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# A difference in attitudes toward surrogacy between Chinese students and the Dutch general population in the Netherlands

**Junling Xiang[1,*], Sanne Agterberg[1], Xianming Shi[2]**

[1]University of Amsterdam, Pedagogische Wetenschappen en Onderwijskunde, Roetersstraat 11, 1018 WB Amsterdam, the Netherlands;
s.agterberg@uva.nl (Agterberg, S.); hankfierce@163.com (Shi, X.)
[2]Tongji University, No. 1239, Siping Road, Shanghai, China

*Correspondence: auroraxjl@163.com

**Abstract:** As surrogacy becomes increasingly available and public attitudes towards it wield significant influence on various societal aspects, investigating these attitudes becomes imperative. This study delves into whether Chinese students in the Netherlands harbor distinct attitudes towards surrogacy compared to their Dutch counterparts, and whether age serves as a moderating factor. Employing a questionnaire featuring a narrative, we collected data on surrogacy attitudes from 183 Chinese students (mean age=24.45, 76% female) and 65 members of the Dutch general population (mean age=35.64, 78.5% female). The moderation analysis results reveal a significant difference in surrogacy attitudes between the Chinese and Dutch participants (b =-3.02, t=-10.56, p<.001), with the Dutch exhibiting more favorable attitudes towards surrogacy. However, moderation analysis indicated no relationship between this disparity and participants' ages (b=.01, t=.31, p=.75). These findings suggest that cultural backgrounds may shape attitudes towards surrogacy, while age does not play a significant role. This research contributes insights into surrogacy attitudes among distinct cultural groups in the Netherlands.

**Keywords:** surrogacy; attitudes toward surrogacy; Chinese students; Dutch

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## 1. Introduction

### *1.1 Background*

Surrogacy, an assisted reproductive technique wherein a woman carries a child for another couple, has garnered increasing attention in recent years [1]. The perception of surrogacy significantly influences the support available to surrogate couples and the degree of social acceptance they encounter [2]. Notably, attitudes toward surrogacy exhibit substantial variation among individuals from different nationalities [3], suggesting that one's cultural background may play a pivotal role in shaping their perspectives on surrogacy. Additionally, age might serve as a potential moderator in the relationship between nationality and attitudes towards surrogacy. Research conducted in Germany revealed more positive attitudes toward surrogacy among younger participants and higher disapproval rates among older individuals, while in Iran, a contrasting pattern emerged, with younger participants displaying more negative attitudes compared to their older counterparts [4]. These findings underscore the varying influences of age across different cultures.

### *1.2 Aims and Scope*

Given the cultural diversity within the Netherlands, a country hosting a multitude of ethnic groups, it becomes essential to comprehend the attitudes of distinct cultural segments toward surrogacy. Such an understanding can offer valuable insights into how these attitudes might impact the reactions and support received by families engaging with surrogacy services.

### *1.3 Research Questions*

Moreover, despite the significance of this topic, limited research has undertaken a comparative examination of attitudes toward surrogacy among Chinese students and the Dutch general population residing in the Netherlands, a nation where gestational surrogacy has been legally practiced since 1997 [5]. To address this gap in the literature, the present study aims to answer the following research question:

Do Chinese students in the Netherlands exhibit different attitudes toward surrogacy compared to the Dutch general population, and does age moderate this relationship?

Understanding the attitudes of Chinese students and Dutch individuals toward surrogacy in the Netherlands can provide valuable insights into cross-cultural variations in perceptions of surrogacy. This knowledge has practical implications for surrogacy services and could inform policies aimed at supporting families utilizing surrogacy.

## 2. Literature Review

### *2.1 Attitudes Towards Surrogacy and the Impact on Infertile Couples*

Infertility and sterility, classified as substantial health concerns in the twenty-first century by the World Health Organization, underscore the potential significance of surrogacy as a reproductive option for infertile couples [6]. Surrogacy can be categorized into two main types: traditional surrogacy, where a surrogate mother uses her own egg fertilized by the intended father's sperm, and gestational surrogacy, in which a surrogate carries the child conceived from the genetic material of the intending parents or an egg donor through IVF [7]. This review focuses on gestational surrogacy, which has been legally practiced in the Netherlands since 1997, offering a pathway to biological parenthood for infertile couples. Notably, the availability of adoption options has become increasingly limited after 2022, potentially making surrogacy a more viable choice for these couples [5, 8].

