**Time to deconstruct the concepts of “foreplay” and “intercourse”: the real structure of human sexual encounters**

Julián Monge-Nájera¹, Mariana Rodríguez¹ & María Isabel González²

¹. Laboratorio de Ecología Urbana, UNED, 2050 San José, Costa Rica.
². Escuela de Estadística, Universidad de Costa Rica, 2060 San José, Costa Rica.

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**ABSTRACT:** Historically, the study of sexual behavior has been affected by diffuse concepts such as foreplay and coitus; the unreliability of self reports; and Eurocentrism. Here we deal with those problems and present data on frequency of sexual positions and stopwatch measurements of foreplay activities from direct observation of video recordings by 604 heterosexual Latin American couples. The most frequent positions were “woman on her hands and knees”; “woman on bed with man standing”; and “woman sitting on man”. The most frequent activities were fellatio; manual stimulation of the penis; and manual stimulation of the vulva. The longest mean durations of particular activities were 67 seconds for coitus, 37 s for fellatio and 34 s for petting. These frequency results differ from reports from the USA, possibly because of cultural differences but more probably because our results are based on what the couples actually do (rather on what they report, as in the American studies). Previous studies have merged a complex variety of sexual activities into a single imprecise category called “foreplay” and ours seems to be the first study to “deconstruct” foreplay into its individual components, and to use objective measurements of their duration.

**Key words:** objective measure of sexual behavior, self-posted sex videos, Latin American sexuality, detailed sexual practices, sexual positions.

**RESUMEN:** Históricamente, el estudio de la conducta sexual se ha visto afectado por conceptos difusos como “juego sexual” y “coito”; la falta de fiabilidad de los informes propios; y el eurocentrismo. Aquí tratamos esos problemas y presentamos datos sobre frecuencia de las posiciones sexuales y mediciones cronometradas del “juego previo” con base en la observación directa de grabaciones en video de encuentros íntimos de parejas heterosexuales latinoamericanas. Las posiciones más frecuentes fueron “mujer sobre sus manos y rodillas”; “mujer en la cama con el hombre de pie” y “mujer sentada sobre el hombre”. Las actividades más frecuentes fueron felación, estimulación manual del pene y estimulación manual de la vulva. Las duraciones medias más largas de actividades particulares fueron de 67 segundos para el coito, 37 s para la felación y 34 s para las caricias íntimas. Estos resultados difieren de los informados en EE.UU., posiblemente debido a diferencias culturales, pero más probablemente porque nuestros resultados se basan en lo que las parejas realmente hacen y no lo que informan (los estudios estadounidenses se basan en recuerdos informados por los participantes). Estudios previos han fusionado una compleja variedad de actividades sexuales en una sola categoría imprecisa llamada “juego previo” (foreplay) y el nuestra parece ser el primer estudio que “deconstruye” esa categoría en sus componentes individuales y que además usa mediciones objetivas de su duración.

**Palabras clave:** medida objetiva de la conducta sexual, vídeos sexuales auto-publicados, sexualidad de América Latina, prácticas sexuales detalladas, posiciones sexuales.

Even though the basics of human sexual practices have been described for American couples in classic studies by Kingsley, Masters and Johnson, and Hite, little reliable information exists for most countries, and some subjects like pornography and prostitution have received uneven attention (Lehmiller, 2014). More than half a century ago, Clellan S. Ford and Frank A. Beach made a pioneer effort by compiling most of the Western literature available at their time, summarizing many reports of varied origin and reliability (Ford & Beach, 1949). Their overall results are still considered valid; for example, they found some superficial differences, but basically concluded that all studied societies practiced “foreplay” and same-gender interactions, as well as oral, manual and anal activities additionally to vaginal penetration. They also found that frequent positions for intercourse included the “missionary” and women sitting on men, and that women could generally reach orgasm but not always through intercourse.
They also found that more educated people reported a greater diversity of sexual practices, and that women reported less masturbation than men (Ford & Beach, 1949).

Later work, mostly limited to some parts of American and, to a lesser extent, European society, reported that foreplay was relatively brief and that the most frequent masturbation practices among women were manual stimulation of the clitoris and labia, and the vaginal insertion of objects (Kinsey, Pomeroy, Martin & Gabhard, 1953). Overviews with a more international coverage have appeared in recent years, for example works on cultural perspectives of sexuality (Bolin, & Whelehan, 2009); same-sex orientation (Kimmel, 2014), and differences on how sexuality is perceived around the world (Caron, 2014), but to our knowledge, when data on sexuality in the USA and Europe are reviewed, there is no equivalent work about sexuality in Latin America, Africa and other less industrialized regions.

