RESEARCH ARTICLE



Younger Escorts Advertise Higher Charges Online than Older Escorts for Sexual Services Cross-Culturally

Michael J. Dunn 1

Published online: 15 March 2018 © The Author(s) 2018

Abstract

As men have universally expressed attraction to younger women, awareness of this proclivity in men by women should be maximally reflected in terms of mate value in younger compared to older women. Prostitution has been recorded across all cultures and historical epochs, and one way in which mate value in women can be explored is by obtaining data from online escort advertising sites. The current study accessed an online escort site called adultwork.com to compare advertised fees between escorts at various ages and age ranges in five different cultures (UK, Ireland, Australia, the USA and Europe) offering either incall or outcall sexual services. With the exception of Irish escorts advertising for an outcall service, differences were found in all countries sampled with younger escorts charging significantly higher fees than older escorts. The current findings are another example of how by accessing real-world online data we can successfully test hypotheses relating to sexual behaviour from an evolutionary psychological perspective.

 $\textbf{Keywords} \ \ \text{Mate value} \cdot \text{Age comparisons} \cdot \text{Female escorts} \cdot \text{Reproductive value} \cdot \text{Online advertisements} \cdot \text{Evolutionary psychological perspective}$

Introduction

Donald Symons once said "with respect to human sexuality, there is a female human nature and there is a male human nature and these natures are extraordinarily different" (Symons 1979, p.11). Even though the difference between the sexes with regards to sexual behaviour, mate preferences and desires has been purported to be exaggerated (Stewart-Williams and Thomas 2013), one category of behaviour where extreme differences in behaviour appear to exist is in the charging of, and the willingness to pay for, sexual services. The former is almost invariably the domain of women with the latter restricted almost entirely to men (Bonnerup et al. 2000; Burley and Symanski 1981; Symons 1979). Indeed, a 2014 global report reported that an estimated 95% of sex workers are women worldwide (All-Party Parliamentary Group 2014). Such a disparity could be explained due to the fact that men possess a desire for greater numbers of sexual partners and to

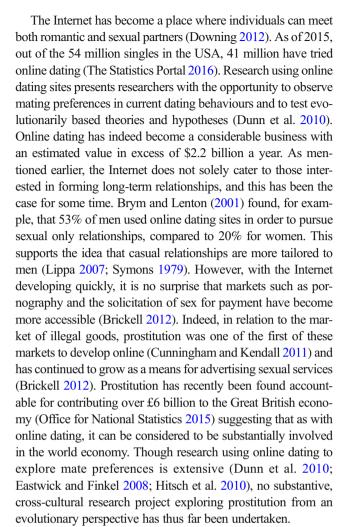


uncommitted, casual sex (Buss and Schmitt 1993; Clarke and Hatfield 1989; Schmitt 2003). Although arguably more costly to women than men, benefits can logically accrue to women who have over evolutionary time pursued short-term mating strategies (Greiling and Buss 2000). That said, Symons (1979), when focussing on the evolution of the desire for sexual variety, noted that one of the very few reasons why a woman during our evolutionary past would have sexual intercourse with a man other than her spouse was because she may benefit by trading sexual intercourse for meat, supplies or services. Symons argued that the concept of paying for sexual services from prostitutes is connected primarily to men as sex is widely known to be something that women have and something that men want. Clearly, prostitutes and escorts engage in casual uncommitted sex but they are rewarded by men who are willing to pay for such services. Often referred to as the 'oldest profession', prostitution has been recorded in all cultures and across all historical epochs (Bullough and Bullough 1996). The reason why women offer sexual services far more frequently than men may also be because women due to higher obligatory parental investment (Trivers 1972) focus more attention on wealth in men. This has been shown to be important for women cross-culturally and across historical time (Buss 1989; Buss 2012; Symons 1979).

