ATTITUDE TOWARDS INTIMATE PARTNER VIOLENCE IN TWO ASIAN CULTURES

Sarah Taylor† --- Yan Xia2 --- K. Anh Do3
1,2,3 Department of Child, Youth & Family Studies, University of Nebraska-Lincoln, USA

ABSTRACT
This study used World Values Survey data to investigate which demographics (gender, socioeconomic status, age, marital status, religiosity, and views towards gender equality) of people in two patriarchal societies, China and India, are associated with attitudes towards intimate partner violence (IPV). Participants were asked to rank their attitudes towards IPV on a scale of 1 to 10. Logistic regression and linear regression analyses were run for India and China to determine the effects of gender, socioeconomic status, age, marital status, religiosity, and gender equality on the likelihood that participants favor IPV or oppose IPV. The model for India was statistically significant, indicating male, lower middle, upper middle, and upper socioeconomic classes, older age, no longer married, and no religious affiliation were more likely to favor IPV. The model for China was also statistically significant, with male the only significant predictor for favorable attitude. Linear regression analyses were performed for India and China using the participants who favor IPV to determine which variables (gender, socioeconomic status, age, marital status, religiosity, and gender equality) are associated with favoring IPV to a greater extent. The model for India was statistically significant, with never married, lower class, upper class, and supportive attitudes towards gender equality having a positive relationship with more favorable attitudes towards IPV. The model for China was not statistically significant. Overall, results may help target individuals at higher risk for victimization or perpetration of IPV with prevention strategies.

Keywords: Intimate partner violence, Attitudes, India, China, Demographics, Prevention, Intervention.
JEL Classification: I14, J12.

1. INTRODUCTION
It is estimated that one in three women worldwide have experienced intimate partner violence (IPV) (World Health Organization, 2012). IPV includes any physical, psychological, or sexual abuse to an individual of any age, race, culture, or economic group (WHO, 2012). Much literature exists on the frequency of women worldwide
experiencing IPV. However, less literature exists on attitude towards IPV. An individual’s attitude towards IPV may be influenced by a variety of reasons.

The present paper examines whether there are differences in beliefs about IPV in India and China and whether these differences depend on (are associated with) gender, SES, age, marital status, religiosity, or views towards gender equality. Research has yet to explore these two countries in regards to attitude towards IPV. India and China have two of the largest populations in the world. These two Asian countries share many values and similarities, such as being historically patriarchal societies. Yet, there are also contrasts between India and China in social, political, and cultural backgrounds. Existing literature regarding IPV in India and China focuses on prevalence and experiences of IPV (Broom et al., 2012). Because 40% of women in India and between 19.7% and 64.8% of women in China have experienced IPV (Kumar et al., 2005; Zhao et al., 2006) identifying the demographics of people associated with attitude towards IPV provides research evidence for developing prevention programs that reach potential victims and perpetrators before the IPV occurs (Hove and Gwazane, 2011).

2. INFLUENCES ON ATTITUDE TOWARDS IPV

2.1. Gender

Research has found that both men and women are victim of IPV, and both men and women have a favorable attitude towards the use of IPV (Merten and Williams, 2009; Yount and Li, 2009; WHO, 2012). However, women are victim to IPV at higher rates than males (Tjaden and Thoennes, 2000). Research from Middle Eastern samples has confirmed that males have a more favorable attitude towards the use of IPV compared to females (Haj-Yahia and Uysal, 2007; Haj-Yahia and Zoysa, 2007). Studies in the United States also show that men favor the use of IPV more than women (Merten and Williams, 2009). Minimal research exists on the association of gender with attitude towards IPV in India and China.

2.2. Socioeconomic Status

IPV occurs across every income level (Vyas and Watts, 2009). However, research shows that when people live in areas of high poverty, they tend to be more tolerant of crime and violence (Sampson and Wilson, 1995). High stress levels as a result of living in poverty can contribute to IPV (Cunradi et al., 2000; Kuruvilla and Jacob, 2007). Therefore, poverty may not be the direct cause of violence, but added stress could serve as a trigger. With limited resources to get help or escape from the violence, lower SES groups have a higher risk of IPV occurring (Kocacik and Dogan, 2006; Koenig et al., 2006; Khalifeh et al., 2013).

