Effects of Violence Prevention and Attention Units on prevalence and perceptions of intimate partner violence in the Dominican Republic

Santa Ramirez Rijo, Colgate University
May 2017

Faculty Advisor: Carolina Castilla

Abstract

Using data from the Demographic Health Surveys nationally representative surveys conducted in the Dominican Republic in the years of 1999, 2002, 2007 & 2013, this study evaluates the impact of Violence Prevention and Attention Units on annual prevalence of intimate partner violence amongst women, as well as, perceptions of intimate partner violence amongst both women and men. Our findings show that having access to a VPAU decreases a woman likelihood of experiencing intimate partner violence. This decrease is larger for married women than for women living in cohabitation. Furthermore, our findings show that having access to these VPAUs do not seem to have a significant effect on single or married women perceptions of intimate partner violence and only a slight effect on women living in cohabitation. Finally, we also conclude that these VPAUs do not affect men's perception of intimate partner violence.

1. Introduction

Intimate partner violence is a serious public health and human rights issue in the Dominican Republic. Government statistics indicate that, between 2005 and 2015, more than 2,704 women were killed- 74% of them at the hands of an intimate partner.[1] Lifetime prevalence of intimate partner violence in the country is estimated at 24%.[2] Which means that 1 out of every 5 women is likely to experience this form of violence at least once in their lifetime. For women living in cohabiting relationships the situation is even more dire, with lifetime prevalence amongst this women estimated at 28%.[3] A potential reason for these differences lies in the fact that cohabiting women do not enjoy the same legal protections that married women do. Couples living in cohabitation were not legally recognized by the government until 2001 and when it comes to legal rights over property and children, women living under cohabitation are much less protected. These limits in the rights of cohabiting women might, in turn, limit their power in the relationship and make them more vulnerable to abuse by their partner. Furthermore, an abundance of empirical studies have linked intimate partner violence to a variety of adverse effects relating to women's health (Campbell JC, 2002), economic well-being (Roldos et al, 2013) and workplace productivity (Reeves, 2009) making it an issue of extreme importance for both researchers and government officials.

Over the last two decades, the Dominican government has taken important measures to address the issue. So far, its most extensive intervention program and the focus of this research study, has been the implementation of Violence Prevention and Attention Units (VPAUs) in

---

[1] "Procuraduría General De La República." http://www.one.gob.do/Estadisticas/145/homicidios
[2] Cedal
[3] DHS Data, 2013

provinces across the country. The first VPAU was established in 2005, in the capital city of Santo Domingo. Soon after, the government pledged to install a unit in every province by the end of 2008.[4] Today, 12 years after the establishment of the first unit, only seventeen provinces have been covered. The head of the Ministry of Women's Affairs has cited budget constraints as the main hindrance to the program. However last year, the government revealed plans to increase fundings towards existing units and construct ten new units by the end of 2017.

In this study, we take advantage of the differences in timing and location of the units and use a difference-in-differences model to estimate the effects that these units have on annual prevalence of intimate partner violence and perceptions of intimate partner violence amongst women and men. Furthermore, we also examine the difference in the impact of these VPAUs for women living in cohabitation compared to married women. The data employed in this study was taken from nationally representative surveys conducted by the DHS Program in the years of 1999, 2002, 2007 and 2013.

Our results suggest that having access to these Violence Prevention and Attention Units does reduce the likelihood of a woman having experienced intimate partner violence within the past 12 months. This reduction is statistically significantly larger for married women compared to women living in cohabitation. However, this latter finding does not necessarily imply that the impact of having access to these VPAUs is smaller for women living in cohabitation. A possible explanation could be that there has been an increase in reporting of incidents of abuse amongst cohabiting women once a VPAU has been established. Furthermore, our findings show that having access to these VPAUs does not seem to have a significant effect on single and married

[4] "Avanzan Acciones a Favor De Mujeres."
http://eldia.com.do/inauguran-unidad-de-atencion-integral-a-victimas-de-violencia-en-santiago/

women's perceptions of intimate partner violence. However, our results do point to a significant difference on perceptions of intimate partner violence for cohabiting women than for single and married women. Whilst the VPAUs seem to have no impact on perceptions amongst men.

Our paper makes several contributions to the literature. To our knowledge, our study is the first to present an empirical estimate of the effects of a government program targeting intimate partner violence in the Dominican Republic. Given the current budget constraints these VPAUs face, research studies like this one, can help provide useful evidence on the importance of this program. Furthermore, within the larger literature, there is a lack of empirical research evaluating the effectiveness of government social programs and this research study will help cover this gap.

The remainder of this paper is divided into six sections. Section 2 gives a brief overview of the history of IPV in the DR and what the government has done to address it. Section 3 reviews the relevant literature. Section 4 describes the data. Section 5 discusses our estimation model and robustness checks conducted. Section 6 summarizes our main findings. Finally, section 7 discusses the implications implications of our findings.

2. Background: IPV and the Dominican government

Before 1997, intimate partner violence was not a crime in the Dominican Republic. Incidents of domestic abuse were seen more as a private family matter than an issue of public concern. It was not until the 1994 Belem Do Para Convention in Brazil, that dealing with violence against women became part of the government's agenda. The Convention, which

established violence against women as a violation of their human rights and fundamental freedoms, was ratified in 1997 by the Dominican government; making domestic abuse a criminal offense under Law 24-97. Currently, penalties for domestic abusers can range from one to 30 years in prison and fines can range from 700 to 245,000 Dominican pesos (US$15 to US$5,400). [5] Following the implementation of Law 24-97, the government developed a national strategic plan to raise public awareness on the issue, reduce the incidence of violence and provide treatment to victims of this form of abuse. In November of 1998, it created the National Prevention Commission for the Prevention of Domestic Violence (CONAPLUVI) to supervise and facilitate the implementation of policies and social programs aimed at preventing incidents of domestic violence and ensure the application of Law 24-97 and Law 136-06 (which protects children from domestic abuse).

