Effects of condom availability on their use: A field experiment in a Peruvian *hostal*

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Perú hass a high rate of unintended pregnancies. STI rates grow. New policies are needed. Contextual factors in the condom use decision are understudied. Self-reported measures of use have proven unreliable.

I used a *hostal* (love-motel) to conduct a field experiment. 102 couples were randomly allocated to three groups with different levels of condom availability. Instead of using self-reported measures, after a couple left, I searched their room for used condoms.

Couples in rooms with a condom on the nightstand were 268% more likely to use one than the control group. For couples with a condom available at the reception desk, the increase was 176%.

Facilitating condoms in *hostales* is a suitable strategy to decrease unprotected sex in the country.

Keywords: Sexual Health; Condom use; Contraception; Field experiment; Trace measures

1. Introduction

1.1. Sexual health in Perú

About 42% of ever-married, sexually active Peruvian women do not use modern contraception (INEI, 2024). Unfortunately, current policies have not been able to reverse this phenomenon (Sánchez & Ramirez, 2011). Two consequences arise from this issue.

Around 53% of pregnancies in Perú are unintended, and they disproportionately affect people from low-income groups (Gakidou & Vayena, 2007; INEI, 2024). Unintended pregnancy has been correlated to lifelong adverse consequences for the mother: higher secondary and tertiary dropout rates (Mendoza & Subiría, 2013), a greater chance of being a victim of physical, psychological and sexual violence (Zhong et al., 2016) and an increased maternal death rate (Sánchez & Ramirez, 2011). The negative effect is also felt by their children and their immediate family (Yakubovich et al., 2018) ;because of this, unintended pregnancies are one of the mechanisms through which the circle of poverty reinforces inequalities in the entire continent (Batyra, 2020).

In Perú, the incidence of Sexually Transmitted Infections (STIs) appears to be steadily rising. STIs were more prevalent among specific risk groups: men who have sex with men (MSM) and male and female sex workers, but in the last decade, there has been an increase in rates among heterosexual women as well (Sánchez & Ramirez, 2011). Up to date or precise numbers are not available, which evidences how sexual health is not only a low-priority topic in the country, but also something that is kept out of the public discourse by the conservative groups in power (Gallego & Romero, 2017).

The causes behind risky sexual practices are multiple and complex. Here, we will focus on three. The first is the unrealistic optimism bias, the belief that the chances of experiencing various adverse life events are consistently below the known population

average (a statistical impossibility). In our case, people know that a person having unprotected sex can get pregnant or infected with an STI, but they believe that they will be exempt from those outcomes despite the lack of protection. This bias is not easy to reverse; it can be found even in cases of individuals with either first or second experience in the matter, such as sex workers and MSM (Bruce et al., 2011; Kesler et al., 2016).

Another common cause for the inconsistent use of contraception, especially of non-permanent devices, is the inability to defer gratification. This is the process through which a person decides to forbear an immediate reward to obtain a better one later (da Matta et al., 2012). Multiple studies have shown that this general decision-making bias can have effects that ripple through different spheres of life, including health-related issues such as alcoholism, smoking, eating habits (Bickel et al., 2012), as well as contraceptive use (Reimers et al., 2009).

One last cause for unsafe sexual behavior is related to the embarrassment associated with the procurement of contraception. Individuals, especially young ones, fear the social implications that their active sexual status might have; they can feel ashamed or afraid of being seen buying condoms or pills (Daley, 2014; Moore et al., 2008). These feelings are strengthened by two strong cultural influences in the region: conservative religious beliefs that promote a purely and *machismo* and *marianismo* beliefs. Conservative religious believes tend to portray sex outside the confines of marriage and reproduction as sinful . Contraceptive use is then a source of shame. *Machismo* and *marianismo* propose very strict gender differences among men and women. Regarding their sexuality, men are expected to "conquer" many sexual partners, while women are expected to "remain pure" and be sexually passive. These believes also place the responsibility of contraception on women while, at the same time, implying promiscuity if they buy or use

it (Decat et al., 2015; Djellouli & Quevedo-Gómez, 2015; Quevedo-Gómez et al., 2012; Soberón Rebaza, 2015)

1.2. Previous methodological practices

Traditionally, studies of sexual behavior have relied on self-reported surveys (Fonner et al., 2014; Free et al., 2011). However, serious concerns have been raised about this methodology (Knerr, 2011): It has been established that social desirability affects dramatically the results by generating an artificial overreport of condom use (Anderson et al., 2017). Substantial inconsistencies have been identified between the reported use of contraception among different members of the same couple (Choiriyyah & Becker, 2018; Koffi et al., 2012), as well as biomarkers of unprotected sex, such as prostate-specific antigen (Aho et al., 2010; Woolf-King et al., 2017).

