Religious beliefs in public administration and behaviour surrounding abortion decriminalisation in COVID-19 era

In the context of reproductive health, policies focused on decriminalising abortion that resulted in religious beliefs, attitudes and behaviours being affected. The main purpose of this article was to identify the religious beliefs of abortion in the emergency situations such as COVID-19. Although there is no general consensus regarding abortion, there is almost ‘general opposition to causing harm to life’ in most religions. In the current study, 28 indicators and four factors (seven for each factor) related to pregnancy termination were explored through an exploratory factor structure. The study was therefore non-experimental, cross-sectional and exploratory, with 100 students selected in a non-probabilistic way.

Contribution: The main contribution of this research is to find the variable effects on abortion in emergency conditions regarding religious beliefs. Given the results, behavioural intentions determine a structural model, but religious beliefs explain the solution. Furthermore, data generalisation is not possible due to the context, sample selection and type of analysis. In the local population, a confirmatory factor analysis should be performed with a probabilistic sample selection.

Keywords: intentions; abortion; religious beliefs; attitudes; COVID-19.

Introduction

Abortion under normal conditions is prohibited in almost all religions of the world. In Zoroastrian religion, the principle is on wisdom in all matters, and there is no statement about legal issues such as legality or illegality of abortion; but in New Avestan religion [ancient beliefs with the teachings of Zoroaster] aborting the foetus is considered unacceptable and illegal in every sense. Buddhists are also against abortion. The Catholic Church considers the foetus to be a complete human being from the moment of conception and under no circumstances should abortion be performed and does not allow it. But if abortion is the only option to save the life of the mother, it cannot be morally objected. Protestants consider abortion legal (Hout, Perrett & Cowan 2022). Jewish religion allows abortion when the life of the mother is threatened, but otherwise prohibits the use of tools and drugs for abortion. It is considered a sin. Muslim scholars did not allow abortion since ancient times and consider abortion after formation the fertilised ovary, as forbidden.

The theology of public administration is a legal figure derived from the governance of religious associations. Its legal essence consists of protecting lives and reducing the impact of risk events on the exposure of human beings (Baidowi et al. 2021; Jamalpour & Yaghoobi-Derabi 2022). Faced with social and medical dilemmas where people’s lives are at risk, the theology of public administration seeks the preservation of life or at least the preservation of the greatest number of lives (Carbonelli & García Bossio 2023; Venter 2021). In this sense, when a pandemic poses a threat to people’s lives, the theology of public administration seeks to resolve the dilemma of who to prioritise in a risk scenario (Turner 2021). In this way, jurisprudence dictates that life must be preserved, even when the imminent risk is the total or partial loss of a human being.

In the case of technological advances related to automation, the theology of public administration in its section on jurisprudence and resolution of dilemmas suggests the programming of the autumata based on the principle of preservation of life or reduction of the impact of human losses (ed. Hampton 2020; Jamalpour & Yaghoobi-Derabi 2022). In this way, faced with the dilemma of...
who to attend to in the face of the health crisis, the theological principle indicates that the greatest number of lives must be attended to regardless of their economic, political, social, labour, education or health condition.

Regarding the request for termination of pregnancy, the theology of public administration will seek the preservation of life in a condition of risk. In a scenario of exposure to contagion, illness and death from COVID-19, the theology of public administration will insist on safeguarding and protecting life. Therefore, this type of theology develops from an axiology of absolute values, not relative ones. The most important value that a person possesses is to be a person, because the person is a value in itself from its original conception (Mansilla 2008).

If the request for termination of pregnancy was made before, during or after the health crisis of the COVID-19 pandemic (Farhud & Mojahed 2022), then the principle of caring for the greatest number of lives will prevail, even when hospitals are organised to provide specialised care for COVID-19 versus other diseases.

More specifically, if the dilemma consists of protecting the applicant for the termination of pregnancy against COVID-19 viruses, then the theology of public administration will seek to find a way to save the mother’s life as a priority (Duque Silva & Del Prado Higuera 2021). The imperative will be to reduce the impact of the pandemic on human lives (Daigle et al. 2022; De Beer 2020). Therefore, priority attention to an applicant for termination of pregnancy will be given precedence over an applicant for COVID-19 care.