The legalization and recent developments in surrogacy within the Netherlands are expected to make it a more prevalent consideration for infertile couples. The attitudes held by a society towards surrogacy play a pivotal role in influencing the decision-making processes of infertile couples and their experiences throughout the surrogacy journey. Societies with more favorable attitudes towards surrogacy often provide increased social support, reduce associated feelings of shame, and offer comprehensive public information to assist infertile couples in making well-informed decisions [2, 9]. Conversely, societies with negative attitudes towards surrogacy can result in the concealment of surrogacy experiences and feelings of shame. This is evident in regions like India and China, where surrogacy carries a social stigma, surrogate mothers face societal discrimination, and surrogacy is viewed as challenging established societal norms [10, 11].

It is important to note that individuals from various nationalities exhibit differing attitudes towards surrogacy [3]. The Netherlands, characterized by its cultural diversity, is home to numerous ethnic backgrounds, including the Chinese, who represent one of the oldest ethnic minorities in the country [12]. The Chinese population in the Netherlands, which includes individuals from Hong Kong, numbers 102,816 [13], constituting a substantial demographic group.

These diverse cultural backgrounds are likely to influence attitudes towards surrogacy. For example, surrogacy is strictly prohibited in China, both legally and culturally, with strong societal condemnation of the practice. Within Chinese culture, surrogacy is viewed as morally unacceptable, as it conflicts with the traditional belief that "skin and hair are inherited from one's parents." Renting a uterus is seen as selfish, immoral, and reckless behavior [11]. On Chinese social media platforms, even a celebrity's choice to engage in cross-border surrogacy generated intense debate, with the majority of users expressing disapproval [14]. This cultural perspective emphasizes the importance of natural pregnancy, further highlighting the reluctance towards surrogacy [15].

Conversely, the Netherlands has seen discussions surrounding the loosening of restrictions on surrogacy, primarily to discourage Dutch intended parents from seeking surrogacy services abroad. Despite the government's opposition to commercial surrogacy, which remains illegal, the Dutch society appears to be more accepting of surrogacy. The increasing use of assisted reproductive technologies (ARTs), including in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI), has contributed to this acceptance [16]. However, it remains uncertain whether Dutch attitudes towards surrogacy are predominantly positive or if there are variations across different segments of the population, warranting further research in this area.

Moreover, the shifting cultural dynamics in both China and the Netherlands add complexity to the understanding of attitudes towards surrogacy. China has witnessed a decline in the desire to have children due to rapid economic growth and social transformation, whereas the Netherlands maintains higher pronatalism levels, emphasizing the importance of children in life, irrespective of age [17, 18]. For infertile Chinese couples, the desire for biological children remains strong, driven by traditional expectations surrounding genetic heritage and societal obligations to conceive [19]. Importantly, age plays a distinct role in fertility intentions between the Chinese and Dutch populations. Older Chinese individuals tend to exhibit a stronger desire for genetically related offspring, while Dutch attitudes do not appear to vary significantly with age. These differences in age-related fertility intentions can significantly influence perceptions of surrogacy within these cultural contexts.

### *2.2 Cross-Cultural Variations in Surrogacy Attitudes*

The influence of cultural backgrounds on attitudes toward surrogacy is undeniable. In China, surrogacy faces not only legal prohibitions but is deeply rooted in societal norms and values. The Chinese Ministry of Health has officially prohibited surrogacy, and the judicial system has enforced a comprehensive ban on any form of surrogacy by broadly applying Article 3 of the 2001 Measure, citing concerns related to public order and morality [20]. Within Chinese culture, surrogacy is considered not only illegal but also irrational and morally objectionable. It starkly contrasts with the traditional Chinese belief that "skin and hair are inherited from your parents," a notion that condemns the practice of renting a uterus as selfish, immoral, and reckless behavior [11]. The strong disapproval of surrogacy within Chinese culture is evident on Chinese social media platforms, where a celebrity's decision to undergo cross-border surrogacy generated intense debate, with a significant 61.9% of users expressing disapproval and only 7.0% showing support [14]. Surrogacy, in general, is not widely accepted among the Chinese populace, as indicated by a 2013 poll conducted by the Canton Public Opinion Research Centre [20]. Many Chinese individuals view surrogacy as a last resort, emphasizing the importance of utilizing the mother's own body during pregnancy [15].