Several national and international studies rely on the Demographic and Health Survey data (DHS). However, this valuable resource is not without its weaknesses. First, it only collects information from women. Second, when answering, female participants cannot provide information about parallel methods or different methods for different partners. Finally, it asks respondents to register their use of contraceptives for the three years prior. Since autobiographical memory can be prone to recall errors (Tulving, 2004), the respondents' capacity to give accurate information is limited.

Although some experimental studies in sexual behavior have been done before, they are conducted in laboratory settings, under artificial sexual stimulation, and rely almost exclusively on self-reported measures of future behavior intention given by university students (Wegner et al., 2017). Therefore, there is a need for a data collection method to overcome these studies' low external validity. Improving research methods is particularly important because the inconsistency between the information reported and actual behavior can hinder the design and evaluation of interventions. Hence, it is necessary to

develop alternative mechanisms to generate proper evidence (Free et al., 2011). In Lima, the presence of *Hostales* allows for exploring an experimental solution to this issue.

1.3. Hostales

Hostales (Pl. *hostal.* Pronounced "os-**ta**-les") are an omnipresent business in Latin American cities; they are places where people rent rooms to engage in commercial or non-commercial sex. *Hostales* can be used by couples with little privacy in their homes or for extramarital affairs. Additionally, sex workers who work through an agency often meet their clients in an *hostal*. The specific proportion of the *hostal* clientele that is comprised of sex workers varies widely depending on the *hostal's* protocols, location and prices. Based on complementary reports from interviews with hostal staff carried out during this study, the percentages range between 0% to 40% of their total visits.

Hostales are marketed toward couples with amorous intentions; the establishment's adverts on the street are filled with loving couples, and *hostal* names usually have romantic or flirtatious undertones. They advertise an array of services; some are ordinary (e.g., cable TV, Wi-Fi), while others cater to more erotic interests (e.g., XXX videos, tantra chairs) or a need for secrecy (hidden entrances, fake receipts). Although their sexual purposes make them morally questionable by conservative groups, they are still legal businesses with working permits provided by the local government. *Hostales* can be found all over the city, but they tend to cluster around commercial areas, especially near markets and shopping malls, from which they get some of their clientele (see Figure 1).

Considering how ubiquitous these businesses are and how they can combine several risk groups, it is surprising how few studies of sexual behavior have been focused on them. Ccopa (1999) was the first and one of the only researchers to tackle the Peruvian *hostal*

phenomenon. He states that *hostales* started their operations as a within-city alternative to out-of-city motels in the early 90s. By the end of the decade, they had become a very common business in the city. Regarding their clientele, he confirmed that *hostales* catered to a very diverse arrange of people. Clients could be of any age or marital status. Since their prices can varied widely, they catered to people from different socio-economic statuses too. Ccopa also identified that *hostales* were used by MSM and sex workers, but he purposedly excluded them from his analysis. Nevertheless, Colby Passaro et al., (2019) studied the intersection of location of sexual contact, partner type and substance use in MSM in Lima. They found that the encounters MSM had in *hostales* were more likely to be higher risk (i.e., more likely to involve drugs and large amounts of alcohol), than those the MSM had in their homes.

Thirty years ago, Gorter et al. (1993) tried to establish how many people actually used condoms in Managua, Nicaragua. They made use of *hostales* as a setting for an experiment. The researchers provided condoms to five *hostal* owners who were instructed to distribute them to the visiting couples. Once a couple checked out, their room was searched for used condoms. They found that, if provided with a condom, 37% of the 128 couples used it.

Based on this methodology, Egger et al. (2000) designed another experiment to assess whether the way *hostales* supplied condoms and the presence or absence of health-education materials affected condom use. They discovered that condoms were more frequently used in commercial encounters (60.5%) than in non-commercial ones (20.2%). Condom use was at its highest when condoms were made available in the room. Directly providing the couples with condoms when entering the *hostal* had a similar effect in the case of commercial encounters but less so in non-commercial ones.