One year later, with the enactment of law 88-99, it created the Ministry of Women's Affair, the highest governmental body in the country in charge of promoting the development of women's issues. It is under the supervision of this department, in conjunction with the Office of Attorney General, that the Violence Prevention and Attention Units currently operate. So far, 18 units have been created across seventeen provinces in the country. Table 1 on the appendix provides the years for when each of the existing VPAUs were established. [6] The objective of the VPAUs was that centralizes all services offered, increase reporting of incidents of IPV, increase awareness of the issue and educate the population on the negative impacts of its occurrence. However, the program has faced and continues to face many monetary constraints. The Ministry of Women's Affairs currently has the second smallest budget in public administration in the

---

[5] "Procuraduría General De La República." https://www.state.gov/j/drl/rls/hrrpt/2013/wha/220439.htm
[6] I included Distrito Nacional in the list, however, this is not a province but a subdivision of the province of Santo Domingo

Dominican Republic.[7] In addition to these units, two refuge centers have also been established in Santo Domingo and Santiago. The creation of 10 new units are part of the 2017 national agenda for the government.

It is hard to estimate the impact of the measures taken by the government so far in the absence of reliable data. Since domestic violence was not considered a crime before 1997, incidents of domestic abuse were hardly ever reported and no official records were kept by the police departments. Hence, statistics on the incidence of domestic violence before this date are practically non-existent. Currently, the Office of Attorney General provides statistics on the number of reports of incidents of intimate partner violence on their website, however, these only go as far back as 2005. Whilst the data reveals that between 2005 and 2015, the number of reports increased from 46,366 to 58,553 (20.8% increase), these numbers are likely to be an underestimate of the true extent of the problem. In a recent interview, the Deputy Attorney for Women's Affairs stated that around 80% of victims of femicides had not previously reported incidents of domestic abuse. The Deputy Attorney has attribute the increase in the number of reports to the increased availability of government services for the women to reach out to, rather than to an increase in the incidence of domestic abuse. It is within this context that empirical studies like this one become essential.

3. Related Literature

3.1 Causes and Risk Factors

---

[7] https://lab.org.uk/dominican-republic-women-continue-to-face-discrimination/ngo

To date, a relatively large body of literature in both sociology and psychology have explored the causes behind intimate partner violence. Sociological explanations tend to emphasize the role of existing cultural norms in shaping perceptions and behavior that can lead to incidents of violence between intimate partners. Hattery (2009) argues that in order to understand the root causes of domestic violence we need to look at the patriarchal system shaping people's perceptions and behaviors when it comes to the roles of husband and wife. Denise Paiewonsky, a prominent sociologist in the DR has pointed to Machismo- which promotes the idea of men as dominant and violent and women as submissive and passive- as a root cause for high incidence of violence intimate partner violence in the country. On the other hand, psychological theories often point to individual-level factors relating to the personality of the abuser and the victim to explain the occurrence of this violence. Social learning theory is one of the major theoretical explanations for the occurrence of domestic abuse expounded by scholars within this discipline. According to this theory, children reproduce behavior learned from family and society. Stith et al (2000) tested this theory in their paper by using a meta-analytic approach to evaluate the effect of early exposure to domestic abuse on the likelihood of future abuse. Their findings revealed that men who grow up in violent households are more likely to be perpetrators of intimate partner violence whilst women who grew up in violent households are more likely to be victims of it. Lori Heise, a prominent social epidemiologist, whose research focuses in the causes and preventions of intimate partner violence, developed an integrated, ecological framework to better understand the origins of gender-based violence. Heise (1998) argues that using a model that integrates different theories

at both micro and macro levels provides a better understanding of the origin intimate partner violence.

Although, no single theory can fully explain this phenomenon, empirical studies do provide us with insights into potential risk factors that increase the likelihood of incidents of intimate partner violence. Hotaling and Sugarman (1986) use a 52 case-comparison study to evaluate 97 potential risk markers of husband-to-wife violence. In their study, they classified as "consistent risk markers", factors that were found to be statistically significant in at least 70% of the studies. Their findings revealed that witnessing violence as a child, alcohol usage and religious incompatibility between the couple are positively correlated 'consistent risk markers'. Whilst occupational, income, marital status and educational level are negatively correlated 'consistent risk markers'. One of the few empirical studies examining the relationship between IPV and socio-demographic factors in the DR is that of Delma (2008). Using data from the 2002 Demographic and Health Surveys in the Dominican Republic, analyzed social risk factors including women's education, religion, urban or rural residence, and pregnancy status that can lead to wife abuse. Their finding s showed that only a woman's work status and her husband's alcohol usage were of statistical significance, with working women being 1.764 times more likely to experience violence than non working women and women with husbands who drank alcohol on a regular basis were 2.942 times more likely to experience violence compared to those whose husbands did not. The data for their study however was limited to married women, leaving out the analysis of the effects of these factors on cohabiting women.

3.2 Married vs. Cohabiting Couples

Multiple studies reveal higher rates of violence amongst cohabiting couples compared to married ones. (Stets and Straus 1988) Using DHS data from Colombia (2005), Nicaragua (1997/98), Peru (2000) and the Dominican Republic (2002), Castro, Garcia and Gonzales (2008) studied the relationship between type of union (cohabitation vs. marriage) and the probability of a woman experiencing IPV. Not surprisingly, their results showed that women living in cohabitation are more likely to experience IPV than married women; in the Dominican Republic the probability of experiencing IPV is 25% higher amongst women living in cohabitation compared to married women. Multiple explanations have been offered to explain this phenomenon. For instance, Nock (1995), argues that cohabiting unions are not governed by the same norms and formal laws as marriages. He calls cohabitation "an incomplete institution". Another explanation is that proposed by Kenney and Mclanahan (2006). In their paper, they attribute these differences in prevalence of intimate partner violence between married and cohabiting couples to 'differential selections into and out of marriage and cohabitation'. Meaning that less violent couple are more likely to get married whilst more violent couples are more likely to get divorced, hence the observed differences in the frequency of IPV between these two types of unions. Stets and Straus (1988) also present several theoretical explanations for this, including social isolation theory, which argues that because of the social stigma surrounding the type of relationship of cohabiting couples, they are more likely to to live in isolation and hence less exposed to outside challenge in their relationships.

