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Surrogacy in the United States: analysis of sociodemographic profiles and motivations of surrogates

BIOGRAPHY

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KEY MESSAGE

Women who become surrogates in the USA do not have low socio-economic status, have medium to high education, participate in the labour market, earn above the average income for their state, have health insurance, and affirm that their primary motivation is prosocial/altruistic.

ABSTRACT

Research question: What is the profile of women in the USA who become surrogates, and what is their power of decision and motivations?

Design: This quantitative study was performed with 231 participants in the USA, given the country's long history of surrogacy, to help clarify the profile of women who become surrogates, their power of decision and motivations.

Results: Descriptive and multivariate cluster analyses showed that women who become surrogates earn above the average income for their state of residency, have a high level of education, have health insurance, are employed, and decide to become a surrogate for prosocial/altruistic reasons.

Conclusions: In contrast to the premise of both radical feminism and ultra-conservative Catholicism, this study found that altruism and empathy are the primary motivations for participating in surrogacy processes, and that a woman's decision to become a surrogate is not motivated by social conditioning relating to poverty or social status.

INTRODUCTION

Surrogacy is a process that uses assisted reproductive technology (ART) (*Ellenbogen et al., 2021*; *Frati et al., 2021*; *Lamm, 2012*; *NPESU, 2023*; *Patel et al., 2018*), whereby a woman agrees to carry and deliver a child on behalf of another individual or couple. Surrogacy is becoming increasingly popular worldwide, but there is currently no consensus on its legal status. In some countries, especially in Europe, surrogacy is in expansion, but there is already a long history in countries such as the USA and the UK. Surrogacy is facilitating family building and family diversity, such as same-sex parent households. A recent study by *Bulletti et al. (2023*, p. 43575) highlights that there 'are 65 countries in the world where surrogacy is legal or admitted', both in its altruistic and commercial forms, and that in 'another 35 countries, the law only establishes access to supportive pregnancy'. Altruistic surrogacy models are regulated in the UK, Canada, Greece, Israel, South Africa, Thailand, Portugal, and

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KEY WORDS

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some states in Australia and the USA (*Horsey, 2024*). Intended parents can access this process in these countries after passing rigorous controls and tests (*Carone et al., 2017*), which cover various aspects: legal, psychological, customs (registering in the corresponding consulate), etc. Other countries are also studying the regulation of surrogacy. Given the complexity involved in the gestation of human life, all parties must be respected and protected. Surrogacy needs to be 'addressed properly through appropriately framed laws which would protect the rights of surrogate mothers, intended parents, and child[ren] born through surrogacy' (*Patel et al., 2018*, p. 212).

Spain, like other European countries, faces decreasing fertility rates and is in constant evolution towards more ART treatment (*Marre et al., 2018*). Progress is being made in Spain in the field of reproductive bioeconomy through the contributions of various authors, including *Álvarez et al., (2019)* who analyse socio-affective relationships and the reproductive industry (*Rivas et al., 2022*).

Although there is currently a broad theoretical and academic debate on the subject, laws are being developed to both facilitate and limit access to surrogacy. A recent study performed in Spain showed that a large majority, approximately 84% of the population, is in favour of regulating surrogacy or do not oppose it, while 52.9% would contemplate using ART treatment in the case of infertility (*Rodríguez-Jaume et al., 2024*).

The principal argument against surrogacy is based on three pillars: (i) gestating a child for others does not involve altruistic or prosocial behaviour; (ii) the women (surrogates) who agree to gestate for others are forced or coerced into agreeing and do not act freely; and (iii) the profile of surrogates is characterized by poverty and, therefore, they are incapable of making decisions due to macrosocial factors that put them in a situation of social vulnerability.

This study aims to clarify the phenomenon of surrogacy from the perspective of the surrogates themselves in order to determine their profile and motivations for carrying children for other people, focusing on surrogates in the USA. Although there are no universal federal surrogacy laws in the USA, potential surrogates from anywhere in the country can access the process through agencies in states where it is legal. Therefore, this study looked at the USA as a whole, rather than individual states.