As the number of infections, illnesses and deaths from COVID-19 increased, the COVID-19 care centres were subjected to a stigma of carrying the virus. Health professionals were stigmatised as sources of infection (Przywara et al. 2021). Once the population is immunised, stigma reduces its impact on social distrust and a new theology of health service administration emerges. Consequently, the measurement of the determining variables of trust in the public health administration will anticipate risk aversion scenarios.

Therefore, in this article, the effect of religious beliefs in the formulation of health policies, especially those related to abortion during emergency situations, was discussed. In other words, the compatibility of religion and theology in emergency health situations was investigated. For this purpose, this research presented the variable scale of abortion in emergency conditions regarding religious beliefs and considered their role.

Literature review

Terminating a pregnancy is a deliberate, systematic and planned process. Consequently, intentions, requests, attitudes and perceptions regarding assisted abortion dictate intent, request and curettage (Garcia 2020). The first step in such a process is to disseminate information regarding sexuality, fertility, abortion decriminalisation and its health consequences. In a 28-day cycle, four periods are required: menstruation – the endometrium or mucosa is detached and is driven by the blood, fertility – pre-ovulatory proliferation, ovulation – the endometrium is reconstructed by oestrogens and secretion – the maximum thickness of the uterine mucosa facilitates fertilisation (Bustos 2019).

In spite of the fact that the basic education system emphasises the fertility cycle, the media reduces it to allusions about women’s choices and reproduction freedom in the case of couples (Leal et al. 2012). Therefore, procreation is most likely in the 22 year age group and decreases dramatically with age. A little more than 5% of procreation attempts after the age of 40 result in pregnancy (Rey et al. 2022). Curettage and abortion seem to be instruments of freedom of choice for women and couples according to the procreation cycle, fertility probability and age (RAE 2014). ‘Pregnancy’ comes from the Latin ligula, which means [teaspoon] and [various instruments and blades similar to a teaspoon] (Anders 2014). Natural or induced abortion occurs when a pregnancy is terminated (RAE 2014). In Latin, the word ‘abortion’ comes from the prefix ab- [deprivation, separation from a limit], so it is understood as depriving of birth (Anders 2014). Abortions that are considered safe meet a range of legal requirements in countries where abortion is legal (Sedgh et al. 2012). Abortion during the first 20 weeks of pregnancy is known as clinical abortion, and it occurs before the gender of the baby is known. A retained abortion occurs when the uterus does not spontaneously expel the conception. Abortion before clinical evidence or an ultrasound of the pregnancy is known as preclinical abortion. If the gestational age is unknown, spontaneous abortion is defined as the spontaneous termination of a clinical pregnancy before 20 weeks of gestation or the weight is less than 500 g (Carbonelli & Garcia Bossio 2023).

As defined by the World Health Organization (WHO), unsafe abortion occurs when an unwanted pregnancy is ended by individuals without the necessary skills or in an environment that does not meet minimum medical standards or both. Despite considerable attention, abortion continues to generate controversy. The trend of case-by-case abortion decriminalisation in Mexico appears to be explained by the relationship between abortion decriminalisation policies and the age of the women requesting termination of pregnancy. There are 100784 requests for terminations of pregnancy in Mexico City, followed by 33 386 in the State of Mexico, the entity with the highest birth rate and youth population (Velez 2018).

When it comes to age and cause of termination, rape accounts for 60% of abortions among women aged 23 to 25; women between the ages of 17 and 19 are more likely to experience pregnancy risks; more than 40% of abortions are caused by economic factors. However, more than 20% of cases involve
women between 23 and 25 years of age. In more than 10% of cases, women between 23 and 25 years of age exercise their right to abort more than younger women (Aldana 2019).