In recent years, the Durex Global Survey has periodically published geographically inclusive information, but the survey is not considered a scientific study. Nevertheless, in the scarcity of formal scientific research about cultural differences and similarities in sexual behavior, the survey is a source of hints about possible international trends that deserve further attention. For example, people report that intercourse lasts around 18 min, with slightly briefer durations in India and longer duration in Latin America and China (Lucas, 2014). Latin American sexual practices have more recently been studied, among others, by Cañizo and Salinas (2010) and by Monge-Nájera and Vega (2015). Cañizo and Salinas (2010) concluded that male Mexican teenagers are more precocious and masturbate more often than their female counterparts. Monge-Nájera and Vega (2015) found that the most frequent practice shown in Latin American videos was fellatio, followed by vaginal penetration; that violence and manifestations of power were rare, and that nearly all violence was simulated as part of sexual games.

None of these Latin American studies dealt with the duration of sexual practices, which are the subject of the present study. When considering studies about duration and other details of foreplay and intercourse, Weiss and Brody (2009) concluded that future research should have three characteristics: 1) stopwatch measurements, 2) information on positions and 3) representation of regions other than Europe and North America. Here we present a study that meets the three criteria: objective measurement from video recordings, detailed analysis of sexual positions and intimate practices, and data from a relatively large sample of Latin American couples.

**METHODS**

We analyzed all home-made sexual videos posted in the website Nereliatube.com from 2010 through 2013 (N=604 individual videos of varied duration, usually from 5 to 40 min). Details about the videos have already been published (Monge-Nájera and Vega, 2015).

We watched all videos, discarded those that showed lone individuals or that were not from Latin America, and selected those that showed heterosexual couples. We did not measure duration for activities that were cut during editing. For every video we recorded all positions used during the encounter (e.g. standing, sitting) and used a stopwatch to measure, from beginning to end, what we called “sexual practices” (e.g. fellatio, female masturbation). The practices and positions were defined as follows:

**SEXUAL PRACTICES**

**Oral Sex**
- Woman licks or sucks the penis.

**Petting**
- Hugging or stroking non-genital areas of the partner.

**Kisses**
- Normal kissing, i.e. stimulation with lips or tongue.

**Male stimulation**
- Woman rubs any part of her body (hands, breasts, etc., –with the exception of the mouth–) to stimulate male genitalia.

**Female stimulation**
- Man stimulates the vulva with any part of his body.

**Female masturbation**
- Woman stimulates vulva and vagina with her hands or with objects.

**Anal**
- Penis inserted in female anus.

**Anal stimulation**
- Anus stimulated manually.

**Cunnilingus**
- Man stimulates clitoris, vulva or vagina with his mouth.

**Intercourse**
- Vaginal penetration with the penis.
POSITIONS FOR INTERCOURSE

Top
Woman sits on lying man, face to face.

Top backwards
Woman sits on lying man, her back towards his face.

Fours
Woman on her hands and knees, the man –on his knees– penetrates the vagina from behind.

Lying
Face to face, both lying down, one partner on top (usually the man; also known as “missionary”).

Face to face
Man sits and woman sits on him, face to face.

Sixty nine
Any position in which both simultaneously use the mouth to stimulate partner’s genitalia.

Perpendicular
Man, standing, penetrates the woman, who can be on her belly or, more commonly, on her back.

Side
Both lying on their sides, man penetrates the vagina from behind.

Standing
Man, standing, holds the woman in the air or against a wall with his arms.

Sitting
Man sits and woman sits on him, her back towards his face.

Parallel
Both lying on their sides, face to face.

Lying behind
Woman lying on her stomach; man, also on his stomach but on top of her, penetrates the vagina from behind.

RESULTS

Most videos showed middle class couples, in their 20s and 30s, often from Mexico, who were aware that they were recording their sexual encounters and sometimes looked at the camera or even stopped to reposition it as needed.

Positions

The three most frequent positions were woman on hands and knees (“doggie style”); woman on edge of bed with man standing; and woman sitting on lying man, looking towards his face. The positions with intermediate frequency were “missionary” and the man lying on the bed with the woman sitting on him. Far less frequent

Fig. 1. Frequency of sexual positions, in number of cases. Chi-square = 560, p<.0001.
were both lying on their stomachs (with the man on top); both lying on their sides; and the so called “sixty-nine”, in which partners simultaneously lick or suck each other’s genitalia. Finally, the position in which the man stands and carries all the weight of the woman was very infrequent. This pattern is statistically significant (Fig. 1).

Practices

Vaginal coitus ("intercourse") was the most frequent activity seen in the videos. The most frequent non coital practices were fellatio and manual stimulation of the penis by the woman. Kissing, manual stimulation of the vulva by the man, self stimulation of the vulva, self stimulation of the penis, and petting, were less frequent. Finally, cunnilingus and anal stimulation were rare; and the pattern is statistically significant (Fig. 1).

Duration

In duration, the top three practices were coitus (mean 67 seconds), fellatio (37 s) and petting (34 s). They were closely followed by stimulation of the vulva by the man's hand, kissing and self stimulation of the vulva (around 30 s each). Cunnilingus, stimulation of the penis by the woman's hands, anal stimulation and self stimulation of the penis were briefer (around 20 s each) (Fig. 3).