ALTRUISTIC OR PROSOCIAL MOTIVATIONS IN SURROGACY: ILLUSION OR REALITY?

In the theoretical and empirical approach to prosocial and altruistic motivations of surrogates, some key questions emerge: What is the fundamental reason why women agree to become surrogates? Do prosocial/altruistic motivations mask strictly economic reasons? Can prosocial/altruistic motivations exist in a contract that grants economic remuneration?

First, it should be noted that prosocial behaviour is not synonymous with helping, if, in reality, it is motivated by professional or organizational obligations (*Bierhoff, 2002*). According to *Stevens and Taber (2021)*, 'pro-social behavior/altruism are used without attribution for why participants may be engaging in these helpful actions' (p. 1); in other words, there is currently no approach that addresses the need to determine what motivates prosocial/altruistic actions of surrogates. Moreover, prosocial behaviour does not necessarily have to be altruistic; there may be motivations of a different type. However, numerous studies have found a correlation between empathy and prosocial behaviour (*Decety et al., 2016*; *Eisenberg and Miller, 1987*; *Richaud and Mesurado, 2016*; *Yin and Wang, 2023*).

Pregnancy through surrogacy demonstrates an exceptional level of altruistic behaviour that is not comparable to others, such as donating blood or any other volunteering activity within the altruism framework. Pregnancy itself cannot be deemed altruistic, but surrogate pregnancies can. Pregnancy entails risks both for the surrogate and the future baby. Even if potential surrogates pass the appropriate psychological checks, they can still be affected by many circumstances both during and after childbirth. Consequently, not everyone will be prepared to become a surrogate, and both training and, especially, information about surrogacy could help potential surrogates to better understand the process. Some studies indicate that there is a lack of information 'about the risks of impact [of becoming a surrogate] on their own employment' (*Fuchs and Berenson, 2016*). Therefore, it is essential that potential surrogates receive clear information on surrogacy — that is, the full range of personal, family, employment, etc. implications — before making the decision to carry a child for others. As such, training should be a priority for women who want to become surrogates, given that it is a decisive factor in starting the process with guarantees (*Ahmari et al., 2014*).

Previous research on women's motivations for becoming a surrogate highlighted the altruistic factor for initiating the process (*Ragoné, 1994*). In a recent study by *Smietana et al. (2021)* on commercial surrogacy in India, Russia and the USA, differences were observed between the surrogates of the three countries. Surrogates in the USA described the process as a 'labour of love' (p. 389). Surrogacy is a process that is supported by women who become surrogates. They define it as giving the gift of life, and see ART as a positive force. The process is only seen negatively if they fail to carry a pregnancy to term, but not when the baby is given to the intended parents (*Berend, 2010*).

In a cyber-ethnographic study using qualitative methodology, motivated by the advance of surrogacy in the USA, *Berend (2014*, *2016*) argue that the motivations of surrogates in the USA are primarily driven by 'individual feelings and behaviour' (*Berend, 2016*, p. 240), with less importance given to macrosocial factors. In their study, *Imrie and Jadva (2014)* show that: (i) in most cases, surrogates were satisfied with the process; (ii) the primary motivation for multiple surrogacy agreements was to offer the possibility of gestating a sibling for an existing child; (iii) no psychological health problems were observed; and (iv) positive psychological effects were not only experienced during the gestation process, but were also maintained over a prolonged period (*Van den Akker, 2007b*). Furthermore, previous research showed that not only do surrogates and their families enjoy positive psychological wellbeing, but, in general, surrogacy has no adverse effects on their family dynamics (*Imrie et al., 2012*). This is in line with a study by *Jadva et al., (2003)*, performed in the UK, in which surrogates stated that they did not experience psychological problems as a consequence of the surrogacy arrangement.

A study in Australia showed that a more altruistic outcome was developed by developing the surrogacy process within a

framework of family relationships and friendships (*Montrone et al., 2020*).