Thus, the data presented suggests that there is a social representation of freedom of choice relating to sexuality, procreation and pregnancy termination disseminated through the media, resulting in attitudes favourable to abortion approval among women between the ages of 17 and 25 years old, when fertility is more likely than at other ages (Quintero 2018). Social freedom and the right of free choice regarding sex and abortion are among the laws that justify the changing process in the decriminalisation of abortion in today's society. However, statistics seem to contradict this. According to Parrish (2012), rational choice is more prevalent among women over 25 years of age. This freedom of rational choice – deliberate, planned and systematic – may be contributing to the development of attitudes – dispositions that favour sexuality and the termination of pregnancy – as women approach the age of 25, when this period should have ended (Garcia 2016). An explanatory model of planned procreation and abortion in the health and human behaviour sciences indicates that attitudes and perceptions are determined by socioeconomic factors, which then influence intentions, which determine whether to continue pregnancy or terminate it (Garcia 2018).

Research on pregnancy and its termination, however, indicates that these actions are not solely influenced by women’s rational choices, but also by socio-cultural factors, such as norms, values, customs and local traditions. Socio-culturally, the stability of the couple’s relationship – without commitment, with commitment, or unstable – affects their decision to get pregnant and/or stop having children (Nodar et al. 2022). The decision to procreate or end a pregnancy is made by couples who maintain stable and committed relationships, but in other relationships, the decision to procreate or end a pregnancy is made by the man’s family. As a result, the behavior of parents – authoritative, permissive or assertive – determine whether a child is able to procreate or terminate a pregnancy. A woman’s choice is supported and favoured in assertive parenting styles (Dickings, Johns & Chipman 2012), as well as her partner’s decision.

It is however more likely that a dominant actor will abort or procreate when parenting styles are more authoritarian or permissive. There is also a sociocultural context to the cases presented, which reveals how the norms or relationships in a family determine the procreation or termination of pregnancy. As a result of a culture where women are seen as instruments of social reproduction and not for personal satisfaction, the parenting styles and types of couple relationships are depositories of this culture. According to the planned fertility model, women’s choices will override any norm or value at an older age, based on their income and education. As a consequence, high education is associated with higher incomes, but it is also associated with a deliberate, systematic and planned lifestyle that is adverse to optimal fertility in the 22 year old age group (Adamsoms 2013). In the face of increasing age, education and income, one must exercise the freedom of sexuality and terminate pregnancies, but fertility is less and less likely (Kreuter, Siosten & Biering 2008).

In deliberate and planned models, beliefs determine attitudes, but their influence has not been established. It would be helpful to study beliefs related to other variables in the planned pregnancy model (Garcia 2019) to clarify the dilemma (Garcia 2019). Propaganda for abortion decriminalisation is explained by the specified dependency model.

- **Assumption 1**: Beliefs attitudes. According to information on the causes and effects of reproductive health policy, decriminalising abortion, widely promoted in the media, creates provisions against as well as in favour of pregnancy and its interruption.
- **Assumption 2**: Beliefs attitudes intentions. A specific example of this is the information regarding the decriminalisation of abortion, which not only generates positive or negative dispositions about the rational choice of women but also estimates the costs and benefits of carrying out a birth. Based on factors such as age, income and education, a caesarean section or abortion is recommended. When information about pregnancy and termination becomes available, the probability of making decisions and taking action increases.
- **Assumption 3**: Beliefs attitudes intentions behaviours. It is the process and assimilation of information relating to the causes and consequences of termination of pregnancy that determines the decisions and strategies in a personal sphere, if it is the result of planning, deliberation and systematisation of that information, related to abortion.

**Method**

Today, according to the religious beliefs of the societies, there are three major tendencies among the legal systems of the world about abortion. Some legal systems absolutely accept abortion and consider it permissible. Others that make up the majority of the legal system, not only do not accept abortion but have vowed to criminalise it. In the third group, abortion is considered permissible in some cases and in some other cases, it is considered impermissible. The principle that abortion is ugly is shared by different religions and it is allowed only in special and few cases and after the approval of a specialist doctor.