3.3 Effects of Government Programs

Empirical research on the effects of government programs on prevalence of intimate partner violence has been limited so far, with most empirical studies being conducted in the

United States. Bennett, Riger, Schewe, Howard and Wasco (2004) use a cluster evaluation approach to estimate the aggregate impact of domestic violence services (including hotline, brief advocacy, long term advocacy, counseling and shelter). Using data from the Illinois Department of Human Services (IDHS) evaluation of 87 state-funded domestic violence and sexual assault agencies in Illinois, they concluded that programs in all five service areas have a positive effect on the reduction of domestic abuse. Closely related to our paper is Farmer and Tiefenthaler (1997) economic analysis of domestic violence. In their paper, they build a theoretical model of a noncooperative household- a household characterized by violence which predicts that, by increasing the amount of economic opportunities outside the partnership would reduce the level of violence in intimate partnerships by increasing a woman's threat point. However, they argue that their model could be extended to any other exogenous alternative (eg. availability of social services), predicting it would also lead to a decrease in violence. A lack of data prevents them from testing the the model's prediction empirically for the availability of social services. To our knowledge, no empirical studies evaluating the effectiveness of social services programs in the Dominican Republic, have been conducted so far. This paper will therefore contribute to this gap in the literature.

4. Data and Description

The data for this study came from the Demographic and Health Surveys (DHS) conducted by the Center for Social and Demographic Studies in coordination with USAID and the Ministry of Public Health in the Dominican Republic. DHS surveys are nationally

representative household surveys covering a variety of issues ranging from child nutrition to domestic violence. For this study, we only selected surveys conducted in the years of 1999, 2002, 2007 and 2013, since these were the only ones that included questions regarding intimate partner violence. Our main sample contains 9,156 observations from a total of 9,156 cohabiting and married couples. The women in our sample are aged 15-49 and men are aged 15-64. We also use a second sample containing 40,678 observations from single, married and cohabiting women aged 15-49 for the years of 2002, 2007 and 2013.

Table 2 provides descriptive statistics, both for the entire sample population and separately by women and men living in marriage and women and men living under cohabitation in our main sample. Overall, the women in our sample had an average age of 32, an average of 8.16 years of education, 47% owned property and 54% belonged to either the poorest or the poorer wealth level. The men in our sample had an average age of 37, an average of 7.6 years of education, 66% are alcohol users and 54% of them belonged to either poorest or the poorer wealth level. There are some notable mean difference between those living in marriage and those living under cohabitation. Descriptive statistics show that married women in our sample were, on average, older, more educated, richer and more likely to live in urban areas than women living under cohabitation with their partners. Whilst married men in our sample were, on average, older, more educated, richer and less likely to be alcohol users than men living under cohabitation with their partners. Table 3 provides descriptive statistics for the all women sample.

Dependent variables. In our study, we consider three outcomes of interest: annual prevalence of intimate partner violence, perceptions of intimate partner violence amongst women and perceptions of intimate partner violence amongst men. We use several variables to measure

annual prevalence. We first constructed a dummy variable that takes the value of one if the woman answers yes to any of the 10 questions[8] in the DHS survey relating to the woman having experienced any form of violence from her partner within the past 12 months, and zero otherwise. To capture frequency of abuse, we constructed an index variable ranging from "0" to "20", depending on the number of times the woman answered never, sometimes or frequently to any of the 10 questions on domestic violence. Finally, to capture the type of abuse, we divided the 10 questions into the categories of emotional, physical and sexual violence and constructed a dummy variable for each category, like we did for our annual prevalence dummy. We also construct several variables to measure perceptions of intimate partner violence amongst women. In essence, these outcome variables are trying to capture the attitude and level of acceptance towards violence against women by their partner. The DHS survey contains five questions asking whether the respondent finds it justifiable for a man to hit his female partner on five different situations. From the answers to these questions, we first constructed a dummy variable taking a value of one if the woman answered yes to any of the questions and a value of zero otherwise. We also constructed an index variable ranging from 0 to 5, depending on the number of questions the woman answered yes to. To capture perceptions of intimate partner violence amongst, we constructed the exact same variables as we did for the women, using the responses from the males in our sample questionnaire.

Independent variables and controls. As our key treatment variable, *unidadesAct*, we constructed a dummy variable equaling one if the province where the couple lives has an active VPAU, and zero otherwise. For our second key independent variable, *unidadesActCoh,* we

---

[8] Table 5 & 6 on the appendix provides this list of 10 questions.

created an interaction dummy variable that equals one if the province has an active VPAU and the couple is living under cohabitation and zero otherwise. Note that for the years of 1999 and 2002, when no VPAUs had been established yet, *unidadesAct* and *unidadesActCoh* take the value of zero for all couples across all provinces. In our model, we use the literature review to identify factors that are highly correlated with incidence of domestic abuse. We ended up with 11 control variables. These include variables related to women's characteristics: age, years of education, a dummy for whether she owns property or not and a dummy for whether her father used to beat her mother. Variables related to men's characteristics include: age, years of education and a dummy for whether he is an alcohol user. Finally, variables related to characteristics of the relationship: number of children, a dummy for whether the couple lives in an urban area, an index variable measuring the level of control the man exerts over the women (eg. limits contact with friends, jealousy, etc) and several dummies for wealth index.