Likewise, research has found that individuals with lower SES have a more favorable attitude towards IPV than individuals with higher SES. Haj-Yahia and Zoysa (2007) found that Sri Lankan medical students from lower SES backgrounds have a greater level of favorable attitude towards IPV than students from higher SES backgrounds. In addition, Linos et al. (2012) found that lower SES women had a greater level of favorable attitude towards the use of IPV than higher SES women in Iraq. Minimal research exists on the association of SES with attitude towards IPV in India and China.

2.3. Age

Most research suggests that the incidence of IPV decreases with age, with younger samples reporting higher levels of IPV (Thompson et al., 2006). However, research in some non-Western cultures has contradicted these findings. For example, Broom et al. (2012) discovered that older Indian males were more likely to experience IPV than younger Indian males. Research on attitude towards IPV in non-Western cultures also shows that older age groups are more likely to have a favorable attitude towards IPV. For instance, Obeld et al. (2010) discovered that older Lebanese students are more likely than younger students to have a favorable attitude towards IPV. In addition, Haj-Yahia (2002) found that less educated, older Jordanian women have a more favorable attitude towards IPV than
younger Jordanian women. A research gap, as well as contradicting findings from previous research, indicates that there is a need to understand the impact of age on attitude towards IPV in India and China.

2.4. Marital Status

The association of marital status and IPV can depend on culture. For instance, Shackelford (2001) found that cohabitating women in the United States were significantly more likely to be murdered by an intimate partner than married women. Johnson et al. (2008) found that in patriarchal countries, separation from a husband may reduce the control held over the wife, which may decrease the risk of IPV. Therefore, married women may be more likely to experience IPV. Most studies that measure attitude towards IPV only use men and women who are married, and most existing research on IPV and marital status is from North America (Yount and Li, 2009; Schuler et al., 2011). Therefore, it is important to examine if marital status is associated with attitude towards IPV in other cultures and countries.

2.5. Religiosity

Research shows that religious people in the United States are less likely to be perpetrators or victims of IPV than nonreligious people (Cunradi et al., 2002; Ellison et al., 2007). Religious people often have a higher level of happiness and life satisfaction, which are indicators of marital quality (Dudley and Kosinski, 1990) and people with a higher marital quality may be less likely to be involved with IPV. However, religious texts across different religions are often interpreted to limit women’s rights (Levitt and Ware, 2006). It is important to examine how self-identifying as “religious” impacts attitude towards IPV in different countries and cultures, as research shows religiosity may impact attitude. Religiosity is operationally defined as a person self-identifying as religious or nonreligious.

2.6. Views towards Gender Equality

Previous research has yet to address the relationship between views towards gender equality and attitude towards IPV. However, according to previous research, the chance of IPV occurring in a relationship decreases as the woman becomes more financially independent. Macmillan and Gartner (1999) explain that a wife’s independence “signifies a challenge to a culturally prescribed norm of male dominance and female dependence. Where a man lacks this sign of dominance, violence may be a means of reinstating his authority over his wife” (p. 949).