Therefore, the law for laboratory fetuses and the rights of the people to whom these fetus belongs, during the COVID-19 epidemic, are one of the newly emerging issues. The explanation of which requires the use of jurisprudential sources and legal principles, in order to be able to propose the approval of new laws necessary to support the laboratory fetus. In this regard, the article will answer these questions: Does a laboratory embryo have the same rights as a natural embryo inside the mother’s womb? Accepting or not accepting each of the two conceivable assumptions in the issue, what legal challenges does it entail? Does accepting the
assumption of equality of rights between natural and laboratory embryos justify the necessity of criminalising laboratory abortion in criminal and religious politics?

Overall, an exploratory factor structure for planned abortion in adolescent couples is assessed in this study.

- **Formulation:** Regarding dependency ratios weighted by sex, age, income, beliefs, attitudes, intentions and behaviours, what is the difference between these factors?
- **Null hypothesis:** A weighted dependency relationship is applied to the theoretical dependency relati between factors and indicators related to termination of pregnancy.
- **Alternate hypothesis:** There is a difference between theoretical relationships and weighted relationships.

**Variables:**
- **Sex:** Refers to the gender of the couple.
- **Age:** Describes the time following birth.
- **Attitudes:** In this context, it refers to the provisions that prohibit or allow the termination of pregnancy.
- **Income:** This is determined by the sum of wages, scholarships, and other economic and financial assistance.
- **Beliefs:** This refers to the processing of information regarding pregnancy termination, whether the information will be gained from religious, academic or daily life.
- **Behaviours:** The term refers to fidelity, documentation, financial arrangements and requests regarding the termination of pregnancy.
- **Intentions:** Refers to the likelihood of terminating the pregnancy.
- **Design:** An exploratory, cross-sectional, non-experimental study was conducted.
- **Sample:** We selected 100 students from a public university in Xochimilco, Mexico City, on a non-probability basis. A total of 43% of the population are female, while 57% are male; 21% are under the age of 18 (M = 17.24 and SD = 1.24), 35% are between 18 and 22 (M = 20.35 and SD = 1.27), and 47% are over 22 years old. Approximately 40% of the workers earn less than 3000 pesos a month (M = 2973 and SD = 124.35), 25% earn between 3000 and 7500 pesos a month (M = 6245 and DE = 135.25), and 35% earn more than 7500 pesos a month (M = 7821 and SD = 135.26).

### Instrument

Pregnancy termination was assessed using variable scales (Sun et al. 2020).

**Beliefs scale**

In this test, the participant is asked to respond to religious, academic or daily information regarding the termination of pregnancy. A choice of 0 = ‘false’ or 1 = ‘true’ is given to the question ‘having a child is against my will’.

**Attitude scale**

Pregnancy termination is measured in terms of the provisions against and in favour of it. The decision to have a child is solely up to the parents’. There are five possible responses ranging from 0 = ‘do not agree at all’ to 5 = ‘strongly agree’.

### Scale of intentions

Essentially, it measures how the couple expects to terminate the pregnancy. Response options range from 0 = ‘not likely at all’ to 5 = ‘very likely’. ‘If my partner abandoned me, I would still have a child’.

### Scale of behaviour

In addition to measuring fidelity, documentation, financing and termination requests, the report identifies the frequency of actions associated with them. There are five response options ranging from 0 = ‘never’ to 5 = ‘always’. ‘The matter has been documented before I decided to have a child’.

### Process

Variables and questions used by the participants were homogenized using the Delphi technique. The confidentiality of the information provided by the participants was maintained, and they were told that the results of the research would not affect the students’ academic standing. Public university library lobby was used for the surveys. Statistical Package for Social Sciences (SPSS) and Structural Moment Analysis (AMOS) version 21 were used to analyse the data.

### Analysis

Alpha Cronbach’s alpha and param coefficients were used to determine the internal consistency. With the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy, parameters were determined, and with the Bartlett test, adequacy and sphericity were estimated. In order to conduct exploratory factor analysis, main axes were extracted, promax rotation was performed, and oblique criteria were applied. Interpretation of the factors was possible only when factor weights exceeded 0.500. With the help of fit and residual statistics, we were able to establish the fit of the dependency relationship model.

### Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

### Results

As determined by Alpha values, the belief scale had an alpha of 0.7582, attitudes had an alpha of 0.760, intentions had an alpha of 0.7883, and behaviours had an alpha of 0.7775, which reach values higher than the minimum required (Table 1).

The extraction method consists of two main axes, a promax rotation and a skew criterion. In this case, the sphericity and adequacy of the data is [146.20 (45 gl) \( p = 0.000; \) KMO is 0.645]. The average is M; SD is the standard deviation; F1 is beliefs (35% of the variance explained), F2 is attitudes (26% of
the variance explained), F3 is intentions (16% of the variance explained), and F4 is behaviours (8% of the variance explained). An item excluded from the scale has an alpha value that represents its internal consistency.

As the result of the analysis of the total percentage of variance explained, the validity of the construct was established by the total percentage of the explained variance, namely beliefs (23%), attitudes (20%), intentions (17%), and behaviours (14%).

In order to observe the structure of relationships between the factors, the correlations and covariances were estimated, considering the specification of the model that proposes linear trajectories between beliefs, attitudes, intentions and behaviours (see Table 2).

As demonstrated in Figure 1, the path beliefs intentions behaviours provides the highest level of explanation plausibility, because intentions determine behaviour. Consequently, attitudes have a bigger impact on intentions, despite reducing beliefs’ influence on dispositions.

The values of the adjustment and residual parameters [$\chi^2 = 256.26$ (41df) $p > 0.05$; CFI = 0.997; GFI = 0.990; RMSEA = 0.008] allowed us to accept the null hypothesis regarding the similarities between the theoretical dependency relationships and the weighted dependency relationships.

### Discussion

Abortion in emergency situations, which according to doctors can cause harm to the mother or the foetus itself, is permissible in most religions and is not criminalised. However, without having these conditions, abortion, in addition to taking the life of a child, can cause great damage to the mother and the society in terms of moral and physical,

| TABLE 1: Reliability, descriptive, and the scales’ validity. |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| R Item          | M               | SD              | Alpha           | F1              | F2              | F3              |
| Belief scale    |                 |                 |                 |                 |                 |                 |
| r1 Owning a child is against my will | 4.01 | 1.00 | 0.743 | 0.341 | - | - |
| r2 Abortion is for selfish people | 4.01 | 1.00 | 0.713 | 0.301 | - | - |
| r3 Owning a child is a divine blessing | 4.02 | 1.10 | 0.711 | 0.332 | - | - |
| r4 Abortion are a reflection of our society | 4.02 | 1.00 | 0.710 | 0.412 | - | - |
| r5 Owning a child is an act of faith | 4.02 | 1.00 | 0.713 | 0.342 | - | - |
| r6 Abortion is for engaged couples | 4.01 | 1.10 | 0.710 | 0.442 | - | - |
| r7 Having a child is not moral | 4.21 | 1.10 | 0.711 | 0.342 | - | - |
| Attitude scale  |                 |                 |                 |                 |                 |                 |
| r8 The decision to have a child lies with the parents | 4.25 | 1.10 | 0.732 | 0.332 | - | - |
| r9 Abortion is women’s exclusive decision | 4.01 | 1.10 | 0.712 | 0.343 | - | - |
| r10 Men entitled to decide in the female body | 4.03 | 1.10 | 0.713 | 0.343 | - | - |
| r11 Abortion demand is women’s privilege | 4.03 | 1.12 | 0.711 | 0.313 | - | - |
| r12 Financing for abortion is men’s duty | 4.01 | 1.10 | 0.713 | 0.442 | - | - |
| r13 Abortion is a dependent phenomenon | 4.01 | 1.10 | 0.721 | - | - | - |
| r14 Abortion demand is a personal instability | 4.02 | 1.21 | 0.710 | - | - | - |
| Intention scale |                 |                 |                 |                 |                 |                 |
| r15 If I was a man although my partner abandons me | 4.21 | 1.03 | 0.712 | - | - | 0.342 |
| r16 Abortion even if my partner forced me | 4.01 | 1.05 | 0.710 | - | - | 0.541 |
| r17 I would like a son, but my partner hated me | 4.02 | 1.20 | 0.711 | - | - | 0.342 |
| r18 Abortion even if my partner left me | 4.00 | 1.10 | 0.710 | - | - | 0.342 |
| r19 I would terminate even though my partner will be indifferent towards me | 4.11 | 1.20 | 0.725 | - | - | 0.342 |
| r20 Even if my partner did not support me, I would have a child | 4.01 | 1.21 | 0.710 | - | - | 0.342 |
| r21 Even if my partner was unhappy, I would have a child | 4.01 | 1.11 | 0.711 | - | - | 0.342 |
| Behaviour scale |                 |                 |                 |                 |                 |                 |
| r22 I respect childbirth | 4.01 | 1.01 | 0.711 | - | - | - |
| r23 Prior to deciding an abortion, I have saved the money | 4.01 | 1.05 | 0.712 | - | - | 0.313 |
| r24 Before abandoning my partner, I have demanded an abortion | 4.01 | 1.10 | 0.711 | - | - | 0.321 |
| r25 Before aborting, I am informed | 4.02 | 1.10 | 0.711 | - | - | 0.332 |
| r26 Before aborting, I have sought a job | 4.01 | 1.21 | 0.712 | - | - | 0.371 |
| r27 I have a relationship with another before aborting | 4.01 | 1.10 | 0.711 | - | - | 0.302 |
| r28 Before an abortion, I have been unfaithful | 4.01 | 1.10 | 0.710 | - | - | 0.314 |