In a post-gestational study in the UK, 10 years after giving birth, surrogates remained positive about the experience (*Jadva et al., 2015*, p. 373). Among the main findings were: (i) surrogates 'scored within the normal range of self-esteem and did not show signs of depression' according to the Beck Depression Inventory; (ii) 'Marital quality remained positive over time'; (iii) 'All surrogates reported that their expectations of their relationship with intended parents had been either met or exceeded and most reported positive feelings toward the child'; (iv) 'In terms of expectations for the future, most surrogates reported that they would like to maintain contact or would be available to the child if the child wished to contact them'; and (v) 'None expressed regret about their involvement in surrogacy'.

A study performed using a comparative analysis between European traditional ('in which the woman becomes pregnant with her own ovum and donated sperm through artificial insemination') and gestational surrogates found that: (i) the environment plays an important role in the gestational process; (ii) surrogates are less anxious and depressed than normative samples; and, in particular, (iii) the level of empathy of gestational surrogates is similar to traditional surrogates, and sometimes even higher (*Lorenceau et al., 2015*).

Scientific evidence highlights the prosocial motivations and altruistic behaviour of women who become surrogates, which radical feminism questions from a more philosophical or anthropological perspective (*Capella, 2015*; *Casciano, 2018*; *Kirby, 2014*; *Panitch, 2013*; *Wilkinson, 2003*). Other authors place surrogacy on a thin line between feminine power and exploitation (*Guzmán and Miralles, 2012*; *Miralles, 2017*; *Roberts, 1999*). These views contrast with the opinions of surrogates, their prosocial frameworks and ideas about love. Various authors show that a woman's decision to gestate for others is guided by 'love' (*Jacobson, 2016*). *Berend (2012)* suggests that by participating in the process, apart from love of family and children, surrogates gain recognition from their community, where giving life to another is considered a moral good. Therefore, the radical feminism argument against surrogacy could be seen as part of an ideological and theoretical framework, which is not necessarily based on scientific evidence.

Given the growing interest in surrogacy in Europe, and the controversy surrounding the role of surrogates, despite legislative measures in many European countries, it is important to analyse the opinions of the surrogates themselves about their participation. Determining the motivations of surrogates and their sociodemographic profiles could help design a transnational policy, and guarantee the social protection of surrogates, future children and intended parents.

This study aims to provide relevant information about surrogacy and its implications for policymakers when designing public policies to protect future children and families from a family diversity perspective.

MATERIALS AND METHODS

Due to the difficulties involved in gathering data on the profiles, employment and economic situation, level of education, motivations for making decisions, etc. of surrogates in certain countries, the decision was made to perform the study in the USA where surrogacy has been practised for decades. The overall objective is to determine the profile and motivations of women who agree to become surrogates for individuals or couples in the USA. The following specific objectives are based on the overall objective:

- to determine the sociodemographic profile of surrogates who participate in surrogacy processes for families in the USA and other countries;
- to determine the socio-economic status of surrogates and their participation in the labour market; and
- to determine the primary motivation of surrogates for carrying a child for other people.

The research hypothesis is that women who become surrogates have low socio-economic status and access the process for economic reasons. Therefore, the null hypothesis is that women who agree to surrogacy are not economically motivated, and their motivation is primarily prosocial and altruistic.

Women are considered to have a low socio-economic status when they agree to surrogacy because they lack economic income, or their income is below the state average, they lack medical insurance, they do not receive income of any kind from other members of their family unit, and the main reason for becoming a surrogate is economic.

The University of Murcia Ethics Committee approved the questionnaire and the study (ID 4715/2023, 20 July 2023).

Research design

A cross-sectional, descriptive study was conducted using quantitative methodology in the USA during August and September 2023. The inclusion criteria focused exclusively on women who had carried and delivered a child for another person(s) in a US state. Although some states have restrictions regarding women in a situation of economic vulnerability becoming gestational surrogates, this was not considered an exclusion criterion given that women from anywhere in the USA can become a surrogate in a different state through an agency.

The simple non-probabilistic sample comprised 231 surrogates from various US states.

An ad-hoc survey was used to gather information to determine the profile of the surrogates and their motivations for carrying a child for other people. The questionnaire was structured into the following blocks: (i) sociodemographic profile and family structure; (ii) access to the labour market and health care; and (iii) motivations for becoming a surrogate.

