thus, the fact that women who experience stranger harassment may also perceive an increased likelihood they could be sexually and physically victimized is not exaggeration. There is ample evidence that sizable proportions of men sexually assault women (Koss, Gidycz, & Wisniewski, 1987), men who engage in sexual objectification (e.g., cat-calls, leering, appearance commentary) of women are also more likely to rape women (Gervais, DiLillo, & McChargue, 2014), one in two women has experienced sexual harassment or some form of unwanted sexual behavior in her lifetime (Pina, Gannon, & Saunders, 2009), one in five women will be abused by a man in her lifetime (World Health Organization, 2013), and virtually nothing will ever be done about it (Gardner, 1995).

An additional distinction of the present study was the use of crime scenarios in the form of vignettes to assess women's perceived likelihood of a crime happening to them. We presented a specific description of the crime that made salient the target and the perpetrator and provided a common basis on which women's perceptions of the crimes would be assessed. We also included a nongender crime comparison (i.e., burglary) to clarify the relation between the objectification variables and the gender-specific nature of the crime. In addition, we examined self-surveillance and body shame as two separate indices of self-objectification, given the evidence for their conceptual and empirical independence in the literature (Calogero, 2011).

We tested the following hypotheses in the present study. First, we hypothesized that stranger harassment would be positively correlated with self-objectification (Hypothesis 1a). We measured self-objectification in the form of self-surveillance and body shame, two valid and reliable indicators of adopting an objectified self-view (Calogero, 2011; McKinley & Hyde, 1996), and we expected these two indicators to be positively correlated with each other (Hypothesis 1b). Second, we hypothesized that stranger harassment would be positively correlated with perceived likelihood of being the victim of all three gender crimes, but not with perceived likelihood of being burgled

¹In their study, Fairchild and Rudman (2008) measured self-objectification using the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996), and created a composite score from the Surveillance and Shame subscales. When we refer to self-objectification in the present article, we are referring to both self-surveillance and body shame, but we tested them as independent variables in our analyses and not in the form of a composite score. We refer to the individual components of self-surveillance and body shame when focusing on each variable specifically.

(Hypothesis 2). Third, we hypothesized that self-objectification would be positively correlated with perceived likelihood of being the victim of all three gender crimes, but not with the perceived likelihood of being burgled (Hypothesis 3). Fourth, and of primary interest, we hypothesized a serial mediation model whereby more frequent experiences of stranger harassment would be directly and positively linked to self-objectification, which, in turn, would be directly and positively linked to perceived likelihood of gender crimes, thus positing an indirect effect of stranger harassment on perceived likelihood of gender crimes through self-objectification (Hypothesis 4). We included perceived severity of the crime as a covariate to provide a stronger test of the relations between the main study variables in the serial mediation model.

2 | METHOD

2.1 | Participants

Ninety-five female psychology undergraduate students from the University of Kent were recruited through its research participation scheme (RPS), for which they received one course credit. Eighteen participants were excluded from the analysis because they identified as men ($n = 3$) or failed the attention check ($n = 15$), leaving a final sample of 77 women with an average age of 20.65 ($SD = 5.21$).² The majority of respondents identified as White (69%); and a small proportion identified as Black (10%), Asian (10%), or Other Ethnicity (10%). Respondents were mostly in their first year (53%) or second year (46%) of university, and 1% were third year. Most of the participants majored in social sciences (91%), with the remainder in languages (4%), health and social care (3%), and math and philosophy (2%).

2.2 | Measures

2.2.1 | Stranger harassment

The Stranger Harassment Scale (Fairchild & Rudman, 2008) was used to assess how often individuals have experienced situations of stranger harassment. This scale was derived from the Sexual Experiences Questionnaire developed by Fitzgerald, Gelfand, and Drasgow (1995) and has demonstrated reliability and validity. Respondents were asked whether they had ever experienced nine behaviors from strangers that ranged in severity (e.g., "Have you ever experienced unwanted sexual attention or interaction from a stranger?"; "Have you ever experienced unwanted touching, stroking, or hugging from a stranger?"). Respondents then reported the frequency at which they experienced these nine behaviors on a 6-point scale (1 = *never*; 2 = *once*; 3 = *once per month*; 4 = *2–4 times per month*; 5 = *every few days*; 6 = *every day*). Mean scores were calculated, with higher scores indicating more frequent experiences of stranger harassment.