DISCUSSION

At the time of the review by Ford and Beach (1949) it was reported that not only was missionary the most frequent position in all the studied regions of the world, but also that 70 % of American couples did not practice other positions, according to their own reports. Our results are different because the missionary was not among the three most frequent position in these Latin American couples. There are several possible explanations for this difference, perhaps self reports failed to mention positions that, at the time, were considered less acceptable, or maybe the current culture gives more importance to reaching the female orgasm, which was already considered more likely if the woman positioned herself on top of the man (Ford and Beach, 1949, p. 24). Additionally, couples may willingly expand their repertoire because they are video-recording their encounters for the future, among other possibilities.

The other positions, often with one or both partners sitting, or lying on their sides, are known to occur in the most varied societies (Ford and Beach, 1949; Kinsey, Pomeroy, Martin and Gebhard, 1953; Caron, 2014), and also are important in the repertoires of the couples analyzed in our study; on this respect, our results are not different from those reported in the literature.

On the other hand, the predominance of the "woman on hands and knees position" that we found is opposite
to the findings of Ford and Beach (1949), who reported it to be rare among all cultures because it produced little stimulation of the clitoris. This position is the original position of mammals and might have been under-reported if it was considered more “animal like” by the people interviewed for previous studies. Our use of video recording is not subject to false reports about what happened in the room and this can explain why it was found to be so frequent, but of course there is always the small but real possibility that couples do not act the same way when they know that they are recording their sexual activities. However, our results go against the prediction of “hiding forbidden positions” because camera awareness should produce two basic effects: not doing things considered shameful, and trying to “look their best” (i.e. more passionate behavior). Our impression is that these two effects are not important in real life and that couples soon forget the camera when sexual passion increases, but such effects are still a potential subject for future study. Additionally, we also do not think it to be the case, but it is still possible that couples that record themselves during sexual encounters may differ in some aspects of their sexual behavior from those who do not.

The literature based on self reports mentions that women masturbate less than men (Ford & Beach, 1949; Caron, 2014). Our results show that both sexes have the same rate of masturbation during their sexual encounters and we believe that a probable cause is that women feel more ashamed of reporting it, as informed by Ford and Beach (1949). In any case, some women may feel that masturbation is not needed when they are with a partner or that it is not worth trying if the man fails to do it properly.

Overall, our results agree with previous reports that show the normality of kissing, petting and manual and oral stimulation among all studied cultures (Ford and Beach, 1949; Caron, 2014). One result is unexpected, however: the low frequency of cunnilingus in our videos. This practice was reported by 50 % of couples in the early studies (Kinsey, Pomeroy, Martin and Gebhard, 1953) and we do not know why it was rare in the videos.

Non coital activities, called “foreplay” even if some occur after intercourse, are normal part of human sexual interactions. Early authors reported that they represented 10 min or less in the majority of couples (e.g. Ford & Beach, 1949; Kinsey, Pomeroy, Martin & Gebhard, 1953). Recent studies have reported foreplay means around 12 min in the USA and 14 in the Czech Republic (Brody & Weiss, 2009). It is well known that memory distorts some facts, particularly regarding frequency and duration (Fine, 2008); and people may not only think that they spent more time in foreplay than they actually did, but they may fail to distinguish between how often they do something and for how long they do it. In any case, the desired foreplay time seems to be around 6 min more than the experienced time of 12 min in an European population (Miller and Byers, 2004; Weiss and Brody, 2009). We did not study the total length of foreplay, but the mean duration of each particular practice within the intercourse, an aspect that, to our knowledge, has not been studied before; so our values (usually half a minute

![Fig. 3. Mean duration (in seconds) of sexual practices in videos from Latin American couples (bars: standard errors; total N= 2624 measurements with stopwatch).](image-url)
per individual foreplay act) will serve as a baseline for future studies.

The scarce data on the duration of sexual intercourse worldwide are mostly based on self-reporting and tend to overestimate duration (Levitt, 1983; Hill, 2007). It has been reported that intercourse lasts 5 min or less, with male orgasm reached in less than 2 min and female orgasm in under 5 min (Ford & Beach, 1949; Kinsey, Pomeroy, Martin & Gebhard, 1953). Ejaculation in less than 1 min is considered precocious (McMahon et al., 2008) and more recent studies found self-reported intercourse mean durations of 7-16 min in Europe (Brody and Weiss, 2009). Our results indicate that each case of coital penetration lasts a mean of 56 s before the penis is taken out for a change in position or activity; however, normally there is a sequence of several penetrations and their total durations may indeed add to a mean total of 7-16 min, in agreement with literature and also with the length of the videos that we analyzed. Furthermore, frequent changes in position or practice may be intended to give variety to the video.

The main contribution of the present study is based on the use of objective measurements (from video recordings) instead of self-reported estimates; the detailed “deconstruction” of sexual sessions into the individual acts that compose them (instead of merging them into the general term “foreplay”); and the focus on a society other than the better studied American and Western European societies. We hope this three-element approach inspires others to check the validity of our results in their own societies.

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