India and China are two Asian countries where the status of men and women, historically, has not been viewed on equal terms. Indian women are slowly beginning to gain rights, and some are even working outside the home. However, the traditional gender roles must be upheld, and women are still expected to take care of the home and children (Dutta, 2000). When women are working and able to contribute financially to the family, they have more input in decision-making, which goes against the typical power structures within the home. Roles are slowly beginning to change in India, and some men may fear losing their status to high-achieving spouses and may resort to IPV to maintain their authority in the home (Bourey et al., 2013). Furthermore, the patriarchal system in China may also impact the way IPV is viewed. For over two thousand years, Chinese culture has been directed by Confucian philosophy, which encourages Chinese families to practice patriarchy. The Confucian philosophy consists of strict guidelines in order to keep women inferior to men (Lin and Ho, 2009). Even though IPV is denounced in China today, these cultural beliefs may explain why certain violent acts still occur within some Chinese families. However, when comparing Chinese culture to Indian culture, research shows that Chinese women are more educated than Indian women, and Chinese women have a higher life expectancy than Indian women (Department of Social Science and Technology Statistics State Statistical Bureau, 1995; United Nations Development Programme, 1997). Because of the historical context and shifting views towards gender equality, it is important to investigate the impact of views towards gender equality on attitude towards IPV in these historically patriarchal cultures.
Overall, minimal research exists regarding attitude towards IPV in India and China. The purpose of this study is to address this gap by looking at the effects of various demographic factors on attitude towards IPV. It is hypothesized that gender, SES, age, marital status, religiosity, and views towards gender equality will have significant influences on whether or not respondents from India and China favor IPV.

3. METHODS

3.1. Sample

Data for this study came from the World Values Survey (2005-2009 Wave) (World Values Survey Association, 2014). Refer to WVSA (2014) for a detailed description of the sampling procedures. Indian respondents were sampled from 18 of the 28 states in India, where 97% of the country’s population lives. Chinese respondents were sampled in proportion to the population areas in China (e.g., North, South) (WVSA, 2014).

Table 1 provides a detailed description of the samples from India and China. Of the 2001 Indian respondents, 43% were female and the average age was 40.09 years. Of the 1991 Chinese respondents, 49% were female and the average age was 41.37 years.

### Table 1. Demographic Data of WVS participants in India and China

<table>
<thead>
<tr>
<th>Variables</th>
<th>India</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>1,137</td>
<td>56.8</td>
</tr>
<tr>
<td>Female</td>
<td>861</td>
<td>43.0</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>89</td>
<td>4.4</td>
</tr>
<tr>
<td>Upper Middle</td>
<td>302</td>
<td>15.1</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>681</td>
<td>34.0</td>
</tr>
<tr>
<td>Working</td>
<td>345</td>
<td>17.2</td>
</tr>
<tr>
<td>Lower</td>
<td>530</td>
<td>26.5</td>
</tr>
<tr>
<td>Highest education level (attained)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete primary school</td>
<td>761</td>
<td>38.0</td>
</tr>
<tr>
<td>Incomplete secondary school</td>
<td>498</td>
<td>24.9</td>
</tr>
<tr>
<td>Complete Secondary School</td>
<td>484</td>
<td>24.1</td>
</tr>
<tr>
<td>University-level education with degree</td>
<td>239</td>
<td>11.9</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>1611</td>
<td>80.5</td>
</tr>
<tr>
<td>No longer married</td>
<td>96</td>
<td>4.8</td>
</tr>
<tr>
<td>Never married</td>
<td>293</td>
<td>14.6</td>
</tr>
<tr>
<td>Religious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>1456</td>
<td>72.8</td>
</tr>
<tr>
<td>Not Religious</td>
<td>365</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>2001</td>
<td>100.0</td>
</tr>
</tbody>
</table>


3.2. Measures

The World Values Survey used a face-to-face interview method (WVSA, 2014). Experts in survey language techniques translated the questionnaire to the ten different languages spoken by Indian participants and to the Chinese language for the Chinese participants. After the questionnaires were completed, they were back-translated into English (WVSA, 2014). The questionnaires were pre-tested to check for questions that could potentially be problematic for respondents. For the Indian survey, mock interviews, and four pre-tests were conducted in each of the ten languages. Feedback was given, and corrections were made if needed, including the omission of problematic questions. The questionnaire also asked demographic information. Of the interviews conducted, 15% were back-checked.

3.3. Outcome Variable

Attitude towards IPV, the outcome variable, was a single item defined as the justification of a man beating his
wife. Participants were asked, “Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card.” Then, participants were read the item, “For a man to beat his wife.” This item was coded on a 10-point Likert-scale, ranging from 1 = never be justified to 10= always be justified. Ratings were combined into a binary variable for data analysis. Responses of ‘1’ were recoded as ‘0’ to represent respondents who “oppose IPV”, and responses from ‘2’ to ‘9’ were recoded as ‘1’ for respondents who “favor IPV”. Binary data allowed researchers to determine which demographic variables predicted the likelihood of being either in the “favor IPV” or “oppose IPV” groups. Additional analyses were conducted with the original scaled ratings (1-10) to examine the extent to which demographic variables predicted favorability of IPV.