²We included a question to assess participants' attention and engagement in the study. Specifically, we instructed them to select a specific response option to a question about their mood to determine whether they were reading the instructions carefully and providing genuine responses. We excluded participants from analysis if they failed this attention check.

2.2.2 | Self-objectification

The Surveillance subscale and the Shame subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) were used to assess two components of self-objectification. Self-surveillance measures the degree to which individuals monitor how their bodies appear to others (e.g., "During the day, I think about how I look many times."). Body shame measures the degree to which individuals feel shame about their bodies when they perceive themselves as falling short of cultural appearance standards (e.g., "When I'm not the size I think I should be, I feel ashamed."). High internal reliability and construct validity have been demonstrated for these scales in women (McKinley & Hyde, 1996). Participants rated eight items for each scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and we calculated mean scores for each scale, with higher scores indicating more self-surveillance ($\alpha = .79$) and body shame ($\alpha = .87$).

2.2.3 | Perceived likelihood of crime

Four vignettes were created for the purpose of this study to represent four different types of crime scenarios, drawn from previous studies (see Appendix). Three of the vignettes represented gender crimes, specifically rape (Vignette 1—Carlson, 2013), IPV (Vignette 2—Yamawaki, Ochoa-Shipp, Pulsipher, Harlos, & Swindler, 2012), and sex trafficking (Vignette 3—Herzog, 2008), and one of the vignettes represented a nongender crime, specifically burglary (Vignette 4—Bohner, Weisbrod, Raymond, Barzvi, & Schwarz, 1993). To verify that respondents understood the vignettes, they were asked to identify the perpetrator of the crime and the target of each crime (either by name or role). To assess the main dependent variable, respondents were asked how likely it was that they would be the victim of the crime portrayed in the vignette, from 1 (*very unlikely*) to 5 (*very likely*). We also asked respondents to rate the severity of the crime portrayed in the vignette, from 1 (*not severe at all*) to 5 (*very severe*).

2.3 | Procedure

Female participants were recruited through an online RPS to participate in a study described as an investigation of the "interpersonal and emotional experiences of undergraduate women" in exchange for course credit. Interested participants were directed to an online survey serviced by Qualtrics. After giving informed consent, participants completed a series of measures, followed by a full online debriefing. The measure of stranger harassment was completed first, and then the measures of self-objectification were completed in counterbalanced order, followed by the four crime vignettes in counterbalanced order. After reading each vignette, participants responded to the corresponding set of questions before proceeding to the next vignette. Demographic information was collected at the end of the survey. The attention check item was randomized within the survey.

Although the scales employed here have not been identified as producing adverse effects on participants, the scale items and the content of the vignettes contain sensitive material and request sensitive information. Therefore, we ensured participants were aware of their right to withdraw from the study at any time. Prior to completing the

TABLE 1 Percentage of women in sample that reported stranger harassment

	Never	Once	Once per month	2-4 times per month	Every few days	Every day	At least once per month
<i>Less severe</i>							
Catcalls, whistles, or stares	6.5	13.0	24.7	26.0	26.0	3.9	80.6
Unwanted sexual attention	18.2	22.1	22.1	19.5	16.9	1.3	59.8
Crude or offensive sexual remarks	26.0	23.4	20.8	15.6	14.3	0.0	50.7
Seductive remarks or behavior	20.8	28.6	22.1	18.2	10.4	0.0	50.7
Sexist remarks or behavior	31.2	22.1	16.9	19.5	9.1	1.3	46.8
<i>More severe</i>							
Unwanted touching or stroking	31.2	33.8	23.4	10.4	1.3	0.0	35.1
Subtle pressure to cooperate sexually	54.5	22.1	11.7	9.1	2.6	0.0	23.4
Forceful fondling or grabbing	40.3	40.3	13.0	6.5	0.0	0.0	19.5
Direct pressure to cooperate sexually	62.3	22.1	9.1	5.2	1.3	0.0	15.6

survey, participants were warned that individuals might experience some distress during the survey if they had a history of physical or sexual victimization. If participants did experience distress from the survey, we provided the contact information for the university counseling service and a national help hotline, and encourage them to use these resources. We did not receive any notifications of distress from participants in this study.