Given that the research was performed in Spain, an online questionnaire was developed and distributed to surrogacy agencies in the USA and closed groups of surrogates on Facebook. In order to contact the agencies, the association Son Nuestros Hijos was contacted and asked to collaborate (https://sonnuestroshijos.com/). This association was approached because it is a leading organization in Spain that participates in national and international forums and research in the area of study. In addition, it is in permanent contact with international surrogacy organizations.

After initial contact, and once Son Nuestros Hijos agreed to collaborate in the study, the US agencies themselves and those managing closed groups of

surrogates on Facebook sent a message asking for surrogates to participate in the research. In line with the Declaration of Helsinki, the questionnaire was anonymous and did not include data of a personal nature. This aspect facilitated the honesty of participant responses.

A frequency analysis was performed using SPSS Statistics 28 (IBM, USA). A two-stage cluster analysis was used to determine the profiles, which enabled clusters to be detected naturally based on the extensive data obtained.

Variables

The questionnaire provided descriptive data on the subject of study. No distinction was made between the variables based on the data. The variables used were:

- Sociodemographic profile and surrogacy process of surrogates: age, marital status, structure of the family unit, state where they reside, nationality of the intended parents, and the last time the participant had been a surrogate.
- Access to the labour market and healthcare system of surrogates: level of education, participation in the labour market at the time of becoming a surrogate and at the time of survey completion, primary family provider, average income level, income level in relation to the average of the state where they reside, number of family members contributing to family income, health insurance the participant had at the time of becoming a surrogate, and whether the process involved an increase in family expenditure.
- Motivations of surrogates: the number of times they have been a surrogate, relationship with intended parents, primary motivation for becoming a surrogate, opinion about the motivation of other women in the USA who become surrogates, subjective perception of their wellbeing after becoming a surrogate, and whether they considered the baby they gestated to be their own.

RESULTS

The presentation of the results follows the same order as the research variables.

All 231 participants completed the questionnaire. The sociodemographic and family structure data revealed that the mean age of the surrogates was 35.8 years, and the median age was 36 years. Data on marital status, structure of the family unit (number of members) and number of own biological children of surrogates are shown in TABLE 1. In total, 74.4% of the surrogates were married. Most of the surrogates were in family units with four members (31.2%), followed by five members (23%) or three members (21.7%). Excluding the children born by surrogacy, 42.4% of the surrogates had two of their own children, 22.1% had one, and 22.1% had three.

TABLE 1 MARITAL STATUS, FAMILY UNIT STRUCTURE (NUMBER OF FAMILY MEMBERS) AND NUMBER OF OWN BIOLOGICAL CHILDREN OF SURROGATES

	%	*n*
Marital status		
Married	74.4	165
Single	19.5	45
Divorced	8.7	20
Widowed	0.4	1
Total	100	231
Structure of family unit (number of members)		
2	7.8	18
3	21.7	50
4	31.2	72
5	23.0	53
6	11.7	27
≥7	4.76	11
Total	100	231
Number of own biological children (excluding surrogacy)		
1	22.1	51
2	42.4	98
3	22.1	51
4	11.7	27
≥5	1.7	4
Total	100	231

TABLE 2 shows the places of residence of surrogates and the intended parents, and the last time the respondent had been a surrogate. Most surrogates who participated in the study were from Idaho (21.2%); followed by California (13.4%); Illinois and Texas (5.6%, respectively); North Carolina (4.3%); and Florida, Utah and New York (3.9%, respectively.

Most of the respondents became surrogates for families in the USA (36.1%), followed by Spain (22.8%) and China (7.1%). Regarding the last time the respondents had been a surrogate, 46.1% had been a surrogate in the last year, and 82.6% had been a surrogate in the last 4 years.

The first point to consider regarding the participation of surrogates in the labour market and their access to the healthcare system is their level of education. Many surrogates were found to have specific training which favours or helps them find a job in the labour market. In total, 27.7% were high school graduates. However, 72.6% had a higher level of education: 24.7% were trade/technical school graduates, 35.1% had a Bachelor's degree, 12.1% had a Master's degree, and 0.4% had a PhD or higher.