3.4. Predictor Variables

Gender, SES, age, marital status, religiosity, and gender equality were the predictor variables. Gender, a categorical variable, was measured as “sex” in the questionnaire, as participants were asked if they consider themselves: 1) male, 2) female, or 3) don’t know. Because “sex” is a biological term, this study referred to the variable as “gender,” as participants responded to the item based on their perceptions of themselves. Additionally, IPV is perceived by the socially constructed idea of gender (i.e., being a man or woman), opposed to reproductive anatomy. Age was measured as a continuous variable. SES was a subjective rating, where respondents were asked to place themselves in the following five groups: upper class, upper middle class, lower middle class, working class, and lower class. Marital status was originally divided into 6 groups, but for this study, it was recoded into three categories: 1) “married,” 2) “not married,” which includes living together as married and single/never married, and 3) “no longer married,” which includes divorced, separated, and widowed. Religiosity consisted of two categories, where respondents were asked whether they consider themselves “religious” or “not religious.” It is important to acknowledge that this variable is a self-belief of the participants, as it was up to the discretion of the participants on what they considered the meaning of “religious.” Gender equality was assessed using a constructed subscale, consisting of 4 items: 1) “When jobs are scarce, men should have more of a right to a job then women”, 2) “Men make better political leaders than women”, 3) “University is more important for a boy”, and 4) “Men make better business executives than women do.” Ratings for these items were based on a 4-point Likert scale, ranging from 1 = strongly agree to 4 = strongly disagree. Reliability between these four gender equality items was .72, indicating that the items have good internal consistency. The scores of the items were then added together and averaged to produce a mean score of gender equality, with higher scores representing a more supportive attitude towards gender equality.

4. RESULTS

4.1. Likelihood of Favoring IPV

Four separate analyses were run. First, separate logistic regression analyses for India and China were performed to determine the effects of gender, SES, age, marital status, religiosity, and gender equality on the likelihood that participants favor IPV or oppose IPV. Statistics can be viewed in Table 2.

The logistic regression model for India was statistically significant, \( \chi^2(10) = 99.360, p < .000. \) The model explained 8.1% (Nagelkerke \( R^2 \)) of the variance in attitude towards IPV and correctly classified 61.6% of cases. Significant predictors include gender, lower middle class, upper middle class, upper class, age, no longer married, and religiosity. Males are 42% more likely to be in the “favor IPV” group than females. Lower middle class participants are 61% more likely to be in the “oppose IPV” group compared to lower class participants. Upper middle class participants are 59% more likely to be in the “oppose IPV” group compared to lower class participants. Upper class participants are 29% more likely to be in the “favor IPV” group compared to lower class participants. Older participants are 50% more likely to be in the “favor IPV” group compared to younger participants. Participants who are no longer married are 30% more likely to be in the “favor IPV” group than participants who have never been
married. Finally, if participants consider themselves religious, they are 62% more likely to be in the “oppose IPV” group than participants who do not consider themselves religious.

The logistic regression model for China was also statistically significant, \( \chi^2(10) = 22.898, p < .006 \). The model explained 2.1% (Nagelkerke \( R^2 \)) of the variance in attitude towards IPV and correctly classified 76.3% of cases. The only significant predictor was gender. Males are 40% more likely to be in the “favor IPV” group compared to women. Predicted probability percentages were calculated using the formula: odds ratio/(odds ratio +1) (Australian Bureau of Statistics, 2012).