Michael J. Dunn mdunn@cardiffmet.ac.uk

Department of Applied Psychology, Cardiff Metropolitan University, Cardiff CF5 2YB, UK

Men's universal preoccupation with youth and physical attractiveness in women (espoused by evolutionary psychologists as reflecting evolved attraction to cues revealing fertility and reproductive value) has been revealed by studies exploring, for example, preferences for body-shape (Puts 2010; Singh 1993), age preferences advertised in personal ads (Kenrick and Keefe 1992) and online dating (Dunn et al. 2010). Dixson et al. (2011) using an eye-tracking procedure found that men paid particular attention to the breasts on a woman's body more than any other part with mid-riff and waist being fixated on secondly. It is argued that these features are clear indications of age and fertility (Dixson et al. 2011; Johnston 2006; Puts 2010). Why do men prioritise these features when considering a sexual or romantic partner? Fisher (1930) was the first to propose the idea of reproductive value (RV) by calculating the average contribution an individual woman may have in terms of future reproduction at any age. Thornhill and Thornhill (1983) stated that RV would peak in women in their mid-teens and decline thereafter. Moreover, Buss (2012) concluded that a woman's RV will ultimately be zero by the age of 50. Symons (1979) proposed that regardless of the nature of the relationship (long-term vs. short-term), men will generally find younger women more attractive because they possess higher RV than older women. It is worth pointing out, however, that fertility differs from RV in that it is defined as the probability of the occurrence of pregnancy following a single coital act (Buss 1989; Symons 1979) which is said to peak in the mid-twenties again declining with age (Thornhill and Thornhill 1983). Research conducted by Montagu (as cited by Symons 1979) suggested that for men, when seeking women to be solely short-term sexual partners, the most attractive age range for them in order for sex to translate into reproductive success would be 23-28. Wood (1992) supported this and argued that fecundity, which is similar to fertility, peaks in the mid-twenties and rapidly declines as a woman approaches menopause. Buss (1989), however, found that men favoured a mean age of 24.83 in a woman, when seeking long-term relationships such as marriage. The targeting of youth by men has also been shown in studies exploring the number of responses women receive to ads placed in personal columns. de Sousa Campos et al. (2002) found when exploring Brazilian dating behaviour that younger women received more responses to advertisements than older women whereas the reverse pattern was observed for men. Such findings lead to the prediction that when seeking sex for payment, men will target younger and more attractive women when paying for sexual services. Women's tacit knowledge of the preeminent status afforded to their physical attractiveness by men should arguably translate into higher mate value in younger compared to older women. Mate value clearly relates to self-esteem. Wade (2000) found that fecundity-related aspects of the body (a sex appeal subscale) predicted women's self-esteem. In the case of woman escorts, this should manifest in higher charges/rates made by younger compared to older sex workers.



The current study aims to observe and analyse age differences in charges that escorts advertise online for sexual services. Previous research has tended to label sexual service providers as 'prostitutes'; however, in this study, they will be labelled as 'escorts'. The current study endeavoured to test the hypothesis that younger women (those possessing higher mate value) will charge more for sexual services than older women in the knowledge that men will be more willing to pay elevated prices. Based on this theoretical position, it is hypothesised that younger women (ages 20 and 25 in the UK, or age groups 20–30 and 20–34 in the non-UK samples) will advertise higher fees for sexual services than their older counterparts (30, 35, 40, 45 and 50 for the UK, 30–39 and 40–50 for Ireland, Australia and Eastern Europe and 35+ for the USA).

Method

Design

An Adult Service provider website (https://adultwork.com/) was selected as it allowed public access to the age of the



advertising escorts and importantly revealed the amount they charged for sexual services. No disclosure of personal information or registering with an account was required to access this information. All service user profiles accessed for data collection were from 'independent' escorts. Therefore, the charging of sexual services was controlled by the escort and not a 'procurer' or agency. Furthermore, it allowed for specific search criteria, such as exact ages, specific sexual services offered and whether services were offered as 'incalls' (at the escorts home or group residence) and/or 'outcalls' (usually at a hotel or the clients home). With regards to the type of sexual services offered, many profiles advertised 'extras' or additional charges for services such as 'come in mouth' and 'anal' and some only offered specialised services (e.g. sadomasochism). Only standard hourly rate charges were compared, i.e. the standard rate that included sexual intercourse.