Table 4 provides descriptive statistics for all outcome and control variables, both for the entire sample and separately by provinces with an active VPAU and those without one before the establishment of any VPAU. We also included variable measuring lifetime prevalence in our results. Looking at this differences-in means test between the two groups, allows us to compare baseline characteristics across them and identify any systematic differences. This helps us evaluate whether the VPAUs were randomly established across provinces or not. Since, as I mentioned before, the government announced that the VPAUs they are planning on building, will be built in provinces with high incidence of domestic violence, it is sensible to assume that past VPAUs were also built in provinces with high incidence of domestic violence. However, we could not find any records or past comments from government officials that could confirm this to

be true. In addition, our results show that there are no systematic differences in either the level of lifetime prevalence or any of our measures of annual prevalence between the two groups. Only the outcome variables measuring perceptions of intimate partner violence amongst women were found to be statistically significant higher for those women living in the control group. These suggest that our final estimates for the treatment effects on women's perceptions could be overestimated. Several of our control variables were found to be statistically significantly different between the two groups. Our model accounts for all of these by including them as controls.

One major concern when dealing with self-reported data, especially when it comes to a subject such as this, which one is often considered taboo, is that of underreporting. The DHS program employs a variety of strategies, in order to increase the validity of their data. First of all, on questions regarding intimate partner violence, women are interviewed privately. If privacy is not achieved, the interviewer would skip the section. Also, women are assured that their response is completely confidential and these questions are asked near the end of the questionnaire, to ensure that the women already feels comfortable by the time these questions are asked. Added to this, instead of asking a single question on whether the woman has been abused by their partner, DHS surveys ask multiple questions that encaptures different forms of violence, which gives the woman more opportunities for disclosure. (un.org/womenwatch/) In our study, we take advantage of this latter strategy to construct variables of annual prevalence of IPV that capture different forms of violence as well as the frequency of this violence.

5. Empirical Strategy: Difference-in-Differences Model

Given that the VPAUs were established at different times in different provinces, this study uses a difference-in-differences (DID) estimation approach in order to exploit these variations and obtain the mean causal effect of women having access to these units on annual prevalence and perceptions of intimate partner violence. Provinces with an active VPAU were grouped in the *treatment group* whilst those without an active VPAU were grouped in the *control group*. Note that, provinces where a VPAU was established on the same year as a survey was conducted were not included in the treatment group for that year.

A key identifying assumption of the difference-in-difference model is that, in the absence of the treatment, relative time trends in the outcome variables across provinces with active VPAUs and those without active VPAUs would have been the same. To test this out, we decided to interact our unidades variable with our year dummies and ran them as independent variables on all of our outcome of interest. We found none of them to be statistically significant.

Our regression model is as follows:

$$Y_{ipt} = \beta 0 + \beta 1\ X_{ipt} + \alpha_{ip} + \gamma_{it} + \beta 2\ Unidades_{pt} + \beta 3\ Coh_i + \boldsymbol{\beta 4}\ UnidadesAct_{pt} + \boldsymbol{\beta 5}$$

$$UnidadesActCoh_{ipt} + \varepsilon \qquad\qquad\qquad\qquad\qquad\qquad [1]$$

In this equation, i indexes individual, p indexes province and t indexes year. All variables in our model are as previously defined. Y_{ipt} takes the value of our three outcomes of interest and X_{ipt} is a vector containing all control variables. $\boldsymbol{\beta 5}$ and $\boldsymbol{\beta 6}$ are the main parameters of interest. Parameter $\boldsymbol{\beta 5}$ captures the average change in the annual prevalence of IPV, as well as, the

average change in perceptions among women and men due to the presence of an active VPAU. Parameter *β6* captures the additional average change in the annual prevalence of IPV, as well as, the average change in perceptions due to the presence of an active VPAU for couples living under cohabitation compared to those living in marriage. Additionally, we included time-fixed effects (α_{ip}) in our model to account for any unobserved common time trends across the provinces, as well as province-fixed effects (γ_i) to account for any unobserved time-invariant unobserved province factors that vary across them.

Robustness. To ensure that nothing else -other than our treatment- was driving our estimates, we carried out multiple robustness checks. Firstly, our difference-in-difference model assumes that no other policy changes occurred at the time that these VPAUs were established in each of these provinces. Therefore, since the provinces of Distrito Nacional, Santo Domingo and Santiago all have active refuge shelters in addition to the VPAUs, we decided to exclude them from our treatment group. Secondly, facing the possibility that migration effects, as a result of women, who are more likely to experience intimate partner violence, moving to more progressive provinces, we decided to evaluate the validity of this claim. Using one of the questions in our survey sample, which asked whether the woman was living in her "dejure place of residence", we estimated the percentage of women who had migrated in their lifetime for each of the four years in our dataset. We found that less than 1% of the women in our sample had migrated for each year, which we concluded to be too low an amount to make any significant impact on our result. Lastly, we clustered all of our standard errors at the province level.

6. Results and Discussion

6.1 Impact on Annual Prevalence

Results for the effects of women having access to these VPAUs on annual prevalence of intimate partner violence are presented on Table 7. Column (1) presents the estimates of the treatment effects on annual prevalence without any controls added and column (2) presents them with all controls added. In both instances the estimates are negative, yet small and insignificant. Once we control for cohabitation, we obtain statistically significant estimates for the effects of the treatment. As shown in column (3), women having access to these VPAUs decreases the likelihood of a married woman experiencing intimate partner violence within the past 12 months, by 5.34 percentage points. This is statistically significant at the 1% level. This estimate for effects of these VPAUs become even larger (-6.99 percentage points) when additional controls are added, as shown in column (4). As shown in column (3), for women living under cohabitation, the effects of having access to these units are much smaller, with the likelihood of a woman experiencing intimate partner violence within a given year decreasing only by 1.18 percentage points[9], as a result of the treatment. Once you add controls, the difference in the effect of the VPAUs for cohabiting women compared to married women become statistically significant as shown in column (4). Two potential stories can explain the differences in treatment effects between married women and women living in cohabitation. It could either be that the effect of the VPAUs is not causing the same decrease in annual prevalence of violence as in the case of married women. Or it could also be the case that these VPAUs are in fact having a

---

[9] I calculated this by adding the coefficients on *unidadesAct* to the coefficients on *UnidadActCoh*. (-0.534+0.0416= -0.0118)

similar impact but that the availability of these VPAUs is causing an increase in reporting of incidents of domestic violence across cohabiting women.