Regarding their participation in the labour market, both at the time of becoming a surrogate and at the time of survey completion, the data were very similar, partly because the surrogates who participated in the study had completed the process relatively recently (TABLE 3).

TABLE 2 PLACES OF RESIDENCE OF SURROGATES AND INTENDED PARENTS, AND PREVIOUS SURROGACY EXPERIENCE OF SURROGATES

	%	*n*
State of residence of surrogate		
California	13.4	31
Colorado	2.6	6
Florida	3.9	9
Georgia	2.6	6
Idaho	21.2	49
Illinois	5.6	13
New York	3.9	9
North Carolina	4.3	10
Tennessee	3.0	7
Texas	5.6	13
Utah	3.9	9
Other state	29.8	69
Total	100	231
Country of residence of intended parents (≥3%) (multiple answers)		
USA	36.1	106
China	7.1	21
Spain	22.8	67
Israel	3.7	11
France	3.4	10
India	3.1	9
Other	23.8	70
Total (surrogacy pregnancies)	100	294
How many years ago were you a surrogate?		
1	46.1	100
2	18.0	39
3	8.8	19
4	9.7	21
5 or more	17.5	38
Total (answered)	100	217

Two results stand out from what, perhaps, might be expected. First, 85.7% of the surrogates were employed when they began their surrogacy process, and second, the potential remuneration obtained from being a surrogate did not discourage the respondents from continuing to work. In fact, the number of surrogates who were employed during the process increased by 2%. In addition, 108 surrogates (46.7%) stated that they were their family's primary provider, which means they played a key role in their family dynamics, given that most were married (74.1%).

In addition to level of education, participation in the labour market and position within the family unit as the primary provider, another piece of data that helps to determine the profile and socio-economic status of surrogates is their annual income. In order to maintain confidentiality, the respondents were only asked about their own income, and not about the income of their family unit. This provided data about their financial independence and disposable income. Although the data can only be explained by considering the average for the surrogate's state of residence, it is interesting to note how many surrogates had no or little individual income. As shown in TABLE 4, only 4.4% of the surrogates reported having no income at all, 5.3% had their own income of US$1–20,000 per year, and 12.4% had US$20,001–40,000 per year. For a better approximation of personal income, average income was estimated according to the surrogate's state of residence by referencing the official data published in *StatsAmerica (2024)*. Consequently, and only considering the income of the surrogates, 67.5% (*n* = 156) and 32.5% (*n* = 75) had an income above and below the average for their state of residency, respectively.

Regarding the number of people contributing to the family income, only 28.3% of surrogates were in single income households. In 67.0% of households, two people contributed to the family finances (TABLE 5). Therefore, taking into account that 47.0% of the surrogates reported that they were the primary earner, and 28.3% lived in family households with only one wage earner, the data show that almost 30% of the surrogates lived in family households where they were the primary wage earner and the only source of income.

Access to health care in the USA is closely linked to access to employment because health insurance, which is mostly private, is linked to work. In total, 69.7% of the surrogates had health insurance before starting surrogacy, 1.7% did not have health insurance, 20.3% had health insurance provided by the intended parents, and 8.2% were in other situations (TABLE 6).

Regarding income and expenses, it is worth noting that, despite economic compensation, 16.0% (*n* = 37) of the surrogates stated that the process had increased their family expenditure.

The participants were asked about their motivations for becoming a surrogate. In total, 88.1% stated that they had become a surrogate for altruistic and prosocial reasons, 9.7% for economic reasons and 2.2% for religious reasons (TABLE 7).

Almost half of the participants (49.8%, *n* = 115) had been surrogates on one occasion; 30.3% (*n* = 70) on two occasions; 14.7% (*n* = 34) on three occasions; and 2.6% (*n* = 6) on four, five or more occasions. The respondents were unanimous when asked if they considered the baby to be their own: 100% stated that they did not.