### Table-2. Logistic regression for India and China

<table>
<thead>
<tr>
<th>Predictor</th>
<th>India</th>
<th></th>
<th></th>
<th>China</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>SE</td>
<td>Wald ( \chi^2 )</td>
<td>( p )</td>
<td>Odds Ratio</td>
<td>( \beta )</td>
</tr>
<tr>
<td>Male</td>
<td>-.334</td>
<td>.112</td>
<td>8.906</td>
<td>.003</td>
<td>.716</td>
<td>-.404</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td>-.256</td>
<td>.158</td>
<td>2.606</td>
<td>.106</td>
<td>.774</td>
<td>-.166</td>
</tr>
<tr>
<td>Lower middle</td>
<td>.443</td>
<td>.137</td>
<td>10.433</td>
<td>.001</td>
<td>1.558</td>
<td>.151</td>
</tr>
<tr>
<td>Upper middle</td>
<td>.382</td>
<td>.169</td>
<td>5.116</td>
<td>.024</td>
<td>1.465</td>
<td>.134</td>
</tr>
<tr>
<td>Upper</td>
<td>-.880</td>
<td>.281</td>
<td>9.827</td>
<td>.002</td>
<td>.415</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.010</td>
<td>.004</td>
<td>6.667</td>
<td>.010</td>
<td>.990</td>
<td>-.003</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No longer</td>
<td>-.852</td>
<td>.315</td>
<td>7.292</td>
<td>.007</td>
<td>.427</td>
<td>.462</td>
</tr>
<tr>
<td>Married</td>
<td>-.327</td>
<td>.167</td>
<td>3.826</td>
<td>.050</td>
<td>.721</td>
<td>.035</td>
</tr>
<tr>
<td>Religious</td>
<td>.497</td>
<td>.127</td>
<td>15.194</td>
<td>.000</td>
<td>1.644</td>
<td>-.179</td>
</tr>
<tr>
<td>Gender Equality</td>
<td>.161</td>
<td>.083</td>
<td>3.780</td>
<td>.052</td>
<td>1.175</td>
<td>.071</td>
</tr>
</tbody>
</table>

Note: Lower class for SES and Never married for age are reference categories. Upper class was not included in the analysis for China, as the number of participants in this group was significantly smaller than the other groups.

### 4.2. Extent of IPV Favorability

Next, linear regression analyses were separately performed for India and China using the participants who favor IPV to determine which variables (gender, SES, age, marital status, religiosity, and gender equality) are associated with favoring IPV to a greater extent. Because attitude towards IPV is a continuous variable, linear regression analyses provided further information about the extent to which participants favor IPV.

The linear regression model for India was statistically significant and explained a significant amount of the variance in attitude towards IPV, \( R^2 = .135, F(10, 612) = 9.529, MS_E = 4.954, p < .001 \). No longer married significantly predicted attitude towards IPV, \( \beta = -.137, t(612) = -2.846, p < .005 \). People who have never been married, have a more favorable attitude towards IPV than people who are no longer married. Lower middle class significantly predicted attitude towards IPV, \( \beta = -.111, t(612) = -2.418, p < .05 \). The negative relationship indicates that the lower class has a more favorable attitude towards IPV than the lower middle class. Upper class significantly predicted attitude towards IPV, \( \beta = .136, t(612) = 3.481, p < .001 \). Compared to the lower class, upper class had a more favorable attitude towards IPV. Finally, gender equality significantly predicted attitude towards IPV, \( \beta = .136, t(612) = -2.418, p < .05 \). The more supportive respondents were towards gender equality, the more favorable attitude they had towards IPV. On the other hand, the linear regression model for China was not statistically significant, \( R^2 = .016, F(9, 376) = 0.679, MS_E = 4.968, p > .05 \).
5. DISCUSSION

IPV is a documented major concern in India and China today (Kumar et al., 2005; Tang and Lai, 2008). Consequently, this study examined who is more likely to favor IPV in India and China and if gender, SES, age, marital status, religiosity, and gender equality are associated with attitude towards IPV. Knowing who is more likely to favor IPV may help identify who is more likely to perpetrate or be victim to IPV in these two countries. Therefore, prevention efforts can target individuals who are, especially, in need of their services.