Sample and Procedure

As data was accessible in the public domain and the personal identity of the escorts was never disclosed, ethical approval to conduct the study was automatically granted. The sample used was exclusively female (even though some male escorts do advertise sexual services on this site) as only analysis of women escort charges was relevant to the research hypotheses and that offering sexual services for financial reward, at least heterosexual, is an almost exclusively female domain (Symons 1979). Data for the study was collected between the dates 11/03/2016 and 17/03/16. To prevent the possibility of collecting data from each participant more than once, data was collected on a single day. Charges for all escorts advertising on that particular day were accessed and analysed. On entering the adultwork website, the UK was chosen as the first location to find adult service providers. When searching for escorts, the website offered a search engine where refined searches could be made. Inclusion criteria for the sample were women escorts, who offered services that included vaginal penetration with men. As search options allowed a visitor to the site the facility to set specific 'age searches', minimum and maximum ages could be set at the same age in order to select escorts of an exact age if required (for example, minimum age 20 to maximum age 20 produced escorts only aged 20). Escorts offering sexual services for both incalls and outcalls were included for further analysis. If participants did not advertise charges for either incalls or outcalls at an hourly rate, their data were not included. For escorts to be included in the UK sample, the currency had to be the Great British Pound (GBP) (Fig. 1). As currency clearly differed from country to country sampled, this precluded the implementation of a cross-cultural comparison analysis. Thus, analyses of differences in charges for sexual services were compared within country of advertisement only.

The homepage showed that five distinct samples (North America, Europe, Asia, South America, Africa and Oceania) were available to access on the website. Individual samples were created within the total sample due to the varying locations, and therefore currencies, which are displayed on the website when indicating the escort's hourly rates. It was decided that each specific purported age/age group sample (purported as age verification is virtually impossible to establish) would compose of, however, many escort's adverts that were available on the day of data collection. Thus, on the day this comprised: n = 65 (age 20), n = 127 (age 25), n = 74 (age 30), n = 61 (age 35), n = 47 (age 40)), n = 38 (age 45) and n = 25 (age 50) for incalls and n = 74 (age 20), n =130 (age 25), n = 81 (age 30), n = 75 (age 35), n = 53(40), n = 41 (age 45) and n = 29 (age 50) for outcalls for the UK. Precise ages were desirable rather than broad age bands as this captures a more distinct 'snap-shot' of age-specific behaviour and precluded the inherent problem of age overlap, which is evident in previous studies exploring age preferences (Dunn et al. 2010). As escort pictures accompany all advertisements on adultwork, the possibility of escorts misleading their target audience with regards to their age is negligible.

Maximum effort was made to ensure that escorts sampled had to be nationals of the country in question. The reason for this was that foreign or immigrant escorts from Eastern European countries in particular have been shown to undercharge, i.e. offer competitive rates for sexual services (Kelly and Regan 2000) and these appear to be over-represented in younger age groups. For all non-UK samples, age ranges as opposed to specific ages were compared and analysed. These age ranges were 20-29, 30-39, and 40-50 for Ireland, Australia and Eastern Europe or in the case of the USA two dichotomous, evenly split age ranges, 20-34 and 35+. For Ireland, sample sizes were as follows: n = 20 (age range 20–29), n = 20 (age range 30–39) and n = 22 (age range 40–50), for incalls and n = 25 (age range 20–29), n = 21 (age range 30–39) and n = 20 (age range 40–60) for outcalls. Only outcall charges were accessible for Australia, Eastern Europe and the USA. Samples being n = 33 (age group 20–29), n = 25(age group 30–39) and n = 22 (age group 40–50) for Australia, n = 33 (age group 20–29), n = 31 (age group 30– 39) and n = 24 (age group 40–50) for Eastern Europe and n =22 (age group 20–34) and n = 16 (age group 35+) for the USA. As mentioned above, escorts offer sexual services as 'incalls' and/or 'outcalls'. As escorts invariably charge more for 'outcalls' (travel expenses etc.) than they do for 'incalls', no within-subject comparisons were made. The decision to either use 'incall' or 'outcall' charges in order to compare



age in a given cross-cultural sample was based upon whichever permitted access to a sufficiently large sample size at the time of data collection. Also, not all escorts who offer incall services offer outcall services and vice versa thus precluding this within-subject factor being incorporated and analysed in a mixed design analysis.

Results

Hourly rates for sexual services (basic rates) were examined and recorded, and those satisfying the inclusion and exclusion criterion mentioned above were subsequently subjected to statistical analysis.

UK

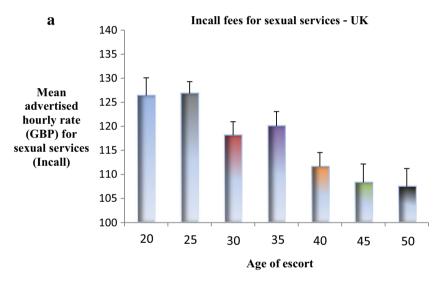
For incalls, a one-way between-subject ANOVA revealed significant differences across age in advertised charges for sexual services [$F_{6.431} = 6.19$, p = .001, partial $\eta^2 = .17$]. A Tukey

Fig. 1 a, **b** Showing mean hourly rates (Great British Pound) for incalls and outcalls, respectively, advertised by UK escorts at 7 ages. Values = mean ± SEM

post hoc analysis showed that 20- and 25-year-old escorts charged significantly more for sexual services than 40-, 45- and 50-year-old escorts (all p's < .05). A similar pattern of charges was observed in escorts advertising sexual services as outcalls [$F_{6,476} = 4.92$, p = .001, partial $\eta^2 = .14$]. Post hoc analysis revealed that 25-year-old escorts charged higher rates for sexual services than escorts at ages 30, 45 and 50 with 20-year-old escorts charging more for sex than 50-year-old escorts (all p's < .05). Lowest rates once again were observed for 50-year-old escorts who in addition to charging lower rates than 20- and 25-year olds also advertised lower rates than 40-year olds (p < .05).

Ireland

Once again, incall and outcall rates were collected and analysed by age; however, age ranges were substituted for exact ages. Two, one-way between-subject ANOVAs were conducted showing significant differences in advertised prices



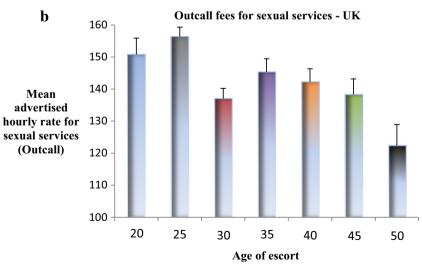
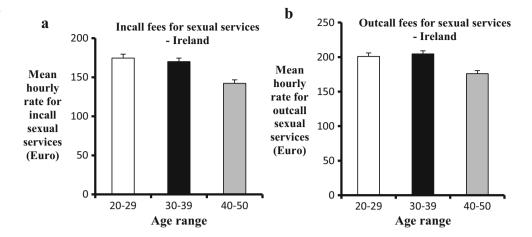




Fig. 2 a, b Showing mean hourly rates (Euro) for incalls and outcalls advertised by Irish escorts at three age ranges.

Values = mean ± SEM



across age ranges for incalls $[F_{2,59} = 3.40, p = .040, partial \eta^2 = .08]$, with 20–29-year-old escorts advertising higher rates than age range 40–50 (p < .05); however, no differences in charges were observed across age ranges for Irish escorts advertising outcall services $[F_{2,63} = 1.70, p = .190, partial \eta^2 = .009]$ (Fig. 2).

Australia

As insufficient numbers of Australian escorts offered an incall service, only those who advertised rates for outcall services were recorded for analysis (Fig. 3). A one-way between-subject ANOVA found significant differences in charges across age ranges [$F_{2,72} = 5.50$, p = .006, partial $\eta^2 = .14$] with age ranges 20–29 advertising higher rates than age groups 30–39 and 40–50 (both p's < .05).

Europe

A between-subject one-way ANOVA comparing escort age ranges for European escorts was conducted (20–29, 30–39 and 40–50) (Fig. 4). Once again, sufficient numbers of

Fig. 3 Showing mean hourly outcall rates (Australian Dollar) advertised by Australian escorts at three age ranges. Values = mean ± SEM

Mean advertised hourly rate (Australian dollars) charged for sexual services (outcalls) advertisers were available for outcalls only. Results showed a significant difference in hourly charges for sexual services across escort age range [$F_{2,85} = 3.42$, p = .015, partial $\eta^2 = .08$]. Post hoc comparisons using the Tukey HSD test showed that escorts in age category 20–29 charged significantly more for sexual services than escorts in age category 40–50 only (p < .05).

USA

Ages were categorised into either 20–34 and 35+. Younger US escorts charged significantly more for outcall sexual services than older escorts t = 2.02, df = 35, p = .011, one-tailed (Fig. 5).