Conversely, in the Netherlands, despite government opposition to commercial surrogacy (which remains illegal), there have been discussions about loosening restrictions, in part, to prevent Dutch intended parents from seeking surrogacy services abroad. The Netherlands, characterized by a relatively open environment, appears to exhibit greater acceptance of surrogacy. The increased use of assisted reproductive technologies (ARTs) such as in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) has contributed to this acceptance [16]. However, the stance of the Dutch population on surrogacy remains uncertain, especially considering the potential changes in regulations. Therefore, further research is imperative to explore whether the Dutch population generally holds more positive attitudes towards surrogacy.

Moreover, shifting demographics and societal dynamics play a crucial role in shaping attitudes toward surrogacy in both China and the Netherlands. China has witnessed a rapid decline in the willingness to have children due to the nation's fast-paced economic development and social transformations. Conversely, the Netherlands maintains higher

pronatalism levels, emphasizing the significance and centrality of children in life, irrespective of age [17, 18]. In the context of infertility, Chinese couples often turn to reproductive therapies like surrogacy to fulfill their desire for biological children, driven by traditional expectations regarding genetic heritage and societal, familial, and individual obligations to conceive [19]. Importantly, the role of age in influencing fertility intentions differs significantly between the Chinese and Dutch populations. Older Chinese individuals tend to exhibit a stronger desire for genetically connected children, whereas age-related differences in fertility intentions are less apparent among the Dutch. These variations in age-related fertility intentions can significantly impact perceptions of surrogacy and further underscore the complexity of cross-cultural attitudes towards assisted reproduction.

### *2.3 Identifying the Research Gap*

Despite the multicultural composition of the Netherlands, there is a notable absence of comprehensive studies that compare attitudes toward surrogacy among individuals of diverse nationalities residing in the country, particularly in the context of surrogacy's increasing prevalence following its legalization. The Netherlands' diverse demographic landscape, including a substantial presence of Chinese individuals, calls for an examination of Chinese students' attitudes toward surrogacy. Notably, Chinese students represent a significant demographic among international students in the Netherlands, ranking third after Germany and Italy [21].

The process of acculturation suggests that individuals who relocate to another country at a young age may more readily adopt the cultural values of the host country [22]. Given that the general Chinese population tends to hold predominantly negative attitudes toward surrogacy, it becomes essential to explore the perspectives of Chinese students in the Netherlands. These students, still in their formative years and potentially influenced by Dutch culture, remain underrepresented in research on surrogacy attitudes, mirroring the dearth of studies on Dutch attitudes as well.

By comparing the attitudes of these two distinct groups—Chinese students and Dutch individuals—this research aims to provide valuable insights into the acceptance of surrogacy among individuals from different cultures residing in the Netherlands. Therefore, the research question at the heart of this study is as follows: Do Chinese students in the Netherlands exhibit distinct attitudes toward surrogacy compared to Dutch individuals? Furthermore, is there a moderating effect of age on these attitudes?

Given the prevailing negative perception of surrogacy within the Chinese population and the generally more accepting stance of the Dutch, it is plausible to hypothesize that Chinese students in the Netherlands may harbor more negative attitudes toward surrogacy than their Dutch counterparts. However, it is equally important to consider the potential influence of age within these groups. Older Chinese students may exhibit more positive attitudes toward surrogacy, aligning with their stronger fertility intentions, while age-related differences may not be as pronounced among Dutch individuals.

This research seeks to bridge the gap in the existing literature by offering a comparative analysis of surrogacy attitudes among Chinese students and Dutch individuals in the Netherlands, shedding light on the multifaceted dynamics of cultural influences and age-related factors in shaping perceptions of surrogacy in a multicultural context.