Results from the study indicated similarities and differences in the demographic predictors of attitude towards IPV. In both India and China, men are more likely to favor IPV. IPV is a gender issue, as it is oftentimes influenced by the accepted roles and behaviors of men and women (e.g., men are assertive, women are submissive). Because men are more often the perpetrator of IPV (Mirrlees-Black et al., 1998) they may be more accepting of IPV, compared to women who are more often the victim. Findings indicate that both countries should especially target men with prevention services.

Additionally, Indian participants who are members of the lower social class tend to favor IPV more and to a greater extent than those in the middle social classes. Findings are consistent with previous research that indicates lower social classes are at a higher risk for IPV (Khalifeh et al., 2013). Interestingly, the Indian upper class tends to favor IPV more and to an even greater extent than the lower social class. This finding is supported by Weitzman (2000)’s account that society overlooks the problem of IPV among upper class families. Additionally, self-blame is high and the utilization rate of services is low for victims of IPV who come from high SES background (Weitzman, 2000). Prevention services should target both lower and upper SES individuals, particularly as services tend to neglect the needs of those in the latter group.

Findings on the association between age and IPV have been inconsistent to date. This study found that, in India, older individuals tend to favor IPV more than their younger counterparts. Younger people in India may be more progressive in regards to women’s rights and women’s issues, and, consequently, less likely to justify IPV against women. Furthermore, lower education attainment has been found to be associated with an increased risk of IPV, and older Indian respondents in the World Values Survey data set were also significantly less educated than younger Indian respondents (WHO, 2012; WVSA, 2014).

Indian respondents who considered themselves to be religious were less likely to favor IPV. An important consideration for this paper is that India recognizes a variety of different religions, and each may have different standards of behavior. Nevertheless, this result highlights the potential positive influence of religion on people’s attitudes and beliefs in India. This finding also highlights the need to increase IPV education and awareness to the general community.

Findings on respondent’s views on gender equality and attitude towards IPV were inconsistent with theory. Indians who have a more favorable attitude towards IPV were found to have a more supportive attitude towards gender equality. Because data was collected using a face-to-face method, participants may have felt pressure to give socially desirable answers regarding their views towards gender equality as the movement for women’s rights increases throughout the country. Yet, participants, particularly males, may still favor the use of IPV as a way to maintain their power and control in their relationship. However, scholars should further examine the association of views on gender equality and attitude towards IPV.

Finally, contrary to theory and findings from India, Chinese participants did not show strong associations between demographics, other than gender, and attitude towards IPV. China’s more progressive movement towards women’s rights and equality may be a contributing factor (DSSTSSSB, 1995). Social desirability may be another contributing factor as conformity and collectivism is valued in Chinese society and culture. Reports of IPV may be defended by the Confucian values held within the country (Lin and Ho, 2009). Prevention efforts are much needed to educate Chinese residents in order to promote awareness and decrease the prevalence of IPV.
5.1. Limitations and Future Directions

Study limitations exist that should be noted. For example, the World Value Survey only asked participants if they favor IPV. Participants were not asked if they would favor IPV in certain situations, such as “if a woman argues with her husband,” “if she neglects the children,” or “if she goes out without telling him” (Hindin, 2003). Certain situations may change participants’ attitude towards IPV. In addition, because there are different ethnic groups within the two countries, the findings are not representative of every ethnic group within one nationality. Finally, it should be noted that participants may favor IPV, yet never inflict violence on their partner. Similarly, participants may oppose IPV, yet still inflict violence on their partner. Attitude towards IPV may not always indicate a person’s actions or experiences.

Findings may help to explain the high rates of IPV in India and China (Kumar et al., 2005; Zhao et al., 2006; Tang and Lai, 2008). Men who have a more favorable attitude towards IPV may be more likely to beat their wife, and women who have a more favorable attitude towards IPV may be more likely to be victim to IPV. These results make it evident that more education and community outreach is needed to help change attitude towards IPV. This evidence may encourage countries to invest in prevention factors associated with a decreased risk of favorable attitude towards IPV, such as education for both women and men.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES


