The Influence of Human Capital on Fertility Intentions: The Moderating Role of Satisfaction with Leave Policies

Wenna Zou[1], Thanwarat Suwanna[2]*, Krisada Chienwattanasook[3]

[123]*Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Thailand.*

KEYWORDS	ABSTRACT
Human Capital, Fertility Intention, Satisfactory Leave Policy, China	In recent years, fertility has received much attention in the context of globalization. This study attempts to assess the influence of human capital on fertility intentions and to examine the moderating effect of satisfactory leave policies between human capital and fertility intentions across different genders. A questionnaire-based survey was conducted in four provinces of China, namely Guangdong, Shandong, Henan, and Sichuan. The results show a positive influence of human capital on fertility intentions and a remarkable moderating effect of satisfaction with vacation policy between human capital and fertility intentions among men. However, there is no significant moderating effect for women. This study suggests that men show higher fertility intentions when they can take leave, which may be due to the expectation of better family support. Conversely, women face significant fertility challenges, which mitigates the impact of leave on their fertility intentions. The study's novelty is that it reveals the differential effects of leave policies on fertility intentions across genders, providing new insights into the gender dynamics of human capital and fertility intentions. Based on these findings, recommendations are proposed for creating a stable employment environment and implementing comprehensive job security measures tailored to women's fertility needs to reduce fertility losses and alleviate employment pressures.

1. Introduction

In recent years, the issue of fertility has increasingly challenged global demographics. Both in academia and among policymakers, the intersection of work-life balance, gender dynamics, and fertility intentions has attracted attention. Fertility is a multifaceted process influenced by social, economic, political, and personal factors, including access to quality and affordable childcare, cultural norms, personal beliefs, and partner compatibility (Abma & Martinez, 2006; Clarke & Hammarberg, 2005; Mills et al., 2011; Proudfoot et al., 2009). Among the factors influencing fertility intentions, individual human capital and perceptions of leave policies have emerged as essential but under-researched determinants. Research has shown that governments in low-fertility countries use family policies to promote fertility (Raute, 2019; Rindfuss et al., 2016). Goldscheider, Bernhardt, and Lappegård (2015) and Tamm (2019) found that leaves exacerbate gender inequality in the family, which has been identified as a critical factor in low fertility rates. However, research on how individuals' satisfaction with leave policies relates to human capital accumulation and subsequent fertility intentions is still limited. Since 2021, various provinces in mainland China have revised "family planning regulations," which has led to changes in leave policies. This policy was revised in 2022. Currently, there are no studies analyzing individual satisfaction with leave.

This paper addresses two main questions: (1) Does human capital influence fertility intentions? (2) Does satisfaction with the leave policy moderate the relationship between human capital and fertility intentions? This study examines the effects of explicit and implicit dimensions of human capital on fertility intentions. It investigates the moderating role of individual-level satisfaction with leave policy in the relationship between human capital and fertility intentions, focusing on gender differences.

This study provides new insights by examining the effects of individual-level human capital on fertility intentions using seven dimensions and the moderating effect of satisfaction with leave policies on the relationship between human capital and fertility intentions, with particular attention to gender differences. These findings are crucial for policymakers and employers in helping people balance work and family life. By clarifying the differential impact of leave policy satisfaction on fertility intentions between men and women, this study contributes to a more nuanced understanding of the gender dynamics influencing fertility decisions. Ultimately, these findings may support the development of gender-sensitive policies and practices in the workplace that promote work-life balance and enable individuals to make more informed decisions about fertility.

Literature Review

The Relationship between Human Capital and Fertility Intention

This article describes the composition of human capital by including both explicit and implicit dimensions. Gratton and Ghoshal (2003) conceptualize human capital as individual intellectual capital alongside the implicit social and emotional capital in organizational and individual contexts. Yu, Zhao, and Chen (2011) emphasize the primacy and fundamental importance of tacit human capital, which underpins explicit human capital. In addition, Channar, Talreja, and Bai (2015) find a remarkable positive correlation between the cultivation of tacit human capital, such as employee skills, and indicators of employee and customer satisfaction, emphasizing the close relationship with organizational performance. Zhang (2017) emphasizes the central role of developing tacit human capital in improving the core competitiveness of new-generation farmers. In addition, Roy, Morton, and Bhattacharya (2018) emphasize the transformative potential of tacit human capital, especially non-cognitive skills, in reshaping young women's education and income development.

Zhang and Cui (2020) believe that human capital subtly influences fertility intentions and behavior. In the area of education, Testa (2014) found a positive relationship between a woman's education level and her lifetime fertility intention. People with higher education are likelier to prefer three or more children and less likely to prefer no children or only one child (Heiland et al., 2005). In addition, Monstad, Propper, and Salvanes (2008) found that the decline in the number of children born is not due to increased educational attainment. However, based on an empirical analysis, Feng (2010) believes that the level of education does not influence fertility intention. Kreyenfeld et al. (2022)found that men and women in managerial positions want more children than those in lower-skilled occupations. In addition, basic insurance, primary care, and participation in commercial insurance influence women's willingness to have children (Xing et al., 2022).