## 3. Methodology

### *3.1 Participants*

The study's participant pool encompasses both Chinese students and the general Dutch population residing in the Netherlands. The sample includes both bachelor's and master's level Chinese students. In total, 343 questionnaires were collected, of which 248 were deemed valid after excluding responses from individuals who did not identify as

either Chinese or Dutch. Among the valid participants, 73.8% were of Chinese nationality, while 26.2% identified as Dutch (see Table 1 for descriptive statistics).

Gender distribution within the sample was as follows: 76% of Chinese participants identified as women, 20.2% as men, 2.7% as non-binary, 0.5% as intersex, and 0.5% chose not to disclose their gender. Among Dutch participants, 78.5% were women, 20% were men, and 1.5% identified as non-binary (also see **Table 1**).

**Table 1.** Descriptive Results

| Descriptive Results | Chinese | | | | Dutch | | | |
|---|---|---|---|---|---|---|---|---|
| | n | % | M | SD | n | % | M | SD |
| Nationality | 183 | 73.8 | | | 65 | 26.2 | | |
| Age | | | 24.45 | 5.967 | | | 35.64 | 14.729 |
| Religiosity | | | 3.313 | 2.951 | | | 2.761 | 2.223 |
| Gender | | | | | | | | |
| Man | 37 | 20.2 | | | 13 | 20.0 | | |
| Woman | 139 | 76.0 | | | 51 | 78.5 | | |
| Non-binary | 5 | 2.7 | | | 1 | 1.5 | | |
| Intersex | 1 | .5 | | | | | | |
| I rather not say | 1 | .5 | | | | | | |

Note: This table presents the distribution of nationality, gender, age, attitude toward surrogacy, and religiosity among the participants. The "Nationality" and "Gender" sections show the frequencies and percentages for different categories. The "Age" and "Religiosity" sections provide different information such as mean (M), and standard deviation (SD).

The participants' religiosity scores were measured on a scale, with Chinese participants having a mean score of 3.313 (SD=2.951), and Dutch participants having a mean score of 2.761 (SD=2.223). These scores indicate the level of religiosity reported by the participants, with higher values suggesting higher religiosity.

### *3.2. Procedure*

The participant sample was recruited using a snowballing approach, where friends and acquaintances of the researchers were initially approached to complete the questionnaire and share it with their networks. To ensure cross-cultural validity, the questionnaire was originally in Dutch and subsequently translated into English. A translation check was conducted to ensure the accurate use of language in both versions. The Dutch version of the questionnaire was administered to Dutch participants, while the English version was utilized for Chinese participants.

The questionnaire was selected as the data collection method due to its ability to efficiently gather a substantial amount of information. Both the English and Dutch versions of the questionnaire were separately distributed online to Chinese students and Dutch individuals residing in the Netherlands. Various communication channels were employed for distribution, including platforms such as WeChat, Instagram, and email.

To maintain ethical standards, all respondents were provided with informed consent before participating in the survey. They were informed that they could withdraw from the survey at any point, and all responses were treated as anonymous.

The initial distribution of the questionnaire involved sharing it with Chinese and Dutch friends in the Netherlands, who were then encouraged to further disseminate it

among their respective communities. Additionally, the research team reached out to individuals via social media platforms, inviting them to participate in the questionnaire. The questionnaire was also posted on social media to reach a broader audience and encourage participation.

This comprehensive approach to data collection aimed to ensure a diverse and representative participant pool, thereby enhancing the validity and generalizability of the study's findings across different cultural groups within the Netherlands.

### *3.3. Measurements*

The questionnaire administered in this study encompassed inquiries about participants' gender and religiosity as part of a larger research project on attitudes toward surrogacy in the Netherlands. For this specific study, only data relating to participants' attitudes toward surrogacy, nationality, and age were utilized.

### *3.4. Attitudes Towards Surrogacy.*

Attitudes toward surrogacy were assessed utilizing a narrative scenario, as outlined in Appendix, which provided participants with contextual information to facilitate their responses. Following the narrative, participants were presented with seven specific questions (refer to Appendix). These questions were designed to gauge participants' viewpoints on various dimensions of surrogacy. Responses were collected on a 5-point scale, with 1 indicating strong disagreement and 5 representing strong agreement, as established by [23, 24].

To facilitate further analysis, four of the questions underwent a reverse scoring process. These reversed questions were as follows:

"The situation in the story is harmful to the healthy development of this child."