Of the surrogates who stated that their main motivation was prosocial behaviour,

TABLE 3 EDUCATION, AND PARTICIPATION IN THE LABOUR MARKET BEFORE STARTING THE SURROGACY PROCESS AND AT THE TIME OF SURVEY COMPLETION

Education		
	%	*n*
High school	27.7	64
Trade school	24.7	57
Bachelor's degree	35.1	81
Master's degree	12.1	28
PhD	0.4	1

Participation in the labour market					
At the time of becoming a surrogate			At the time of survey completion		
	%	*n*		%	*n*
Employed	85.7	198	Employed	87.8	203
Unemployed	11.3	26	Unemployed	7.8	18
Other	3.0	7	Other	4.3	10
Total	100	231	Total	100	231

TABLE 4 ANNUAL INCOME OF SURROGAATES

Income (US$)	*n*	%
%0	10	4.4
1–20,000	12	5.3
20,001–40,000	28	12.4
40,001–60,000	57	25.2
60,001–80,000	59	26.1
80,001–100,000	27	11.9
>100,000	33	14.6
Total	226	100
Not completed (missing data)	5	

TABLE 5 NUMBER OF FAMILY MEMBERS (INCLUDING THE SURROGATE) CONTRIBUTING TO FAMILY INCOME

Number of family members	*n*	%
1	65	28.3
2	154	67.0
3	6	2.6
4	2	0.9
≥5	1	0.4
Total	230	100
Not competed	1	

95.2% (n = 220) maintained contact with the intended parents. Of this total, 4.1% (n = 9) were in contact permanently (almost every day), 30.0% (n = 66) were in contact frequently (almost every week), 44.1% (n = 97) were in contact sporadically (once a month), and 21.8% (n = 48) were in contact occasionally (birthdays and holidays).

In response to the question asking their opinion about the motivation of other women in the USA who become surrogates, 13.0% (n = 30) of participants stated that they believed they did so because they were in a situation of poverty or had low socio-economic status. However, the majority of participants (87.0%, n=201) disagreed with this statement.

Finally, regarding the overall satisfaction of the participants with surrogacy, it is significant that, after having been a surrogate, 86.6% (n = 200), 11.7% (n = 27) and 1.7% (n = 4) considered that their family and social wellbeing was very good, good or fair, respectively. The other options (bad and very bad) scored 0%.

The cluster analysis shows two distinct surrogate profiles. As can be seen in TABLE 8, the cluster analysis groups accounted for 91.3% of the cases, showing adequate robustness in the results. The clusters and their variables are shown in TABLE 9.

The variables that were more helpful in defining the clusters were marital status, primary provider, and number of family members contributing income to the family unit. Income, employment, level of education and motivations for becoming a surrogate were not decisive in creating the cluster profiles. The following differences can be observed in the clusters.

Cluster 1 represents the highest number of surrogates (n = 148) and a combined percentage of 70.1%. This profile comprises married women (93.9%) who are not their household's primary provider (76.4%), and there are two members in the family unit who contribute to the family income (87.8%). In addition to the variables that define the cluster most strongly, their average age is 36 years, they maintain contact with the intended parents after the surrogacy process ends (98.6%), they have a Bachelor's degree (31.8%), they are currently employed (83.8%), their motivation for becoming a surrogate is prosocial/altruistic (89.9%), their own (individual) income is above the state average (70.9%), they have been a surrogate once (45.9%), and surrogacy did not involve an increase in family expenditure (81.8%).

Cluster 2 is smaller, with 63 surrogates and a combined percentage of 29.9%. This profile is characterized by single women (57.1%) who are their household's primary provider (69.8%), and only one person in the family unit contributes to the family income (100%). Their average age is

TABLE 6 ACCESS OF SURROGATES TO HEALTH INSURANCE

Type of health insurance	*n*	%
Had health insurance	161	69.7
Did not have health insurance	4	1.7
Did not have health insurance but intended parents arranged for it	47	20.3
Other situation	19	8.2
Total	231	100

TABLE 7 PRIMARY MOTIVATION FOR BECOMING A SURROGATE

Primary motivation	*n*	%
Religious	5	2.2
Economic	22	9.7
Pro-social and altruistic	200	88.5
Total	227	100
Not completed (missing data)	4	

34 years, they maintain contact with the intended parents after the surrogacy process ends (90.5%), they have a Bachelor's degree (41.3%), they are currently employed (95.2%), their motivation for becoming a surrogate is prosocial/altruistic (85.7%), their own (individual) income is above the state average (50.8%), they have been a surrogate once (49.1%), and surrogacy did not involve an increase in family expenditure (85.7%).