Similarly, Myrskylä and Margolis (2014) found that higher socioeconomic status is associated with better health outcomes and lower stress levels, which may positively affect fertility intentions. Miller and Pasta (1995) believe that women's fertility attitudes, subjective norms, and behavioral control significantly impact differences in fertility intentions and behavior. In terms of health, Alderotti and Trappolini (2022) found that poor health negatively affects the fertility intentions of immigrant women. Tanskanen and Rotkirch (2014) and Yoon (2017) believe that people with family support from parents or in-laws are likelier to want children. To summarize, various factors influence intentions and d, and different conclusions can be drawn depending on the choice of research subject and the methodology used. In this study, human capital is conceptualized as a second-order construct encompassing seven dimensions: Education, skills, insurance coverage, socioeconomic status, fertility attitudes, health, and social trust and support. This multifaceted construct is assessed through explicit and implicit human capital perspectives and provides a comprehensive understanding of its impact on fertility intentions.

The study categorizes fertility intentions into three dimensions: the desire for parenthood, the desired number of children, and the timing of childbearing. The dependent variable is operationalized using the fertility intention questionnaire developed by Brzozowska and Beaujouan (2021), complementing the fertility intention prediction model proposed by Miller (2011).

Leave Policy Satisfaction as a Moderator to Affect Human Capital and Fertility Intention

Numerous studies have emphasized the central role of parental leave policies in shaping fertility intentions, especially in countries struggling with low fertility rates (Raute, 2019; Rindfuss et al., 2016). Family policies that aim to support parental care responsibilities and improve family well-being often include various components such as child-related cash transfers, childcare subsidies, and fiscal financial support (Eydal et al., 2018).

One aspect of particular interest in this discourse concerns parental leave policy, widely recognized as a critical factor in family gender dynamics and significantly impacts fertility rates (Goldscheider et al., 2015; Tamm, 2019). Researchers have noted the increasing tension between career aspirations and gendered family responsibilities, which impacts fertility rates (Baizan et al., 2016; Duvander et al., 2016; Meier & Rainer, 2017). However, the empirical evidence for the effectiveness of taking time off work to increase fertility remains controversial(Balbo et al., 2013; Hoem, 2008; Olivetti & Petrongolo, 2017). Studies investigating the effects of leave policies on fertility outcomes have also yet to provide precise results (Bergsvik et al., 2020).

Differences in regional leave policies can lead to significant differences in individual decisions to have children. Satisfaction with these policies may reflect individuals' perceptions of their effectiveness in reconciling work and family life, potentially influencing fertility intentions. In particular, highly favorable leave policies could mitigate the social costs associated with childbearing and thus promote fertility intentions (Thomas et al., 2022). Conversely, given the substantial opportunity costs in terms of time, energy, and job security, women may be unable to compensate for the significant "fertility disadvantage" they face by taking more extended leave (Evertsson & Duvander, 2011; Raute, 2019). In addition, provinces in mainland China have revised population planning regulations since 2021, which has led to changes in parental leave entitlements. These changes necessitate a contemporary assessment of satisfaction with leave policies to measure their impact on fertility intentions, including leave policy satisfaction as a moderating variable that allows for a nuanced examination of regional influences on the relationship between human capital and fertility intentions.
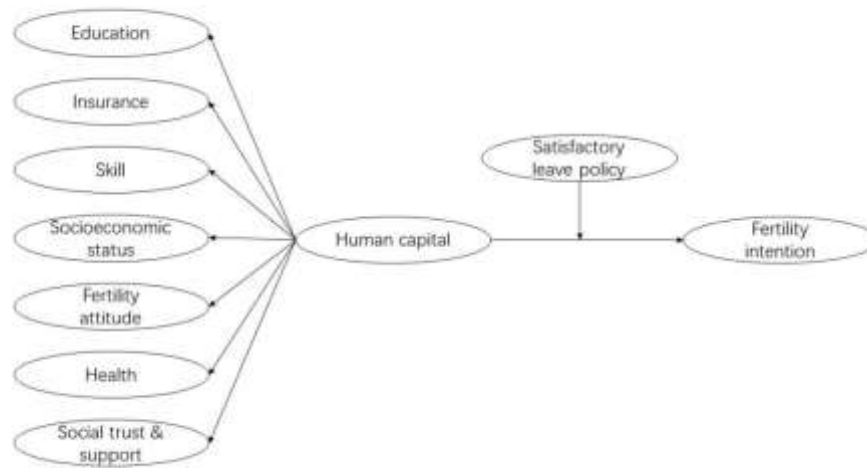
Conceptual Framework and Hypothesis

Figure1 Conceptual Framework

Source: Authors

Table 1 Research Hypothesis

Hypothesis	Contents
Hypothesis 1	Human capital has an impact on fertility intention.
Hypothesis 2	A satisfactory leave policy moderates between human capital and fertility intention.