Furthermore, Table 8 presents the results for the effects of women having access to these VPAUs on our annual prevalence index, which measures frequency of intimate partner violence. Across all four columns, the decreases in the annual prevalence index are not statistically significant. Suggesting that the effects of these VPAUs occur at the extensive margin and not at the intensive one. However, although not statistically significant, the negative sign on the effect of the VPAUs on cohabiting woman suggest that these VPAUs are actually decreasing annual prevalence of violence amongst women and that an increase in reporting is behind our results on our previous outcome variable. When looking at the effects of these VPAUs broken down by form of violence, you can see that these decreases in annual prevalence are largely driven by decreases in annual prevalence of emotional violence in particular (as shown on Table 9), followed by decreases in annual prevalence of physical violence (as shown on Table 10). For annual prevalence of sexual violence, the decreasing effects of the VPAUs are not statistically significant (as shown on Table 11).

6.2 Impact on Perceptions amongst Women

Results for the effects of VPAUs on perceptions of intimate partner violence amongst women, using the all women sample survey, are presented on Tables 12 & 13. Column (1) & (2) on Table 12, reveal no statistically significant effects on perceptions as a result of these VPAUs. However, once we control for women currently in a union (either cohabiting or married), we get

more interesting results. As shown in column (3), there is a negative and statistically significant difference in the effects of these VPAUs for women who are in a union compared to single women. Women having access to these VPAUs decreases the likelihood of a woman justifying intimate partner violence at least in one occasion, by an extra 1.86 percentage points for women currently in a union than for single women. This is statistically significant at the 1% level. This makes sense, since women currently in a partnership are the ones who are exposed to intimate partner violence and therefore the effects of VPAUs would impact them. Furthermore, using our couples sample dataset, our results show that for women living in cohabitation the negative effects of the VPAUs are much larger than for married women. As shown in Table 14 in column (3), women having access to these VPAUs decreases the likelihood of a woman justifying intimate partner violence at least in one occasion, by an extra 5.35 percentage points for women living in cohabitation compared to married women. This suggest that the VPAUs seem to be having a more significant effect on the perceptions of cohabiting women compared to either married or single women. Looking back to the summary statistics on Table 3, you can see that women living in cohabitation hold more conservative perceptions when it comes to intimate partner violence, than both single and married women. Hence, for them, access to these units are more likely to have a greater impact.

6.3 Impact on Perceptions amongst Men

Results for the effects of women having access to these VPAUs on perceptions of intimate partner violence amongst men are presented on Tables 16 & 17. Our results reveal no

statistically significant changes in either of our outcomes of interest measuring men's perceptions. Women having access to these VPAUs, therefore, do not appear to have had an effect on men's perceptions. A lack of data, does not allow us to compare the effects of these VPAUs on men currently in a union compared to single men.

7. Conclusions

Intimate partner violence has a negative impact not only on women but also on the society as a whole. Taking measures to alleviate this problem should be considered a priority within a government's agenda. The Dominican Republic has a long road ahead in the fight against intimate partner violence and these Violence Prevention and Attention Units are only an initial step in helping achieve this. Research into the effectiveness of this program provides important information on the effectiveness and efficiency of these programs, that could help better inform policy decisions. Our study does exactly that.

In this study, we use DHS nationally representative surveys for the Dominican Republic and a difference-in-differences estimation model, to evaluate the impact of women having access to Violence Prevention and Attention Units on annual prevalence as well as perceptions of intimate partner violence amongst men and women. Our estimates suggest that having access to these Violence Prevention and Attention Units does reduce the likelihood of a woman having experienced intimate partner violence within the past 12 months. This reduction is statistically significantly larger for married women compared to women living in cohabitation. However, this latter finding does not necessarily imply that the impact of having access to these VPAUs is smaller for women living in cohabitation. A possible explanation could be that there has been an

increase in reporting of incidents of abuse amongst cohabiting women once a VPAU has been established. Furthermore, our findings show that having access to these VPAUs does not seem to have a significant effect on single and married women's perceptions of intimate partner violence. However, our results do point to a significant difference on perceptions of intimate partner violence for cohabiting women than for single and married women. Whilst the VPAUs seem to have no impact on perceptions amongst men.

Our results suggest that these VPAUs have been beneficial in helping reduce annual prevalence of intimate partner violence. Funding for these units should therefore be a priority within the government's agenda. Our estimates for the effects on perceptions suggest that better strategies aimed at changing attitudes should be adopted. Further research into these VPAUs using experimental designs using a sample of women who have used these services could provide better insights into the effectiveness of these units.

References

"Avanzan Acciones a Favor De Mujeres." Listindiario.com. 2012. Accessed December 09, 2016. http://www.listindiario.com/la-republica/2012/11/21/255927/avanzan-acciones-a-favor-de-mujeres

Bennet Larry, Riger Stephanie, Schewe Paul, Howard April, Wasco Sharon. "Effectiveness of Hotline, Advocacy, Counseling, and Shelter Services for Victims of Domestic Violence A Statewide Evaluation' (2004)

Castro Martin, T., T. Martin Garcia y D. Puga González, 2008, "Matrimonio vs. unión consensual en Latinoamérica: contrastes desde una perspectiva de género", en III Congreso de la Asociación Latinoamericana de Población (ALAP), del 24 al 26 de septiembre, Córdoba, Argentina.

"Dominican Republic." U.S. Department of State. 2012. Accessed December 09, 2016. http://www.state.gov/j/drl/rls/hrrpt/2011/wha/186510.htm.

Gatehouse, Mike. "Mike Gatehouse." *Latin America Bureau*. N.p., 07 Mar. 2017. Web. 08 May 2017.

Farmer, Amy, and Jill Tiefenthaler. "An Economic Analysis of Domestic Violence." Review of Social Economy 55, no. 3 (1997): 337-58. http://www.jstor.org/stable/29769903.