1.4. Condom use

Using contraception is not a stable behavior; it can be affected by multiple variables and may even be subject to a last-minute decision based on immediate availability (Kusunoki & Upchurch, 2011). In Perú, one of the most used contraceptive methods, especially among single people, is the male condom (INEI, 2024; Villaran et al., 2012). This method has several advantages: It prevents both pregnancy and the spread of STIs; it can be used by heterosexual couples and MSM in vaginal, oral and anal sex; and as a single-use disposable device, it leaves a trace that is easily identified. The last argument is essential for the proposed method of this study.

National public policies have sought to increase condom use (Ministerio de Salud del Perú, 2013), and some authors advocate for increasing condom availability in places conducive to sexual encounters as a strategy to do so (Bollinger et al., 2004; Egger et al., 2000; Gakidou & Vayena, 2007; Gorter et al., 1993).

Having established the necessity for more information regarding the relationship between contraceptive availability and use in Perú, this paper aims to answer three main questions:

- Does the free availability of condoms in *hostales* promote the condoms' use?
- Does the condom's accessibility differentiate the effect?
- Are experiments in *hostales* a feasible strategy to study sexual behavior in Perú?

I hypothesize that free availability of condoms will increase their use. Additionally, the more anonymous and quicker the provision of condoms is, the greater the effect will be. This is because an anonymous delivery decreases the sense of embarrassment, and a quick provision diminishes the need to defer sexual gratification.

2. Methods

2.1. Data collection strategy

A field experiment was carried out in a *hostal* in a middle to low-income area of Lima using the following variables:

- Dependent variable - Condom use during the sexual encounter. Dichotomized into:
  - Condom used - Operationalized as cases where a rolled-out condom or an open condom wrapper was found in the room.
  - No condom used – Operationalized as any other case but "Condom used".
- Treatment variable - Condom availability:
  - *Treatment-1 (T_1) - Condom available in the room*: one condom was placed inside the room on the nightstand.
  - *Treatment-2 (T_2) - Condom available outside the room:* a notice stating that a free condom could be obtained at the reception desk was visible inside the room, above the bed's headboard.
  - *Control (C) Without condoms*: No condoms were provided by the researcher.
- Control variable - Room price. This *hostal* had three types of rooms at different prices. This variable was included to serve as a proxy for socio-economic status. The reasoning is that the smaller and thus cheaper the room, the less available resources the couple might have.
  - Small: S/ 15.00 (≈ US$ 4.00)
  - Medium: S/ 25.00 (≈ US$ 6.50)
  - Large: S/ 35.00 (≈ US$ 9.50)

2.2. Preparation of the experimental setting

I visited seventy-one *hostales* in the San Juan de Miraflores district in Lima's southern cone to find a setting for the experiment. *Hostales* are very private businesses, so the overwhelming majority were not interested in participating in the study. Nevertheless, I finally reached an agreement with an *hostal* owner. His *hostal* did not vary significantly from the others in the area, but, by happenstance, its owner had children working on their undergraduate theses, which made him relate to my situation and be more open to participate on the study. A S/.300 (US$ 80) payment was made to cover my accommodation during the data collection period and as an incentive for its participation. The selected *hostal* was a small venue with seven rooms available for rent. It was manned solely by the owner, who was in charge of management, reception, and cleaning. Before starting the data collection, I trained him in the experiment's goals and procedures. The *hostal* had three types of rooms. The price of each depended on a mixture of room size, window orientation, bathroom privacy, stay duration and personal factors (if the clients were "regulars" or were perceived as willing to pay a bit more). I divided the *hostal*'s rooms into three groups within each price bracket. Less than three rooms were available for two of the three price brackets. For this reason, some of their treatments were changed during the collection process (e.g., Room 207 was T_1 one day and Control the next).

In order to guard the participants' anonymity, no personal information was collected from the sample. Thus, the information we possess about high-risk groups is non-existent. Still, the owner specified that the *hostal* was used by sex workers and MSM but he could not quantify the visits.

The condoms provided during the experiment were all the same brand and type: Durex - Extra seguro (untextured, unflavoured, greater thickness). Durex® is a well-known, relatively expensive brand in the country. To identify if the discovered condoms were

provided by the experiment, each wrapper was marked with invisible ink, only readable when exposed to UV light. This measure also served to control for cross-contamination between treatments.

2.3. Experimental procedure

The experiment followed this sequence: A couple entered the *hostal* and asked for a room, usually within a price bracket. The receptionist took some information for management purposes and assigned them to one of the rooms corresponding with the chosen price. He handed them the keys and TV remote, and they proceeded to the room. If a client allocated to T_2 came back and asked for condoms, the receptionist provided one without asking any additional questions. After the couple checked out, the receptionist informed me of their departure. Then, I entered the room to collect the data.

Once inside, I searched the bedroom and bathroom for unrolled condoms or open condom wrappers. Every rolled-up toilet paper was torn to ensure that nothing was lost. If any evidence was found, it was registered with a form and photographed with a template (see Figure 2). This same protocol was followed for each couple that left the *hostal*. The data collection process was carried out for 16 days in a span of five weeks.

This approach is ascribed within the research framework of Physical trace measures and builds upon the one used by Egger et al. (2000) and Gorter et al. (1993) in Nicaragua. My approach includes one crucial new element. Previous studies worked on several venues at the same time, which provided them with a larger sample, but denied them strict control over the experimental setting. For that reason, their treatment allocation was venue-based instead of couple-based. I opted for a smaller sample with more control over the experiment. This allowed me to use a couple-by-couple random allocation protocol, which in turn provided purer measures of treatment effect. Since comparisons produced

by this strategy are carried out within the same clientele, they are less likely to be affected by venue-level extraneous factors, such as location or price.

2.4. Ethics

This study was approved by the London School of Economics and Political Science Research Ethics Committee on February 8th, 2019 (REC ref. 000838). Even so, it is understandable that the experimental design can still raise ethical concerns. I will mention the measures in place to ensure no participants' rights were violated. First, it should be noted that this arrangement allowed me to record reliable information of naturally occurring behavior. The study did not force any sexual encounters; it provided a proven protective alternative for those who had already decided to use the *hostal*'s services. Second, the use or non-use of the condom was carried privately by the participants, and their freedom of choice was in no way impaired by their participation. Finally, the clients' anonymity was protected in two ways: I had no direct contact with clients, and no personal information was collected from them at any point in the study. It is impossible, from the very beginning, to identify any participant.

I decided not to inform the clients of their participation because stating the study's aims before the encounter would have severely affected their behavior. If the debriefing had been conducted after the encounter, their anonymity would have been compromised, and the study would have suffered from self-selection bias.

Finally, from an ethical standpoint, it is also important to remember what the role of a researcher in society is. A researcher should use their skills to create knowledge to be applied in the bettering of the public's wellbeing. Given that the information we generate guides the design and evaluation of policies, we should ensure that the evidence we produce is as accurate as possible, particularly when trying to solve ongoing social issues.

I believe the continuous production of unreliable data could be more harmful to society than any foreseeable consequence of this experiment.

3. Results

This section is structured in two stages. First, I will briefly describe the essential characteristics of the sample and compare it to those of similar studies. Then I will present the effects of the different levels of condom availability in condom use using logistic regression models. I used R base to analyze the sample characteristics and to run the models, the Stargazer package to present the multiple models (Hlavak, 2022) and the AICcmodavg package to calculate the goodness of fit for small samples (Mazerolle, 2019).

3.1. Sample characteristics

The sample consisted of 102 couples (n = 102), all heterosexual or MSM. During the 16 days of data collection, there was only one case of an unaccompanied client; she was not included in the final sample. The time each couple spent in the room ranged from 25 to 1050 minutes (Median = 200', IQR = 260'). The distribution of these values is positively skewed (Skewness = 1.32). 83% of the couples checked out of the *hostal* the same day they checked in and none stayed for more than one night.

3.2. Condom use

The sample was successfully distributed among the three groups during the experiment. Table 1 shows that condom use among the groups is different, particularly when comparing both treatments (T_1 = 41%; T_2 = 36%) with the control group (16%). There does not seem to be any difference between Small and Large rooms. Medium size rooms show less condom usage than the other rooms. When assessing these differences, the

relatively modest sample size for both types of rooms should be noted as a limitation. Small groups are, of course, more susceptible to substantial proportional changes with minor absolute fluctuations.

To identify the effect our variables of interest might have on the probability of using a condom, I fitted five logistic regression models (see Table 2). These included dummy variables for Treatment group, Room size, Check in time and Stay length. I originally planned to use check in time as a proxy for encounter unpreparedness. The logic was that people who checked in late at night (after 11 pm) were much more likely to be engaged in a spontaneous sexual encounter. However, unlike most of its competition, this *hostal* closes its doors late at night and only opens them for specific clients, rendering this proxy unusable.

Bearing this in mind and seeing that the AICc did not show a difference in parsimony between the models, I decided to use Model 5 to analyze the intervention results (See Table 3). This model includes the Treatment group and the Room size. Of these, only the Treatment group affected condom use. Both treatments significantly increased the probability of using condoms. By analyzing the average marginal effects we can state that the probability of using condoms of those in T_1 (condom in the room) was 25% higher than the control group.. For T_2 (condom at reception desk) it was 19% higher.

4. Discussion

The duration of the stay is longer in this *hostal* (Median = 200') than in those visited by Egger et al. (2000) in Managua (Median = 91'). I consider this related to the venues' services. Most rooms in this *hostal* had a private bathroom and cable TV, services that were not available in Egger's sample. Although their visits were longer in this experiment, most clients stayed for only a few hours, and very few spent the night there.

This, compounded by the fact that all but one of the clients were couples, speaks of the sexual nature of the business.

Regarding condom use, the first and most important finding is the positive effect of T_1; keeping all other variables constant, a *hostal* user is much more likely to use a condom if one is immediately available next to the bed. Even though one might argue that giving free condoms to people that are going to have sex will obviously increase the chances of it being used, we should remember that there was no additional incentive provided, nor was there any sexual health promotion campaign in motion. This result is a mere product of facilitating access to contraceptives.

Although not as clear as in T_1, a similar association is found for T_2. Throughout the different models presented in Table 2, we can see that the results for T_2 hover consistently around the same values. The effect size is not as strong as for T_1, but still, being allocated to a room with a sign stating that free condoms could be procured at reception dramatically increased the odds of condom use.

Let us contrast these results with that of other initiatives. Sweat et al. (2012) conducted a metanalysis that serves as an appropriate comparison point. Through the combined analysis of six studies carried out in India and Sub-Saharan Africa, they found a pooled odds ratio of 2.01. Even when considering that all those studies employ self-reported measures of use, the effect of all those interventions is lesser than those obtained here (OR = 3.68 for T_1 and 2.77 for T_2).

Several factors help to explain this intervention's overall success. First, unlike other initiatives that have tried to promote condom use by facilitating access in schools, clinics or clubs, here the condom is made available directly in the place where sex is going to happen. This allows us to bypass the participants assessing their chances of engaging in a sexual encounter and plan ahead. This last task has proved to be challenging to

overcome, even when there is a general intention of condom use. This is due to both the stigma that buying and carrying condoms might imply (Hillier et al., 1998), as well as the inability to take the necessary preliminary steps (Van Empelen & Kok, 2008).

Second, not only do clients not invest any time in purchasing condoms, but they do also not need to spend any money on them as well. Condom cost has been shown to hinder its acquisition and use before (Cohen et al., 1999).

Third, it is essential to consider how low the baseline is; the control group only showed condom use in 14% of their cases. Achieving a proportionally significant change might be easier than in places where condom use is more common.

Regarding the effect of T_2, I believe some characteristics specific to the *hostal* setting weaken the inhibitory effect of embarrassment in condom use. The reception in this *hostal* is located behind a small, mirrored glass window that does not allow for eye contact between the clients and the receptionist. This arrangement is common and serves the dual purpose of providing a safe place for the administrator to store the money in case of robbery, as well as increasing the customer's sense of privacy. For clients, the receptionist might be little more than a voice and a hand that receives cash and dispenses keys (and condoms). This perceived anonymity has also been conducive to less embarrassment in procuring condoms in a hypothetical scenario experiment by Young et al. (2017).

Another element that might decrease the embarrassment of procuring condoms is that, unlike a clinic, pharmacy or mini-market, a *hostal* is a very private place. The chances of running into someone one might know are almost non-existent. Previous research shows that there is certain sense of complicity among users (Ccopa, 1999); *Hostales* are places for having sex; why should they feel embarrassed? They are all in the same boat.

Finally, this *hostal* was a small venue. Unlike in bigger buildings, most rooms were only a few meters from the reception window. The effect of deferring gratification might not

be as strong as it was considered initially because the clients knew that the delay they would experience was small, no more than a few minutes.

Finally, we should consider the possibility of drafting a public policy promoting the free distribution of condoms in *hostales* in Perú. It is not the first time this has been tried in the country; 25 years ago, a bill stating that *hostales* should be responsible for providing their clients with free condoms was presented to Congress (Díaz, 1997). This project was rejected and was never taken up again. The reasons for this veto were not included in the committee's evaluation report (Comisión de Salud, 1997). One can speculate they were probably related to the nation's conservative views surrounding sex and the questionable morals associated with *hostales*.

A policy of distribution of free condoms in *hostales* does not seem particularly expensive, and, like any other preemptive measure, it is considerably cheaper than the alternative. Reports from other countries (Engstrand & Kopp Kallner, 2018; Lete et al., 2015) show that the rate of return is positive enough to be considered a sound social investment. Considering the high frequency of unintended pregnancies in Perú, we would expect that the rate of return for the country could be even higher. More research, and ideally a pilot, is needed to properly estimate the cost and feasibility of such an initiative.

4.1. Strengths and limitations

The experimental methodology used in this study has a series of features that strengthen the validity and reliability of its findings. Clients were unaware of their participation in the study, which eliminates both the social desirability and self-selection bias that affect condom use reports and sexual behavior studies sampling. The reliance on physical evidence eliminates the effect of recall errors in reporting. Unlike in most lab experiments, participants in this field experiment were actually going to have sex; they made a real (not hypothetical) decision of using a condom while they were naturally

aroused. Furthermore, the decision was not taken in isolation but was influenced by the presence of both members of a couple, a situation that is commonly neglected in other studies. Finally, since the randomization was conducted on a couple-by-couple basis, and in only one *hostal*, the results of this study have not been influenced by extraneous variables such as the potential effect of unknown differences in the composition of different *hostales*' clientele. The measurement of the causal relationship between variables is then more solid than in similar previous studies.

Nevertheless, it would be wise to consider an alternative explanation for such results. Concerning internal validity, how I operationalized condom use includes those cases where an open package was found, but a condom was not (it was probably flushed down the toilet). One could argue that, in some of these cases, the condom might not have been used; the couples might have just opened it for curiosity's sake and discarded it without using it. I consider this an improbable scenario for four reasons:

First, there was only one case in the sample in which a package was found open and the condom unrolled, which means that if they opened the wrapper, they most likely tried to use it. Second, proper disposal of condoms does not seem to be a common practice in the sampled population. No condoms were tied up, nor were they wrapped in toilet paper, both standard hygienic practices (Durex UK, 2021). Participants might not know that they should not flush used condoms down the toilet. Third, embarrassment has not only been associated with purchasing and carrying condoms, Moore et al. (2006) found that the disposal of condoms was also a source of shame. Some participants may want to get rid of the evidence of the sexual encounter; the toilet provides a way to quickly do so. Finally, condoms are not novelty items in Lima; they have been well-known, publicly advertised, easily found products for decades. It is likely that clients who opened them already knew what these were and went ahead and used them. As an additional note, there were only

five cases in which an experiment-provided wrapper was found opened without its accompanying condom. The removal of those cases does not have a sizeable effect in the difference between experimental groups.

Concerning external validity, when compared to a study that relies solely on self-reported measures, this methodology proves to be a considerable improvement. However, some limitations are still present. The behavior observed in an *hostal* will not necessarily be the same as in other spaces where sexual encounters are frequent, such as the participants' homes. Likewise, the novelty factor of free condoms may temporarily affect their use in unpredictable ways. We know from perception studies that humans tend to pay more attention and act upon novel and salient stimuli, and this effect might wear out with time (Vlaev et al., 2016). If a habit has not been formed during the time window in which novelty facilitates it, a policy of condom distribution might not necessarily be successful in the long term. More research is needed on the matter. Finally, this study used condoms from one specific brand and type, results might vary when using different combinations of these variables.

However, the main issue present in the study is the lack of knowledge about the *hostal* clientele. It is challenging to establish which segment of Lima these findings can be applied to. Past research (Ccopa, 1999) states that the client base is diverse in age and occupation, but no current systematized information is available. Furthermore, given the characteristics of absolute anonymity of the methodology, there is no information about the users' relationship nature, marital status, age or education. These variables could generate differences within the sample.

Additionally, in this particular *hostal*, there are recurrent customers, people who could have used the facilities more than once during the data collection timeframe. The risk of cross-contamination is higher for this subsample. There was a case of one couple who

asked for condoms at reception even though they had been assigned to the Control group because they had previously been allocated to T_2. The precise number of recurrent clients is unknown. According to the *hostal's* owner, this quantity is small but I believe it should still be accounted for.

5. Conclusions

Using a new methodology, I have produced reliable information about the effect of different levels of condom availability on its use. Both experimental treatments have generated higher odds of condom use compared to the control group. Although based on a relatively small sample, these results are strong, and support a measure more efficient in making behavioral changes than other previously studied measures. This is because, through this arrangement, we bypass the need for the participants to assess the possibility of a sexual encounter and plan accordingly. The condom is also provided free of charge, a variable previously linked to lack of usage.

The effect of having a condom inside the room is higher than providing it at the reception desk. Both condoms are free, but asking for one requires surpassing the feeling of embarrassment related to procuring, carrying and using condoms. It also demands that the clients defer their own sexual pleasure for a few minutes. Even so, this treatment still increases the odds of use.

This study evidences the importance of conducting field experiments in designing and evaluating public policies. Using this methodology, I have been able to produce valid and reliable results that go beyond self-reported measures and hypothetical situations.

A policy of free condom distribution in *hostales* seems like a plausible strategy to follow in the country's struggle against unintended pregnancies and STIs. Still, additional

research is needed to specify different concrete elements of the plan in order to produce the most efficient results.

Even if only briefly, I would like to add one final remark. A condom distribution policy is still heavily male-oriented; it might not help solve the problems caused by Machismo and Marianismo in the country. The proposed policy should only be considered a strategy complementary to sexual education that promotes a more egalitarian, responsible and happy society.

Having established *hostales* as a viable research setting, additional variables could be explored in future studies. This would aid in drafting a more precise and feasible public policy. Among the elements that might be studied are perceived distance from the collection point, number of condoms provided, condom cost, condom brand, condom type and contraceptive delivery method.

Another option would be to adapt this methodology to similar settings with at-risk populations (e.g., spousal prison visits). It would also be interesting to explore if such findings are replicable in other cities with a similar existence and quantity of *hostales*, both in and out of Perú.

Finally, a variation of this methodology could be used to establish an objective criterion of validity and reliability in constructing new data collection techniques.

In summary, this study measures the impact that condom availability programs can have on condom use. It evidences the benefits that could be achieved with a policy that merely facilitates access to them in the proper moment. Results as impactful as these have not been found in previous studies. This is more remarkable when considering the external validity of evidence generated here. This newly created method could be replicated and adapted to study other variables and behaviors. It also establishes that *hostales*, a relatively unknown institution, could be a suitable place to conduct experiments that,

while remaining ethical, can produce reliable information on difficult to research topics and populations.

6. References

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7. Tables

Table 1. Frequencies and Percentages of condom use per grouping variable.

Condom use frequency per grouping variable							
	Experimental group			Room size			Total
Condom use	Control	Treat. 1	Treat. 2	S	M	L	
No	27 84%	20 59%	23 64%	8 57%	52 73%	10 59%	70 69%
Yes	5 16%	14 41%	13 36%	6 43%	19 27%	7 41%	32 31%
Total	32	34	36	14	71	17	102

Table 2. Logistic Regression Models for Condom Use.