| TABLE 2: Correlations and covariances. |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Parameters M    | SD              | F1              | F2              | F3              | F4              | F5              | F6              |
| F1 24.35        | 14.25           | 1.00            | -               | -               | 1.987           | 0.47            | 0.39            | 0.46            |
| F2 20.31        | 17.32           | 0.48*           | 1.00            | -               | -               | 1.879           | 0.38            | 0.37            |
| F3 25.41        | 19.20           | 0.38*           | 0.50*           | 1.00            | -               | -               | 1.789           | 0.48            |
| F4 27.43        | 15.46           | 0.51**          | 0.51**          | 1.00            | -               | -               | 1.878           |

Note: Elaborated with data study; F1, Beliefs; F2, Attitudes; F3, Intentions; F4, Behaviors; M, Media; SD, standard deviation.

* $p < 0.01$, ** $p < 0.004$, *** $p < 0.0001$. 

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and therefore it is not permissible (Daigle et al. 2022). The current study contributes to the body of knowledge by establishing an exploratory factor structure of the planned termination of pregnancy based on religious beliefs. Each of its factors and indicators is consistent with its obliqueness and promax rotation criteria.

A randomised and stratified sample, as well as a study in a non-university population, would enable a confirmatory factor analysis of established dependency relationships, but the context, sample selection and exploratory factor analysis prevent generalisation of the data to other study areas. In contrast to exploratory factor analysis, confirmatory factor analysis determines whether factors not included in the dependency relationship model have an impact by weighing measurement error. An exploratory factor analysis does not seem to be affected by homoscedasticity – constant measurement error in indicators and factors – whereas the confirmatory factor analysis would be affected by it (Carbonelli & García Bossio 2023). The public policies that emerge from these results show that the population between 18 and 22 years of age is prone to plan their termination of pregnancy and based on this finding, it is possible to anticipate risk scenarios, as well as prevention, self-care and self-efficacy in vulnerable populations.

**Conclusion**

The objective of the research was to specify a model for the study of pregnancy termination. Although the design limited the findings to the sample, positive relationships were established between religious beliefs, attitudes and intentions regarding behaviours. Future lines of research regarding factors explaining abortion intentions will allow anticipating demographic growth scenarios. In light of these characteristics and recommendations, a study could define the impacts of reproductive health policies generally and the decriminalisation of abortion specifically on women and their partners’ beliefs, attitudes, intentions and behaviours during childbirth or abortion.

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