Hattery, Angela. Intimate partner violence. Lanham, MD: Rowman & Littlefield Publishers, 2009. Print.

Heise, L., Ellsberg M., and Gottemoeller, M., 1998, 'Violence Against Women: an Integrated, Ecological Framework', Violence Against Women, Vol. 4, pp. 262 290.

Hotaling, Gerald T., and David B. Sugarman. "A risk marker analysis of assaulted wives." Journal of Family Violence5, no. 1 (1990): 1-13. doi:10.1007/bf00979135.

Campbell, Jacquelyn C. "Health consequences of intimate partner violence." The Lancet359.9314 (2002): 1331-336. Web.

Kenney, Catherine Taft, and Sara Mclanahan. "Why Are Cohabiting Relationships More Violent Than Marriages?" Demography 43.1 (2006): 127-40. Web.

"Procuraduría General De La República." Procuraduría General De La República. Accessed December 09, 2016. http://www.pgr.gob.do/.

Reeves, Carol A., and Anne M. O'leary-Kelly. "Study of the Effects of Intimate Partner Violence on the Workplace." PsycEXTRA Dataset(n.d.): n. pag. Web.

Roldos, M. I., and P. Corso. "The economic burden of intimate partner violence (IPV) in Ecuador: setting the agenda for future research and violence prevention policies." Injury Prevention 16.Supplement 1 (2010): n. pag. Web.

Stets, Jan E., and Murray A. Straus. "The Marriage License as a Hitting License: A Comparison of Assaults in Dating, Cohabiting, and Married Couples." Journal of Family Violence 4, no. 2 (1989): 161-80. doi:10.1007/bf01006627.

Stith, Sandra M., Karen H. Rosen, Kimberly A. Middleton, Amy L. Busch, Kirsten Lundeberg, and Russell P. Carlton. "The Intergenerational Transmission of Spouse Abuse: A Meta-Analysis." Journal of Marriage and Family 62, no. 3 (2000): 640-54.

Nock, S. L. (1995). A comparison of marriages and cohabiting relationships. Journal of Family Issues, 16(1), 53. Retrieved from http://search.proquest.com/docview/1300092398?accountid=10207

Appendix

Table 1: Years for the establishment of VPAUs in each province.

Province	Year established
Santo Domingo*	2005
Distrito Nacional*	2005
Santiago*	2005
San Cristobal	2006
La Vega	2006
Peravia	2006
Hermana Mirabal	2008
San Pedro de Macoris	2008
Espailliat	2008
Monseñor Nouel	2008
Puerto Plata	2008
San Juan de la Maguana	2008
La Altagracia	2008
San Francisco de Macoris	2012
Azua	2012
Dajabon	2013
La Romana	2013
Valverde	2015

*Province also has an established refuge shelter

Table 2: Summary Statistics for Couple sample

Variable	All	Min	Max	Married	Cohabitation
woman_age	31.9	15	49	35.76	30.87
woman_educ	8.236	0	20	11	7.499
man_age	37.26	15	64	40.72	36.33
woman_educ	7.615	0	25	10.19	6.929
urban	0.589	0	1	0.695	0.56
# children	2.639	0	12	2.576	2.656
control_level	1.387	0	6	0.939	1.506
owns_property	0.458	0	1	0.56	0.431
husbanddrinks	0.671	0	1	0.525	0.71
father_beat_mother	0.152	0	1	0.145	0.153
wealth_index==poorest	0.298	0	1	0.119	0.346
wealth_index==poorer	0.246	0	1	0.156	0.27
wealth_index==middle	0.191	0	1	0.198	0.19
wealth_index==richer	0.155	0	1	0.239	0.132
wealth_index==richest	0.11	0	1	0.288	0.0626

Table 3: Summary Statistics for all women sample

Variable	Observation:	All	Min	Max	Single	In Union
wperceptions	40,687	0.157937	0	5	0.1370834	0.1702352
wperceptions1	40,687	0.09025	0	1	0.0810972	0.0956474
women_age	40,687	29.85853	15	49	25.99245	32.13839
male_age	465	19.22581	15	20		19.22581
woman_educ	40,647	8.365218	0	20	9.306269	7.810457
man_educ	29,476	7.710137	0	20	8.649888	7.479873
wealth_index1	40,687	0.236734	0	1	0.1828	0.2685395
wealth_index2	40,687	0.230565	0	1	0.2146028	0.2399781
wealth_index3	40,687	0.204783	0	1	0.217253	0.1974291
wealth_index4	40,687	0.184752	0	1	0.21129	0.1691021
wealth_index5	40,687	0.143166	0	1	0.1740542	0.1249512
number_children	40,687	2.118515	0	13	1.131253	2.700711
urban	40,687	0.633372	0	1	0.6932353	0.5980699
owns_property	40,687	0.394844	0	1	0.2399788	0.4861686
control_level	21,676	1.54738	0	6	2.032981	1.415155
husbanddrinks	21,654	0.696638	0	1	0.7732959	0.6757551
father_beats_mother	25,617	0.142835	0	1	0.1356841	0.1465527

Table 4: DHS Questions for annual prevalence

Questions: Annual Prevalence
Annual Prevalence Emotional
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner
Annual Prevalence Physical
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner
Annual Prevalence Sexual
how many times in the last 12 months ever been humiliated by husband/partner
how many times in the last 12 months ever been humiliated by husband/partner

Table 5: DHS Questions for perceptions

Questions: Perceptions
Beating justified: woman goes out without telling
Beating justified: woman neglects children
Beating justified: woman argues with husband
Beating justified: woman refuses sex
Beating justified: woman burns food

Table 6: Summary Statistics for Control and Treatment group (pre-treatment period)