Discussion

With relatively few exceptions (Griffith et al. 2016; Saad 2008), the utilisation of evolutionarily based theories with regards to exploring the preferred age by men for women offering sexual services has until now been somewhat ignored. By accessing advertisements placed by independent

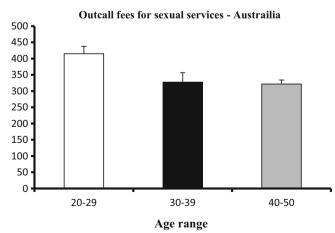
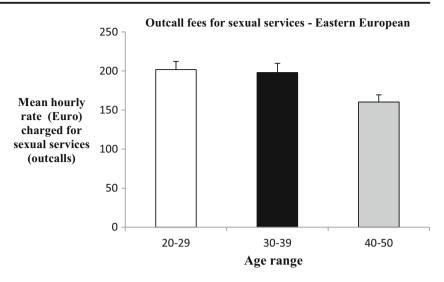




Fig. 4 Showing mean hourly outcall rates (Euros) advertised by European escorts at three age ranges. Values = mean ± SEM

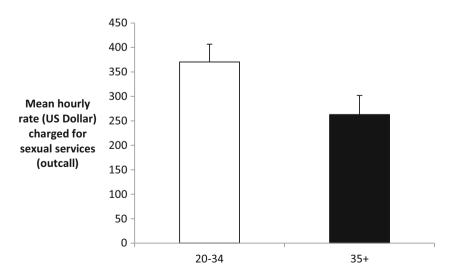


escorts on an online escort advertising site, the current study aimed to test the hypothesis that younger escorts will charge higher fees for sexual services compared to older escorts across a variety of cultures. More specifically, it was hypothesised that younger escorts, i.e. those in possession of youth and fertility (ages 20 and 25 in the UK, age group 20–29 in Ireland, Australia and Europe, and age group 20–34 in the USA) would charge significantly more for sexual services than older age/age group escorts as such preferences by men for women higher in RV and fertility have been shown to be cross-culturally invariant.

With reference to the UK specifically, this studies' hypotheses were clearly supported. For incall sexual services, 20-and 25-year-old escorts advertised significantly higher fees than 40-, 45- and 50-year olds. These findings were partially replicated when referring to outcall services where 25-year olds charged significantly higher fees than 30-, 45- and 50-year-old escorts and 20-year olds charging more than 50-year olds. One interesting finding gleaned from the current study is

the fact that clients did not show a preference for the youngest age (20) compared to the second youngest age (25) sampled (the UK sample was the only one permitting this type of comparison). It appears that youth per se does not determine rates that are charged. Research has shown that when adopting a short-term mating mindset, men prioritise cues revealing fertility rather than reproductive value (Confer et al. 2010) and fertility peaks in the mid-late twenties. Antfolk et al. (2015) in a large-scale Finnish study with a participant age range of 18-49 found that male respondents who were asked to indicate the age group that they preferentially direct their sexual thoughts, desires and sexual fantasies towards indicated women in their mid-twenties as being the recipients of such attention. Interestingly, the authors found disparity between men's patterns of sexual interest and their actual sexual activity with regards to women's age in that as men grow older the discrepancy between sexual interest and sexual activity as a function of the woman's age increases. Without detailed interviews, it is difficult to conclude that older male prostitute clients select

Fig. 5 Showing mean hourly outcall rates (US Dollar) advertised by US escorts at two age groups. Values = mean ± SEM





younger women for paid sex. However, 10% of a sample of 2665 men presented with a standard health screening questionnaire who had admitted paying for sex possessed a mean age of 34.7 years (Groom and Nandwani 2006). This is approximately 10 years older than the age at which escort charges appears to peak. Older men would appear to not pay for sex with age-similar prostitutes but select those with maximum fertility.

With regards to Irish escorts, analysis was undertaken on age ranges for both incall and outcall samples. The only significant difference reported was for incall prices where younger escorts (20-29) advertised higher charges than their 40-50-year-old contemporaries. No differences were reported between ages 30-39 and the younger or older cohort or for any of the three age groups for outcalls. Australia differed in that 20-29-year-old escorts charged significantly higher prices for sexual services than the two older age categories although insufficient sample sizes precluded an analysis of incall charges. A similar pattern was reported for European escorts although significantly higher fees for advertised sexual services were evident in 20-29-year-old escorts compared to the older group (40-50-year olds) only. Despite the small sample size for US escorts, a significant difference was reported in that younger escorts (20-34) advertised a significantly higher fee than escorts 35+ years. These findings support a recent study conducted by Griffith et al. (2016) in the USA which showed that factors such as youth and physical characteristics associated with fertility such as an idealised 0.7 waist-to-hip ratio (WHR), lower weight and body mass indexes and extent of nudity in the advertisement clearly predicted higher advertised prices for sexual services. Cultural invariance has also been shown in the manner in which online escorts advertise WHRs. These appear to be consistent with the near-universal male preference for women that possess this ideal (Saad 2008).