"The situation in the story is harmful to the surrogate mother."

"The situation in the story is harmful to the person whose egg is used."

"The child in this story will be confused about who his mother is."

In these reversed questions, a score of 1 denoted complete disagreement, reflecting a more positive stance toward surrogacy. Consequently, scores on these questions were reversed to 5, aligning with a positive attitude. The summation of responses to all seven questions yielded a composite measure representing participants' overall attitudes regarding surrogacy.

Nationality. To ascertain participants' nationality, a straightforward question was posed: "What is your nationality?" The provided response options encompassed a range of nationalities, including Dutch, Belgian, British, Chinese, German, Surinamese, Turkish, and others. It is essential to note that this study exclusively included participants who identified themselves as either Dutch or Chinese, ensuring a focused examination of attitudes toward surrogacy within these specific cultural groups.

Participants age. Participants' ages were collected through a direct query: "How old are you?" A scale was made available to participants to select their respective age category. This straightforward method allowed for the accurate capture of participants' age data, which is integral to the analysis of potential age-related differences in attitudes toward surrogacy.

### *3.5. Analysis*

To address the central research questions of whether Chinese students in the Netherlands hold distinct attitudes toward surrogacy compared to Dutch individuals and whether age moderates this relationship, moderation analysis was employed as the analytical approach.

Before conducting the moderation analysis, several essential preliminary steps were taken to ensure the validity and reliability of the results. These steps included:

Assumption Checks: Assumption checks were carried out to assess the fundamental assumptions of moderation analysis. Scatter plots were employed to examine the presence

of a linear relationship between the independent variable, moderator variable, and the dependent variable. This examination was crucial to ensure that the data met the assumptions underlying moderation analysis.

Independence of Data: It was verified that each data point was independent, preventing issues related to autocorrelation or dependencies in the dataset.

Normal Distribution of Residuals: The residuals from the analysis were assessed to ensure that they followed a normal distribution, a critical assumption in many statistical analyses.

Low Correlation between Variables: It was confirmed that there was no excessively high correlation between the independent variable (nationality) and the moderator variable (age), which could have confounded the moderation analysis results.

The data underwent analysis using the SPSS software, specifically utilizing the PROCESS tool with moderation analysis model 1. In this analysis, attitudes toward surrogacy served as the dependent variable, nationality (Chinese vs. Dutch) as the independent variable, and age as the moderator. This moderation analysis allowed for an in-depth exploration of how age might interact with nationality in influencing attitudes toward surrogacy among the study participants.

## 4. Results

### *4.1. Reliability Statistics*

According to the reliability test results of the survey questionnaire (**Table 2**), it can be seen that the Clonbach Alpha is 0.777, which meets the standard of 0.7. Therefore, it is believed that the survey questionnaire has good internal consistency.

**Table 2.** Reliability Statistics

| Cronbach's Alpha | N of Items |
|---|---|
| 0.777 | 7.00 |

### *4.2. KMO and Bartlett's Test*

According to the validity test results of the survey questionnaire (**Table 3**), the KMO value is 0.760, which exceeds the validity test standard of 0.6, and the chi square statistic of the Bartlett's spherical test reaches a significance level of 5%. Therefore, it is believed that the survey questionnaire has good structural validity.

**Table 3.** KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.760 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 385.97 |
| | df | 21.00 |
| | Sig. | 0.000 |

### *4.3. Descriptive Results*

The total score for the 7 questions assessing attitudes toward surrogacy is 35. The mean score for Chinese participants' attitudes toward surrogacy was 18.85 with a standard deviation of 4.69. In comparison, Dutch participants had a mean score of 27.45 with a standard deviation of 4.75.

### *4.4. Independent Samples Test*

According to the results of independent sample T-test (**Table 4**), the mean attitude towards surrogacy among Dutch participants is 27.45, while the mean attitude towards

surrogacy among Chinese participants is 18.86. There is a significant difference in surrogacy attitude between Dutch and Chinese participants, t=11.55, p<0.001.