	Control	Treatment	All	(N-N)*
Outcome Variables				
lifetime_prevalence	0.229	0.232	0.231	-0.015
	[0.421]	[0.422]	[0.422]	[0.025]
annual_prevalence	0.193	0.161	0.175	0.018
	[0.395]	[0.368]	[0.380]	[0.023]
annual_prevalence_emotional	0.13	0.0994	0.113	0.016
	[0.337]	[0.299]	[0.317]	[0.019]
annual_prevalence_physical	0.133	0.122	0.127	0.006
	[0.340]	[0.328]	[0.333]	[0.019]
annual_prevalence_sexual	0.0469	0.0352	0.0404	-0.001
	[0.212]	[0.184]	[0.197]	[0.012]
wperceptions	0.367	0.211	0.28	0.127***
	[0.938]	[0.632]	[0.786]	[0.047]
mperceptions	0.117	0.0932	0.104	0.023
	[0.525]	[0.457]	[0.489]	[0.033]
wperceptions1	0.18	0.13	0.152	0.043**
	[0.384]	[0.337]	[0.359]	[0.022]
mperceptions1	0.0677	0.0538	0.06	0.013
	[0.252]	[0.226]	[0.238]	[0.016]

Control Variables	Control	Treatment	All	(N-N)*
woman_age	31.6	31.1	31.32	0.101
	[8.363]	[8.340]	[8.349]	[0.506]
man_age	37.39	36.52	36.9	0.47
	[9.657]	[9.319]	[9.475]	[0.589]
woman_educ	6.354	7.232	6.843	-0.734***
	[4.485]	[4.401]	[4.457]	[0.265]
man_educ	6.294	6.957	6.663	-0.545**
	[4.611]	[4.622]	[4.626]	[0.277]
wealth_index==poor~t	0.443	0.294	0.36	0.142***
	[0.497]	[0.456]	[0.480]	[0.028]
wealth_index==poorer	0.227	0.265	0.248	-0.023
	[0.419]	[0.442]	[0.432]	[0.026]
wealth_index==middle	0.169	0.188	0.18	-0.028
	[0.375]	[0.391]	[0.384]	[0.023]
wealth_index==richer	0.117	0.155	0.138	-0.043**
	[0.322]	[0.363]	[0.346]	[0.020]
wealth_index==rich~t	0.0443	0.0973	0.0738	-0.047***
	[0.206]	[0.297]	[0.262]	[0.016]
number of living c~n	3.169	2.791	2.958	0.286**
	[2.040]	[1.832]	[1.935]	[0.115]
type_residence==ur~n	0.505	0.528	0.518	-0.032
	[0.501]	[0.500]	[0.500]	[0.030]
owns_property	0.573	0.538	0.554	-0.014
	[0.495]	[0.499]	[0.497]	[0.029]
number of control ~e	1.589	1.327	1.443	0.223***
	[1.503]	[1.417]	[1.461]	[0.086]
husbanddrinks	0.672	0.716	0.697	-0.024
	[0.470]	[0.451]	[0.460]	[0.028]
father_beat_mother	0.146	0.133	0.138	0.026
	[0.353]	[0.339]	[0.346]	[0.021]

Table 7: Results for effects of VPAUs on annual prevalence

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.000751	0.0154	0.0240	0.0302*
	(0.0209)	(0.0132)	(0.0262)	(0.0178)
unidadesAct	-0.0190	-0.0285	-0.0534***	-0.0661***
	(0.0204)	(0.0192)	(0.0188)	(0.0190)
cohabitation			0.0758***	-0.0189
			(0.0142)	(0.0113)
unidadCoh			-0.0314	-0.0176
			(0.0228)	(0.0205)
unidadesActCoh			0.0416	0.0472*
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.151***	-0.00956	0.0918***	0.0130
	(0.0297)	(0.0387)	(0.0290)	(0.0397)
Observations	7,678	7,653	7,678	7,653
R-squared	0.010	0.189	0.015	0.190

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 8: Results for effects of VPAUs on annual prevalence index

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.646**	-0.207	-1.196**	-0.756**
	(0.294)	(0.254)	(0.468)	(0.334)
unidadesAct	0.0165	-0.193	0.201	-0.113
	(0.350)	(0.331)	(0.473)	(0.389)
cohabitation			0.113	-0.853***
			(0.297)	(0.229)
unidadCoh			0.673	0.657*
			(0.463)	(0.369)
unidadesActCoh			-0.264	-0.0935
			(0.517)	(0.409)
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	1.947***	0.858	1.928***	1.706**
	(0.404)	(0.642)	(0.421)	(0.624)
Observations	1,484	1,481	1,484	1,481
R-squared	0.046	0.175	0.049	0.178

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 9: Results for effects of VPAUs on annual prevalence of emotional violence

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.00125	0.0138	0.0230	0.0294
	(0.0144)	(0.0104)	(0.0257)	(0.0198)
unidadesAct	-0.0139	-0.0215	-0.0493***	-0.0603***
	(0.0148)	(0.0167)	(0.0170)	(0.0203)
cohabitation			0.0521***	-0.0249**
			(0.0138)	(0.0110)
unidadCoh			-0.0305	-0.0183
			(0.0241)	(0.0219)
unidadesActCoh			0.0433	0.0489*
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.0968***	-0.0744**	0.0550**	-0.0445
	(0.0174)	(0.0309)	(0.0205)	(0.0316)
Observations	7,678	7,653	7,678	7,653
R-squared	0.011	0.171	0.014	0.172

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 10: Results for effects of VPAUs on annual prevalence of physical violence

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.00711	0.00401	-0.00549	-0.000932
	(0.0198)	(0.0143)	(0.0250)	(0.0190)
unidadesAct	-0.00731	-0.0144	-0.0176	-0.0276*
	(0.0153)	(0.0159)	(0.0166)	(0.0155)
cohabitation			0.0540***	-0.0216
			(0.0135)	(0.0130)
unidadCoh			-0.00257	0.00673
			(0.0177)	(0.0157)
unidadesActCoh			0.0112	0.0164
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.0798***	0.00840	0.0386*	0.0315
	(0.0210)	(0.0299)	(0.0219)	(0.0332)
Observations	7,678	7,653	7,678	7,653
R-squared	0.010	0.150	0.015	0.150