Central to the focus of the current study is the concept of mate value. Pawlowski and Dunbar (1999), when exploring personal advertisements in newspapers (also known as Lonely Hearts columns), found that individuals with lower mate value (older advertisers) were less demanding in their mate search criteria, presumably as they acknowledge their diminished, mate-attraction, bargaining power. Brase and Guy (2014) showed clear differences between the sexes with regards to estimates of mate value across age ranges. In their study, whereas men's mate value on a scale of 1-9 increased from 5.46 at age range 18-25 to 6.35 at age range 26-35 before tailing off to 5.19 at age range 36+, for women, it was significantly higher at age range 18–25 (6.6) tailing off to 4.73 and 4.79 at age ranges 26–35 and 36+, respectively. Eighteen to 25 was quite clearly the age range that consistently (apart from Irish outcall escorts) charged more for sexual services than older ages and ranges in the current study.

The current study is not without its limitations. Sample sizes, at least for non-UK advertising escorts, were small. That said, the study did benefit from accessing data all from one escort online advertising site, adultwork.com. Accessing online escort advertising sites specific to each country would have yielded larger sample sizes but would possibly have introduced more in the way of confounding variables. It should also be noted that all Eastern European escorts advertised in English so it would appear that they were targeting UK or at least English speaking tourists exclusively. It is difficult therefore to conclude that the study accurately captured a purported universal proclivity in men to pay more for sexual services with younger compared to older escorts/ prostitutes. It is possible for example that younger European escorts could accurately gauge only English clients willingness to pay a specific fee for sex and that this ability is honed solely through experience and feedback from UK clients and not due to a more innate understanding of their own pre-eminent matevalue status. The central question here is how do we determine the antecedents of mate value? Is it acquired through one's engagement with the external world (e.g. how we monitor and act upon feedback from the opposite sex during our adult life) or does a knowledge that fertility and status positively elevate mate value operate at an unconscious, universal level? According to Fisher et al. (2008) p.157, mate value is "the total sum of characteristics an individual possesses at a given moment and within a particular context that impacts on their ability to successfully find, attract, and retain a mate". Mate retention is of course an irrelevance for an escort and the relationship between herself and her client is accomplished simply by how much the mate is willing to spend financially for sex. The results of this study suggest that younger women are aware they possess something in particular that is valuable to men and that they are aware that men are more willing to pay for it. Related to this is the possibility that escorts misrepresent their age when advertising sexual services. That said, such a deception is unlikely to be fruitful however as escorts almost invariably provide photographs to accompany their advertisements. What the current study was unable to do was to determine precisely how and to what extent younger women, or escorts in this case, are aware they possess optimal mate value, i.e. their 'self-perceived mate value'. Future studies employing some form of mediational analysis or qualitative interview methodology could address this shortcoming.

In conclusion, the Internet provides the opportunity to advertise for a variety of services and prostitution is clearly one of these (Cunningham and Kendall 2011). With online escorts practicing safer sex than those engaged in traditional prostitution (for example, street-walkers) (Cunningham and Kendall 2011), there is no surprise that online sexual service websites, such as adultwork.com used in this study, are becoming increasingly popular amongst escorts and patrons of sexual services alike. Also, such websites clearly offer opportunities



for researchers to explore price differences charged by escorts across age and culture pertaining to a wide range of different sex acts and services. Additionally, age comparisons can be made regarding the number of escorts advertising sexual services at a given time (Castle and Lee 2008). The current study aimed to look at the effect of age on the charges per hour for sexual services amongst online escort advertisers from different countries. The results were supportive of previous research that indicates younger women possess a higher mate value, whereas older women, in this case older escorts possess lower mate value which translates in to reduced charges for sex.

Funding This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

Compliance with Ethical Standards

Conflicts of Interest The authors declare that they have no conflict of interest.

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