DISCUSSION

The results obtained contradict the premise about surrogacy, which advocates that surrogates have a profile associated with poverty, and that their motivation is economic. In total, 86.6% of respondents considered that their personal and family wellbeing was very good after becoming a surrogate. Only 9.7% said that they had become a surrogate for economic reasons. This is similar to the data obtained on the respondents' opinions about the motivation of other women in the USA who become surrogates, to which 13.0% ($n = 30$) responded that they believed they did so because they were in a situation of poverty or had a low socio-economic status. However, the majority (87.0%, $n = 201$) responded that they did not believe that women become surrogates for economic reasons.

These results are in line with earlier studies (*Imrie et al., 2012*; *Jadva et al., 2003*; *Pizitz et al., 2013*; *Van den Akker, 2007a*, *2023*) that highlight the social, family and psychological benefits of surrogacy. The results are also similar to those obtained in a study by *Kleinpeter and Hohman (2000)* performed in California, in which the majority of surrogates were very satisfied with the surrogacy process; and a study by *Braverman and Corson (1992)*, in which the surrogates expressed that they enjoyed being pregnant and also wanted to obtain extra financial income. Important to note is that all the surrogates (100%) responded that they did not consider the baby they gave birth to as their own, and 95.5% maintain a relationship with the intended parents, as also highlighted in other studies (*Jadva et al., 2015*). Therefore, not only are prosocial and empathic/altruistic behaviours observed when making the decision to become a surrogate, but positive effects are also reported for the surrogates and their family unit that persist over time (*Ruiz-Robledillo and Moya-Albiol, 2016*).

The descriptive analysis shows that the income of most surrogates is above the state average (67.5%). Their income may be higher if they live with other members of the family unit who are also wage earners (71.%, $n = 165$). Moreover, the majority were employed when they began the surrogacy process (85.7%). This highlights the fact that women who become surrogates have sufficient economic income and participate actively in the labour market, which gives them financial independence and freedom to make decisions about themselves and their family dynamics.

The economic compensation for surrogacy did not produce a change in the respondents' living conditions, given that they maintained a similar relationship with the labour market before and after becoming a surrogate. In fact, the percentage of women who joined the labour market on becoming a surrogate increased by 2% (87.8%). In addition, most had health insurance (69.7% their own and 20.3% through the intended parents). Their level of education is medium to high (>70% have post-high school education and around 50% have university education), which coincides with their objective earning possibilities. In contrast, there are cases where the family expenditure of surrogates increased as a consequence of the surrogacy process (16.0%). One of the important aims of this study was to determine whether the surrogates belonged to a vulnerable social stratum characterized by low income, financial dependence on others, lack of health insurance, etc. It was found that the results contradict these assumptions, and are similar to those obtained a few years ago by *Fuchs and Berenson (2016)* which showed that surrogates were women with a high level of education who had family income unrelated to surrogacy.

In total, 47% of the participants responded that they are their family unit's primary provider, which gives them financial independence and, therefore, the power to make decisions. Consequently, becoming a surrogate cannot be deemed precarious, at least in its current form (*Standing, 2013*). In most cases, the income of surrogates is above the state average, they are employed, and they have access to health insurance before becoming a surrogate. The results show that women who become surrogates are not in a precarious or vulnerable situation. None of the variables introduced in the study corroborate this premise. Moreover, other contributions suggest that subjective motivations, not associated with social vulnerability, play a predominant role in women deciding to become surrogates of their own free will (*Jacobson and Rozée, 2022*). No aspect relating to vulnerability was found in the results in the surrogate profiles, or in the principal variables that differentiate the clusters (marital status, whether the surrogate is the primary provider, and number of family members who contribute income to the family unit). Furthermore, it was found that prosocial/altruistic motivations behind becoming a surrogate favour the development of positive effects, which, in line with earlier research, may persist in the future (*Ruiz-Robledillo and Moya-Albiol, 2016*).