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 11: Results for effects of VPAUs on annual prevalence of sexual violence

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.000233	0.00684	-0.00320	0.00119
	(0.00959)	(0.00918)	(0.0128)	(0.0116)
unidadesAct	-0.00339	-0.00692	-0.00357	-0.00805
	(0.0135)	(0.0144)	(0.0142)	(0.0164)
cohabitation			0.0134	-0.0131
			(0.00795)	(0.00772)
unidadCoh			0.00353	0.00738
			(0.0106)	(0.00995)
unidadesActCoh			-0.000330	0.00139
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.0434**	-0.0321	0.0335	-0.0181
	(0.0193)	(0.0266)	(0.0205)	(0.0294)
Observations	7,678	7,653	7,678	7,653
R-squared	0.005	0.071	0.006	0.071

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 12: Results for effects of VPAUs on all women sample perceptions (index)

VARIABLES	(1) No controls	(2) With controls	(3) In Union w/no controls	(4) In Union w/controls
unidades	0.0228	0.00113	0.0111	0.0315
	(0.0281)	(0.0386)	(0.0270)	(0.0365)
unidadesAct	0.0214	-0.0110	0.0544	0.0197
	(0.0580)	(0.0658)	(0.0616)	(0.0673)
inunion			0.0206	0.0490**
			(0.0125)	(0.0197)
unidadinunion			0.0188	-0.0239
			(0.0183)	(0.0242)
unidadesActUnion			-0.0543***	-0.0320
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.287***	0.436***	0.270***	0.362***
	(0.0334)	(0.0592)	(0.0335)	(0.0428)
Observations	35,223	14,368	35,223	18,249
R-squared	0.045	0.068	0.045	0.062

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 13: Results for effects of VPAUs on all women sample perceptions (dummy)

VARIABLES	(1) No controls	(2) With controls	(3) In Union w/no controls	(4) In Union w/controls
unidades	0.00969	0.00266	0.00267	0.00916
	(0.0140)	(0.0175)	(0.0144)	(0.0163)
unidadesAct	0.00456	-0.0128	0.0158	-0.00236
	(0.0324)	(0.0383)	(0.0333)	(0.0361)
inunion			0.00609	0.0217***
			(0.00516)	(0.00758)
unidadinunion			0.0112	-0.00399
			(0.00771)	(0.00960)
unidadesActUnion			-0.0186***	-0.0118
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.173***	0.244***	0.167***	0.198***
	(0.0172)	(0.0284)	(0.0181)	(0.0195)
Observations	35,223	14,368	35,223	18,249
R-squared	0.048	0.073	0.049	0.068

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 14: Results for effects of VPAUs on women's perceptions (index)

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.0546	-0.0308	-0.0677	-0.0400
	(0.0438)	(0.0408)	(0.0415)	(0.0398)
unidadesAct	0.00575	0.0103	0.0845**	0.0769*
	(0.0337)	(0.0303)	(0.0407)	(0.0383)
cohabitation			0.0865***	0.0217
			(0.0199)	(0.0222)
unidadCoh			0.0153	0.0108
			(0.0291)	(0.0276)
unidadesActCoh			-0.0987***	-0.0822***
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.405***	0.491***	0.342***	0.470***
	(0.0731)	(0.0747)	(0.0694)	(0.0771)
Observations	7,680	7,655	7,680	7,655
R-squared	0.033	0.053	0.037	0.054

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 15: Results for effects of VPAUs on women's perceptions (dummy)

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.0187	-0.00801	-0.0328	-0.0216
	(0.0221)	(0.0203)	(0.0204)	(0.0190)
unidadesAct	0.00777	0.00991	0.0501***	0.0469***
	(0.0145)	(0.0125)	(0.0160)	(0.0144)
cohabitation			0.0446***	0.00910
			(0.0117)	(0.0125)
unidadCoh			0.0170	0.0165
			(0.0161)	(0.0158)
unidadesActCoh			-0.0535***	-0.0461***
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.222***	0.277***	0.190***	0.267***
	(0.0356)	(0.0421)	(0.0327)	(0.0409)
Observations	7,680	7,655	7,680	7,655
R-squared	0.039	0.061	0.044	0.062

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 16: Results for effects of VPAUs on men's perceptions (index)

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.0310	-0.0252	-0.0136	-0.00798
	(0.0243)	(0.0234)	(0.0253)	(0.0250)
unidadesAct	0.0211	0.0252	0.0279	0.0227
	(0.0245)	(0.0247)	(0.0234)	(0.0216)
cohabitation			0.0757***	0.0220
			(0.0192)	(0.0164)
unidadCoh			-0.0223	-0.0218
			(0.0266)	(0.0247)
unidadesActCoh			-0.00920	0.00367
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.110***	0.265***	0.0503*	0.244***
	(0.0265)	(0.0402)	(0.0272)	(0.0366)
Observations	7,402	7,380	7,402	7,380
R-squared	0.016	0.032	0.019	0.032

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 17: Results for effects of VPAUs on men's perceptions (dummy)

VARIABLES	(1) No controls	(2) With controls	(3) Cohabitation w/no controls	(4) Cohabitation w/controls
unidades	-0.0194	-0.0158	-0.00695	-0.00464
	(0.0140)	(0.0126)	(0.0134)	(0.0130)
unidadesAct	0.00922	0.0119	0.0121	0.0103
	(0.0135)	(0.0133)	(0.0120)	(0.0106)
cohabitation			0.0446***	0.0132
			(0.0102)	(0.00873)
unidadCoh			-0.0159	-0.0141
			(0.0132)	(0.0124)
unidadesActCoh			-0.00388	0.00232
Controls	NO	YES	NO	YES
Province Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Constant	0.0720***	0.160***	0.0371**	0.148***
	(0.0133)	(0.0198)	(0.0147)	(0.0182)
Observations	7,402	7,380	7,402	7,380
R-squared	0.018	0.038	0.022	0.038

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1