3 | RESULTS

Among the 77 women retained for final analysis, there were no missing data points. Data screening revealed no outliers or violations of normality. Table 1 presents the reported frequencies of stranger harassment experiences in this sample. Less severe experiences of stranger harassment occurred regularly, with 47%–81% of participants experiencing these forms of harassment at least once per month. More severe experiences of stranger harassment occurred less regularly, yet as many as 35% of participants reported these forms of harassment at least once per month.

Means, standard deviations, and zero-order correlations for the study variables are presented in Table 2. Given the difference in the quality of the four crimes, we tested first for overall differences in the perceived likelihood and severity of the crimes. Repeated measures ANOVA revealed the four crimes were not perceived equally in terms of likelihood, Mauchly's $\chi^2(5) = 6.66, p = .247, F(3, 228) = 33.20,$

$p < .001.$ A series of Bonferroni-adjusted (.05/6 = .008) multiple comparisons revealed that all crimes differed significantly from each other except for rape and burglary, where women viewed the likelihood of these two crimes happening to them similarly, $p = .305.$ Human trafficking was perceived as least likely, whereas rape and burglary were perceived as most likely to happen to them.

Perceived severity of the crime was also analyzed using repeated measures ANOVA. For this analysis, Mauchly's test indicated the assumption of sphericity was violated, $\chi^2(5) = 24.55, p < .001,$ therefore degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\epsilon = 0.84$). A main within-subjects effect was demonstrated for perceived severity, $F(2.52, 191.48) = 43.76, p < .001.$ A series of Bonferroni-adjusted (.05/6 = .008) multiple comparisons revealed that burglary ($M = 4.09$) was perceived as significantly less severe than all three gender crimes (rape $M = 4.77$; IPV $M = 4.64$; trafficking $M = 4.77$), whereas the gender crimes did not differ from each other in perceived severity, p 's = .15 to 1.00.

Perceived severity of the crime was not significantly associated with perceived likelihood of the crime across all four crimes (p 's ranged from .13 to .94); however, perceived severity of one crime was positively and strongly associated with perceived severity of the other crimes (r 's ranged from .43 to .58, all p 's < .001). Perceived severity of burglary was weakly negatively correlated with stranger harassment ($p = .027$), but stranger harassment was unrelated to perceived severity of the other crimes (p 's ranged from .16 to .96). Perceived severity of

TABLE 2 Means, standard deviations (SDs), and zero-order correlations for study variables

Measure	M	SD	1.	2.	3.	4.	5.	6.	7.
1. Stranger harassment	2.45	0.92	-	.29*	.07	.45**	.33**	.09	.02
2. Self-surveillance	4.90	0.96		-	.41**	.43**	.31**	.01	.06
3. Body shame	3.69	1.28			-	.30**	.28*	.12	.08
4. Rape likelihood	2.47	0.94				-	.30**	.32**	.33**
5. IPV likelihood	1.99	1.05					-	.43**	.30**
6. Trafficking likelihood	1.47	0.75						-	.12
7. Burglary likelihood	2.60	0.96							-

Note. IPV = intimate partner violence. * $p < .05.$ ** $p < .01.$

the crime was unrelated to the measures of self-objectification (p 's ranged from .13 to .96) with the following exceptions: self-surveillance was positively and moderately correlated with perceived severity of IPV ($p < .001$), perceived severity of human trafficking ($p = .029$), and marginally correlated with perceived severity of rape ($p = .063$).

In partial support of the first hypothesis, stranger harassment was moderately positively associated with self-surveillance, but was not significantly associated with body shame, and self-surveillance and body shame were moderately positively correlated. These correlations suggest more frequent experiences of stranger harassment were associated with women's monitoring of how their physical appearance would be evaluated by others, but not necessarily how ashamed they were of their bodies. However, self-surveillance was associated with more body shame, lending some initial support for the potential sequential indirect pathway proposed here.

The second and third hypotheses were mostly supported. Specifically, stranger harassment and self-objectification were moderately significantly associated with perceived likelihood of being the victim of rape and IPV, but unrelated to the perceived likelihood of being burgled. Stranger harassment and self-objectification were not associated with perceived likelihood of being trafficked. Thus, more frequent experiences of being treated like a mere body and/or viewing oneself in those terms was associated with a greater perceived likelihood of being the victim of those gender crimes that occur more often (i.e., rape, IPV) than a gender crime that occurs less often (i.e., human trafficking) or a nongender crime (i.e., burglary).

Given the patterns observed above, we proceeded to test our primary hypothesis for an indirect effect of stranger harassment on perceptions of gender crimes for rape and IPV, as these were the only gender crimes significantly linked to the objectification variables, with perceived severity of the corresponding gender crime as a covariate.

3.1 | Test of sequential mediation models

For the main analysis, we tested two serial mediation models using PROCESS (Model 6; Hayes, 2013) to examine the direct and indirect effect of stranger harassment on perceived likelihood of rape and IPV through self-objectification. In each analysis, stranger harassment was entered as the predictor (X), perceived likelihood of the crime happening to them was entered as the outcome (Y), self-surveillance (M1), and body shame (M2) were entered sequentially as mediating variables, and severity of the corresponding crime was a covariate in models of the mediator and the outcome. The significance of the indirect paths was assessed using 95% percentile bootstrap confidence intervals with 5,000 bootstrap samples. Given the small sample size in the present study, percentile bootstrap confidence intervals were preferred, as they have been shown to be resilient to outliers that may appear multiple times when resampling with replacement, compared to other tests of indirect effects (Creedon & Hayes, 2015).

In the first analysis, the full regression model predicted 34% of the variance in perceived likelihood of rape from stranger harassment, self-surveillance, and body shame, controlling for perceived severity of rape, $F(4, 72) = 9.10, p < .001$. Consistent with the proposed sequential

linkage among the variables, stranger harassment was directly linked to self-surveillance (direct $\beta = .31, SE = .11, p = .007, 95\% CI [.09, .54]$), and self-surveillance was directly linked to body shame (direct $\beta = .66, SE = .15, p < .001, 95\% CI [.37, .95]$). Partially consistent with the proposed indirect effects, stranger harassment was indirectly and positively linked to perceived likelihood of rape through higher self-surveillance (indirect $\beta = .09, SE = .05, 95\% CI [.01, .21]$), but not through body shame (indirect $\beta = -.01, SE = .02, 95\% CI [-.07, .03]$) or through self-surveillance and then body shame (indirect $\beta = .02, SE = .02, 95\% CI [-.01, .07]$). The direct effect of stranger harassment on perceived likelihood of rape was significant after accounting for these mediators (direct $\beta = .36, SE = .10, p = .001, 95\% CI [.16, .57]$).

In the second analysis, the full regression model predicted 21% of the variance in perceived likelihood of IPV from stranger harassment, self-surveillance, and body shame, controlling for perceived severity of IPV, $F(4, 72) = 4.44, p < .003$. Consistent with the proposed sequential linkage among the variables, stranger harassment was directly linked to self-surveillance (direct $\beta = .30, SE = .11, p = .007, 95\% CI [.08, .51]$), and self-surveillance was directly linked to body shame (direct $\beta = .66, SE = .16, p < .001, 95\% CI [.35, .98]$). Inconsistent with the proposed indirect effects, stranger harassment was not indirectly linked to perceived likelihood of IPV through self-surveillance (indirect $\beta = .06, SE = .04, 95\% CI [-.02, .16]$), through body shame (indirect $\beta = -.02, SE = .03, 95\% CI [-.09, .05]$) or through self-surveillance and then body shame (indirect $\beta = .03, SE = .03, 95\% CI [-.01, .10]$). However, the direct effect of stranger harassment on perceived likelihood of IPV was significant (direct $\beta = .31, SE = .13, p = .017, 95\% CI [.06, .56]$).

In sum, the mediation analyses revealed partial support for the hypothesized models for perceived likelihood of gender crimes (Hypothesis 4). The results demonstrated a direct effect of stranger harassment on perceived likelihood of rape and IPV, whereby more frequent experiences of stranger harassment were directly linked to women's greater perceived likelihood that they could be sexually or physically harmed in situations involving an acquaintance or an intimate partner. Stranger harassment was also indirectly linked to perceived likelihood of being raped through higher self-surveillance, but not body shame, and neither component of self-objectification linked stranger harassment to IPV.

4 | DISCUSSION

The present study examined the role of objectifying experiences in women's perceptions of gender crimes (compared to a nongender crime) happening to them. Notably, women's reports of the frequency of stranger harassment were high and comparable to estimates previously reported by other researchers (Kozee, Tylka, Augustus-Horvath, & Denchik, 2007; Swim, Hyers, Cohen, & Ferguson, 2001). Experiences of stranger harassment directly accounted for variability in perceived likelihood of rape and IPV, and this pathway was partially mediated by self-surveillance for perceived likelihood of rape, but not for IPV. Stranger harassment and self-objectification were unrelated to the perceived likelihood of being the victim of human trafficking or burglary.

Although positively correlated with self-surveillance, body shame was unrelated to stranger harassment, and this component of self-objectification did not play a significant mediating role in the models tested. The findings for body shame underscore the recommendation to treat self-surveillance and body shame as separate constructs in studies that measure self-objectification (Calogero, 2011).

The inclusion of other gender crimes and a nongender crime in the present study represents an important departure from previous research in that we examined scenarios within which women might feel vulnerable and victimized other than the potential for rape (e.g., Fairchild & Rudman, 2008). The overall patterns indicated that the experience of stranger harassment (i.e., unwanted sexual attention) was uniquely associated with perceptions of gender crimes that directly threaten and violate women's bodies, suggesting that stranger harassment is a sufficient reminder to women of their unequal status relative to men, and the potential for sexual and physical victimization by men (Parish, Das, & Laumann, 2006). Indeed, the descriptions of the crimes in the vignettes mapped onto these differences in bodily violation. Even though burglary and rape were rated as similarly likely to occur, burglary was unrelated to stranger harassment and self-objectification, which was consistent with the prediction that only those crimes involving the violation of women's bodies would be associated with stranger harassment and self-objectification.

We did not observe the expected pattern for the gender crime vignette depicting a human trafficking scenario. Although this vignette made reference to forcing the abducted woman to work as a prostitute, it is possible this depiction was too far removed from the women's day-to-day experience for them to be able to identify with it. Human trafficking was perceived to be as severe as the other gender crimes, but the relatively lower prevalence of human trafficking in the general population may have contributed to less variability in responses to the perceived likelihood of this crime happening to them. This lower variability might also partly explain the lack of association with the objectification variables.

We also considered why the indirect effect through self-surveillance was observed for perceptions of rape, but not for IPV. According to objectification theory, vigilant body monitoring (in the form of self-surveillance) is adopted as a strategy by many women to anticipate how others will view and treat them on the basis of their appearance, and thus helps them feel more in control of how others respond to them (Fredrickson & Roberts, 1997). Thus, self-surveillance may be more closely aligned with anticipating and avoiding potential sexual threats, which are central to objectification theory (Franz, DiLillo, & Gervais, 2016), and not necessarily with the anticipation or avoidance of all physical threats. For gender crimes that do not explicitly involve women's sexual body parts and functions, self-objectification may play less of a role in women's perceptions of them.

4.1 | Strengths, limitations, and future directions

From a design standpoint, we situated the descriptions of the different crimes within a social context in order to feature the crimes more vividly and within scenarios that university women might find more

relatable. Although we view the use of context-rich vignettes for the evaluation of gender crime perceptions to be a strength of this study, we also acknowledge that only a single context was given, which could have activated particular myths and stereotypes about these crimes, thus inflating or deflating responses to their perceived likelihood. For example, the rape vignette described a common situation that female students may find themselves in (e.g., socializing at the bar, have a few drinks, run into a friendly male acquaintance); however, the scenario also lends itself to rape myths by referring to alcohol intoxication and a woman agreeing to be alone with someone she did not know well (Haikalas, DiLillo, & Gervais, 2017). Future research would benefit from including more than one vignette for each crime, because differing circumstances may change participants' ratings of perceived risk in relation to their personal experiences of sexual objectification. Sexual objectification can also take a variety of forms and occurs in a wider variety of public and private spaces than what was assessed in the present study. Future research could examine a wider variety of ways that women are objectified to determine whether different types of sexual objectification differentially impact the perceived possibility of gender crimes and/or the cumulative effect of these converging experiences of sexual objectification on women.

In this study we tested a model that implied causal pathways from stranger harassment to perceived likelihood of gender and nongender crimes through self-objectification, but confirmation of these pathways as causally determined is warranted. Participants were also recruited from a relevant yet nonetheless convenience sample of young adult university women, which precludes the generalizability of the findings to young adult women outside of university and to women across the age spectrum who find themselves outside of the traditional objectification limelight. These patterns should also be replicated in more diverse samples of women. As it stands, these particular findings are bound by cultural context and represent the experiences of British women living in the United Kingdom—yet the objectification of women and its consequences are more widespread (Loughnan et al., 2015; United Nations, 1995). This point may be especially critical for investigating perceptions of gender crimes that may appear more or less frequently in the lives of women depending on the national and cultural context.

4.2 | Implications

The fact that experiences of stranger harassment coincided with women's perceptions of physical and sexual harm happening to them (from both strangers and intimate partners) further challenges lay notions that sexual objectification is harmless and merely serves to compliment and seduce women. The accumulation of these experiences of sexual and physical intimidation may impact the degree to which women believe they could be harmed and be the victim of gender crimes (Fairchild & Rudman, 2008; Ferraro, 1996; Fisher & Sloan, 2003). Multiple and complex downstream consequences of objectifying experiences for women have been documented (Calogero et al., 2011; Roberts et al., 2018), yet women's concerns about personal safety and the anxiety that accompanies concerns with being harmed by others

are significant outcomes directly associated with the experience of sexual objectification that have been given much less attention in the objectification literature.

One of the most ironic consequences for women who are targeted for sexual objectification and gender crimes is that women are also tasked with the responsibility of preventing these encounters from happening to them, namely, by restricting their movement and behavior in order to avoid sites of potential harassment (Bart & O'Brien, 1985; Ullman, 2007). The subtle perpetuation of this unequal and unjust treatment of women in the public sphere is largely ignored. In general, women as a social group are required to be more vigilant and work harder to ensure their personal safety on a day-to-day basis than men as a social group must do in the face of sexual threats and violence. We suggest the perpetrators of sexual objectification should constitute the first line of intervention and stranger harassment should be viewed as a form of victimization itself. Belgium, Portugal, Peru, Argentina, and New Zealand have laws banning street harassment and catcalling. On the back of the Harvey Weinstein sexual harassment scandal, France has introduced legislation against sexual harassment and violence, and plans to enforce on-the-spot fines for the harassment of women on the street (Marsh, 2017; Willsher, 2017).

While the criminalization of street harassment is a deterrent, it is not remedial action. The United States has street harassment laws too, but they vary by state, and as the opening of this article noted, these laws do not prevent it from happening. As The Telegraph has aptly noted, "Men still haven't grasped that rape culture begins with a pat on the bum" (Hemmings, 2017). Prevention and intervention efforts are needed that address toxic masculinity in boys and men as early as possible, which would encourage men to be part of the solution to ending violence against women, and would also be beneficial to their own mental health (Addis & Cohane, 2005; Drury & Kaiser, 2014; Foubert, 2005). We hope the burgeoning psychological research on the perpetration and perpetuation of sexual objectification will further help to inform how stranger harassment can be effectively reduced in the first instance (Calogero & Tylka, 2014; Gervais et al., 2014; Tyler, Calogero, & Adams, 2017), with corresponding reductions in women's perceived likelihood of being victimized by it.

5 | CONCLUSION

On the whole, the present research underscores the positive association between experiences of stranger harassment and perceptions of rape and IPV among university women—two gender crimes whereby women are disproportionately the victims of blatant sexual and physical harm and men the perpetrators. In addition to taking the view of oneself as an object of sexual desire, these findings suggest that women who experience sexual objectification also come to view themselves as potential objects of sexual violence—thus revealing yet another way through which women may come to internalize their objectification.

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APPENDIX: CRIME VIGNETTES

Vignette 1: Rape

Melissa was out at the bar with a few of her friends. While there she spotted Mike, a guy she had met a few weeks earlier at a work party, and they began talking. After a few hours, she decided to go home, because she was feeling slightly drunk. Mike suggested he should walk

her home. On the way to her flat, Mike forced her behind the nearest tree and shoved her up against it. Frightened, she tried to get out of his hold, but she could not move and he raped her.

Vignette 2: Intimate partner violence

Marci and Steve have been married for 4 years. They had an argument over the fact that Marci met a male work colleague for lunch without telling Steve. He was furious because he suspected Marci was cheating on him. Steve lost control, and repeatedly hit Marci in the face until she collapsed, screaming for him to stop.

Vignette 3: Human sex trafficking

Yelena was the main breadwinner for her family. A man offered her a good job in another country. Yelena decided her family needed the money, so she left her home for the first time, and traveled with him to start this new job. Once there, he took her passport and forced her to work as a prostitute against her will.

Vignette 4: Burglary

Andrea was walking home from work. She noticed two people loitering and drinking on the pavement in front of her flat. Upon turning the key and entering the hallway, she was grabbed immediately by two people, who had followed her in. They tied her up and then burgled her home.