Surrogacy is of interest to the scientific community. The results obtained in this

TABLE 8 STRUCTURE OF THE CLUSTER ANALYSIS

	n	% of combined	% of total
Cluster 1	148	70.1	64.1
Cluster 2	63	29.9	27.3
Combined	211	100	91.3
Excluded cases	20		8.7
Total	231		100

TABLE 9 DESCRIPTION OF THE CLUSTERS FOLLOWING CLUSTER ANALYSIS OF SURVEY RESPONSES

Cluster 1	Cluster 2
% combined: 70.1%	% combined: 29.9%
n = 148	*n* = 63
Marital status	
Married (93.9%)	Single (57.1%)
Main provider	
No (76.4%)	Yes (100%)
Family members contributing income to the household	
2 (87.8%)	1 (69.8%)
Age (years)	
36	34
Maintains contact with the intended parents after surrogacy	
Yes (98.6%)	Yes (90.5%)
Level of education	
Bachelor's degree (31.8%)	Bachelor's degree (41.3%)
Currently employed	
Yes (83.8%)	Yes (95.2%)
Motivation for becoming a surrogate	
Prosocial/altruistic (89.9%)	Prosocial/altruistic (85.7%)
Annual income in relation to the average income of state	
Above state average (70.9%)	Above state average (50.8%)
How many times have you been a surrogate?	
1 (45.9%)	1 (49.1%)
Increase in family expenditure during surrogacy	
No (81.8%)	No (85.7%)

study are in line with previous research, and reject the alternative hypothesis while confirming the null hypothesis insofar as women who become surrogates do not have low socio-economic status, have a medium to high level of education, participate in the labour market, have an income above the average for their state, have medical insurance, and their primary motivation for surrogacy is prosocial/altruistic. The results from the descriptive and the multivariate cluster analyses contradict the anti-surrogacy premise that women in the USA who become surrogates are socially vulnerable or poor, have little power of decision, and their material situation leads them to become surrogates in order to improve their living conditions, all of which would put their human dignity at risk from a human rights perspective.

The reasons why women decide to become surrogates of their own free will in developed countries cannot be explained by the premise put forward by radical feminism or ultra-conservative Catholicism. Many factors play a role in a woman's decision to become a surrogate: family, social, religion, community, etc. This new form of parenthood is based on women wanting to become surrogates of their own free will, their altruistic and prosocial motivations, and, most importantly, a redefinition of what life and 'giving life' means to them (*Berend, 2012*), especially in relation to families who cannot conceive naturally.

It is a universally acknowledged fact that everyone is different. As such, women's prosocial motivations for becoming surrogates to help others should be respected, especially, perhaps, in countries that persecute or reject surrogacy. For example, in some countries, commercial surrogacy agreements are seen as a major factor in opposing surrogacy. These attitudes do not contemplate the fact that women can decide to become surrogates of their own free will. Irrespective of whether or not surrogacy agreements exist, or that they compensate surrogates financially, surrogacy should not be seen negatively but positively or surrogates could become invisible, stigmatized and relegated to second place in society.

Given that surrogacy is viewed differently around the world, the data from this study, obtained from the USA, cannot be compared with countries that do not have similar laws, judicial controls, or provide psychological and social support; or countries in which women's citizenship rights are not enshrined in law. However, they can be compared with countries with democratic governments that share the aforementioned aspects. However, in Spain, as in other European countries, such as Italy, surrogacy is only criticized explicitly by radical feminism and ultra-conservative Catholicism, which claim that surrogacy undermines some basic human rights, such as freedom and equality, without taking into account the prosocial and altruistic motivations that surrogates themselves manifest.

One of the limitations of this study is participation bias. Although it was possible to create surrogate profiles and to determine women's motivations for becoming a surrogate, the opinions of those who could not (because they did not receive the survey) or did not want to participate in the research have been ignored. However, given that the sample is large compared with similar studies and a profile has not been created previously, the results should be considered in future research.

DATA AVAILABILITY

Data will be made available on request.

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