Logistic Regression Models for Condom Use

	Dependent variable: Condom Use				
	(1)	(2)	(3)	(4)	(5)
Treatment (Reference: Control)					
Treatment 01	1.330	1.339	0.470	1.310	1.302
Treatment 02	1.116	1.114	0.981	1.103	1.019
Check-in before 11 pm (Reference: Check-in after 11 pm)		0.165	-0.363		
Interaction (Reference: Control and Check-in after 11 pm)					
Treatment 01*After 11 pm			1.056		
Treatment 02* After 11pm			0.171		
Stay length (minutes)				-0.0004	
Room size (Reference: Small room)					
Large room					-0.028
Medium room					-0.621
Constant	-1.686	-1.827	-1.386	-1.571	-1.219
Observations	102	102	102	102	102
Log Likelihood	-60.450	-60.411	-60.091	-60.378	-59.617
AICc†	127.144	129.235	133.066	129.17	129.86

Notes: † AICc is a version Akaike Information Criterion that includes a correction for small samples (Burnham & Anderson, 2004)

Table 3. Chosen Model Coefficients,Odds Ratios, and Marginal Effects.

Variable	β	eβ	Average marginal effects
Constant	-1.22	0.30	
Treatment (Reference: Control)			
Treatment 01	1.30	3.68	0.25
Treatment 02	1.02	2.77	0.19
Room size (Reference: Small room)			
Large room	-0.03	0.97	-0.01
Medium room	-0.63	0.54	-0.13

Figure 1. Typical Peruvian hostal. The sign shows its services, including tantra chairs and XXX videos, and its prices S/20, S/25 and S/30.

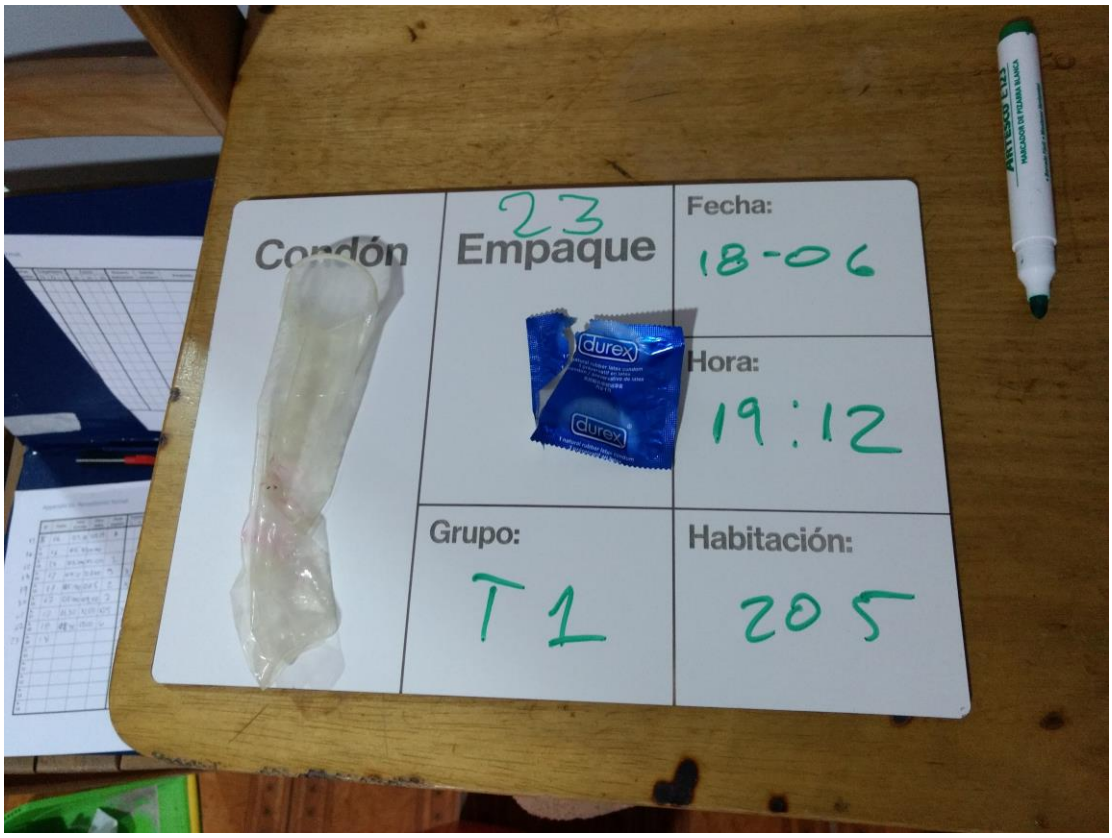

Figure 2. Findings corresponding to case 23 are shown to exemplify the template used for recording results.