**Table 4.** Independent Samples Test

| Nationality | N | Mean | Std. Deviation | t | Sig. (2-tailed) |
|---|---|---|---|---|---|
| Dutch | 58.00 | 27.45 | 4.747 | 11.55 | 0.000 |
| Chinese | 129.00 | 18.86 | 4.691 | | |

### *4.5. Benchmark Model Analysis*

To answer the impact of nationality on attitudes towards surrogacy, a regression model was established with nationality as the independent variable and attitudes towards surrogacy as the dependent variable.

There is a significant difference in attitudes towards surrogacy between Chinese and Dutch people, b=-2.87, 95% CI [-3.56, -2.38], t=-11.55, p<.001, using $\alpha$=.05 as a significance criterion, nationality explained a moderate change in attitudes towards surrogacy, with R2=.42 (**Table 5**). Nationality has a significant impact on attitudes towards surrogacy, as evidenced by Dutch participants having a more positive attitude compared to Chinese participants in the Netherlands.

**Table 5.** Benchmark Model Analysis

| Benchmark Model Analysis | b | SE | t | p | 95% CI | |
|---|---|---|---|---|---|---|
| | | | | | LL | UL |
| Constant | 30.313 | 0.836 | 36.271 | <.001 | 28.665 | 31.962 |
| Nationality | -2.865 | 0.248 | -11.549 | <.001 | -3.355 | -2.376 |

Note: R2=.42. CI=confidence interval; LL=lower limit; UL=upper limit.

### *4.6. Moderation Analysis*

To answer the research question regarding whether the attitudes toward surrogacy differed between Chinese and Dutch participants and whether age moderated this relationship, a moderation analysis was conducted. The analysis utilized nationality as the independent variable, attitude toward surrogacy as the dependent variable, and age as the moderator.

The differences in attitude toward surrogacy between the Chinese and the Dutch were significant, b=-3.02, 95% CI [-3.59, -2.46], t=-10.56, p<.001, using $\alpha$=.05 as the criterion for significance, and nationality explained a moderate portion of the variability in attitude toward surrogacy, R2=.43 (Table 6). An obvious difference in attitudes toward surrogacy between participants from different nations, with Dutch participants holding more positive attitudes compared to Chinese participants in the Netherlands.

The difference in attitude toward surrogacy between participants from different nations moderating by ages was not significant, b=.01, 95% CI [-.05,.06], t=.31, p=.75, using $\alpha$=.05 as criterion for significance (**Table 6**). The difference in attitude toward surrogacy between participants from different nations was not moderated by age.

**Table 6.** Moderation Analysis

| Moderation Analysis | b | SE | t | p | 95% CI | |
|---|---|---|---|---|---|---|
| | | | | | LL | UL |
| Constant | 30.828 | .959 | 32.153 | <.001 | 28.936 | 32.720 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Nationality | -3.025 | .286 | -10.562 | <.001 | -3.590 | -2.460 |
| Age | -.056 | .062 | -.897 | .371 | -.178 | .067 |
| Nationality x Age | .009 | .028 | .323 | .747 | -.046 | .064 |

Note: R2=.43. CI=confidence interval; LL=lower limit; UL=upper limit.

## 5. Discussion

This study aimed to examine the differences in attitudes towards surrogacy between Chinese students and Dutch individuals and whether age moderates this relationship. The findings indicated a significant distinction in attitudes between the two groups. Just like the hypothesis, the Dutch participants exhibited more positive attitudes towards surrogacy compared to the Chinese participants. Additionally, the study found that age did not moderate this relationship, contradicting the second hypothesis. Therefore, it appears that Chinese individuals in the Netherlands may be less accepting of surrogacy than Dutch individuals, which suggests that their attitudes towards people who used surrogacy may not be as favourable as the Dutch.

One possible explanation for the attitudes towards surrogacy between the Chinese students in the Netherlands and the Dutch could be attributed to the influence of different social media platforms. Chinese news writers and media professionals frequently refer to surrogacy as a "moral miscarriage," an "illegal practise," and a "black chain" on websites like Baidu [15]. Contrarily, Western websites like Google may be regarded as swiftly encouraging surrogacy [15]. When searching "surrogacy", nearly the whole Google page is devoted to advertising the business, projecting a view of surrogacy as totally acceptable and comparable to any other daily transaction [15]. Most people with Chinese nationality would not be exposed to such advertisements since Google is not available on the mainland of China; instead, the general population in China is more likely to be influenced by the mainstream media, which views surrogacy as immoral and as part of a grey market [15]. The attitudes of the people surrounding the participants may also influence their own attitudes. Most Chinese held negative attitudes towards surrogacy based on both how they responded to the use of surrogacy by a Chinese celebrity and the answers in the 2013 poll [14, 20]. Considering these factors, the differing information presented on Chinese and Western social media, and the negative attitudes towards surrogacy prevalent among the majority of Chinese individuals, it is understandable why Dutch participants held more positive attitudes towards surrogacy than their Chinese counterparts. In the ancient Chinese notion that "skin and hair are inherited from your parents," renting a uterus is seen as selfish, immoral, and reckless behaviour that is strongly condemned [11]. As a result, both traditional Chinese culture and human morals are offended by surrogacy [11]. Chinese culture is quite traditional, which may explain why they are not fans of surrogacy. This may be another reason why the Chinese held more negative attitudes towards surrogacy than the Dutch. Another possible explanation for the differing results lies in response styles. Response styles that differ across people and between nations, or a respondent's predisposition to respond with systematic answers to questions regardless of their content, might bias responses to survey questions [25]. Middle response style (MRS), characterised by a preference for selecting responses closer to the middle of the scale, was found to be more prevalent among Chinese respondents compared to Western respondents, and extreme response style (ERS) was found to be more prevalent among Western respondents, such as Australians [25]. This tendency to avoid extreme responses, such as strongly agreeing or disagreeing, was also evident in the results of this study, where the average score for Chinese attitudes towards surrogacy fell in the middle of the scale, which was 18.85 out of 35, and the average score for Dutch attitudes towards surrogacy was 27.45. To avoid this situation, future studies may use interviews as a research method.

As the first study to compare attitudes towards surrogacy between Chinese and Dutch individuals, this research offers valuable insights for future investigations. It illuminates how cultural values influence people's perspectives on surrogacy. It also highlights the need for individuals residing near Chinese communities and considering surrogacy to be prepared for potential low acceptance among these individuals.

One limitation of this study is that it was conducted solely in the Netherlands, involving participants residing in the country. However, it should be acknowledged that surrogacy has been prohibited under Chinese law, but non-commercial surrogacy is allowed in the Netherlands. Consequently, Chinese students in the Netherlands may not view surrogacy as an unacceptable behaviour as the Chinese do in China. Additionally, the Chinese participants in this study were predominantly international students, which means they were highly educated. They may have more knowledge about surrogacy. This means they may not see surrogacy as reckless behaviour, as traditional Chinese do. This exclusion of Chinese individuals with lower levels of education may limit the generalizability of the findings. Another limitation relates to the imbalance in the number of returned questionnaires, with a higher proportion of Chinese participants (73.8%) compared to Dutch participants (26.2%), deviating from the intended balance. This imbalance may introduce a potential bias and reduce the liability of the study.

To address these limitations, future studies should consider translating the questionnaire into Chinese and conducting a comparative analysis of attitudes towards surrogacy between Chinese individuals in China and Dutch individuals in the Netherlands, which would enhance the study's scope. Furthermore, ensuring participation from individuals of different education levels would contribute to maintaining educational diversity in future studies. Lastly, achieving a balanced representation of both Chinese and Dutch participants would also be beneficial for subsequent research endeavours.

## 6. Conclusion

In conclusion, the findings support the fact that Chinese participants held significantly more negative attitudes towards surrogacy compared to their Dutch counterparts. The cultural differences likely contribute to the varied attitudes towards surrogacy observed between the two groups.

Interestingly, age did not moderate the relationship between attitudes towards surrogacy and nationality. This suggests that within each cultural group, age does not significantly influence opinions on surrogacy.

These findings highlight the importance of understanding cultural values and perspectives when examining attitudes towards surrogacy. They also emphasise the need for further research in this area, considering the limited existing literature comparing attitudes towards surrogacy between different nationalities. Future studies could explore additional factors that may influence attitudes towards surrogacy, such as religiosity and gender, to gain a more comprehensive understanding of the topic. Overall, this research contributes to the existing knowledge on surrogacy and provides insights into the attitudes held by Chinese students and Dutch individuals in the Netherlands.

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