Source: Authors

2. Methodology and Procedures

Data Collection

According to China's Seventh National Population Census statistics, the five most populous provinces (Guangdong et al.) were selected to collect the questionnaires. The questionnaire is distributed to people aged 20-49. The sampling method uses a two-stage stratified random sampling method and proportional allocation of samples. A total of 32 questions were considered in this study. Finally, 640 valid questionnaires were collected for this survey. The result is as follows (Table 2).

Table 2 Distribution Data of Population in Four Provinces

Province	Population	Proportion	Sample Size
Guangdong	1,260,130	.307	196
Shandong	1,015,270	.247	158
Henan	993,660	.242	155
Sichuan	836,750	.204	131
	4,105,810		640

Source: Authors

Constructs and Measures

For the questionnaire, they were asked to answer on a 5-point Likert scale (1. strongly disagree, 2. disagree, 3. somewhat agree, 4. agree, 5. strongly agree). Human capital: In this article, the components of human capital are referred to as explicit and implicit human capital. Human capital is a second-order reflexive construct consisting of seven dimensions: Education, Skills, Insurance, Socioeconomic Status, Fertility Attitude, Health, and Social Trust and Support. Each dimension includes four items, namely education (Wang & Wang, 2016), skills (Zhang & Cui, 2020), insurance (Zhang & Cui, 2020), socioeconomic status (Anderson et al., 2012), fertility attitudes (Söderberg et al., 2013), health (Chin-Ching et al., 2018), and social trust and support (Chinese General Social Survey). This study was modified based on existing items. Fertility intention is the dependent variable. Fertility intentions include timing of childbearing, having children, and number of children (Miller, 2011), which contains three items. Satisfactory leave policy is the moderating variable. In this study, respondents had to answer whether they were satisfied with the leave policy and choose yes or no.

The structural equation modeling (SEM) framework is widely recognized in various disciplines for its robustness and analytical power (Hair et al., 2012). It provides a suitable methodology for analyzing second-order models and is the method of choice for this study.

3. Results and Discussions

Measurement Model Assessment

The factor loadings represent how each element in the correlation matrix correlates with the specified principal component (Hair et al., 2016). None of the items examined had factor loadings below the recommended threshold of .50 (Table 3). The observed factor loadings ranged from .821 to .904, indicating a satisfactory association between the items and their respective components.

As Marks and Karkouti (1996) described, reliability refers to the degree of stability and consistency of a measurement instrument. The most commonly used methods for assessing reliability include Cronbach's alpha and composite reliability (CR). A Cronbach's alpha coefficient of more than .70 indicates good internal consistency of the questionnaire measurement. Composite reliability, on the other hand, refers to the coherence of variables within a particular construct, with values ideally above .70 (Bagozzi & Yi, 1988). Table 3 shows that both Cronbach's alpha and the composite reliability values fulfill the specified criteria and thus ensure the reliability of the measurement instruments used.

Convergent validity assesses the extent to which multiple instruments developed to measure the same construct are coherent. According to the criteria established by Hair, Ringle, and Sarstedt (2011), the average variance extracted (AVE) for each construct should be above .50 to confirm convergent validity. The values shown in Table 3 are between .635 and .779, which fulfills the established criterion and confirms the convergent validity of the measurement instruments used in this study.

Table 3 Construct Reliability and Convergent Validity

Second order construct	First order construct	Item	Loadings	Cronbach's alpha	Composite Reliability	Average Variance Extracted
				.904	.924	.635
	Education	educ1	.878			
		educ2	.855	.876	.915	.730
		educ3	.831			
		educ4	.851			
Human capital	Skill	skill1	.822			
		skill2	.837	.859	.904	.702
		skill3	.833			
		skill4	.860			
	Insurance	isr1	.838			
		isr2	.841	.863	.907	.708
		isr3	.836			
		isr4	.851			

Second order construct	First order construct	Item	Loadings	Cronbach's alpha	Composite Reliability	Average Variance Extracted
	Socioeconomic status	ses 1	.848			
		ses 2	.841	.864	.907	.710
		ses 3	.846			
		ses 4	.835			
	Fertility attitude	fa 1	.832			
		fa 2	.851	.870	.911	.720
		fa 3	.854			
		fa 4	.856			
	Health	hlth1	.821			
		hlth2	.840	.861	.906	.706
		hlth3	.850			
		hlth4	.851			
	Social trust support	st&sp1	.836	.856	.903	.699
		st&sp2	.836			

Second order construct	First order construct	Item	Loadings	Cronbach's alpha	Composite Reliability	Average Variance Extracted
		st&sp3	.841			
		st&sp4	.831			
	Fertility intention	fi1	.904			
		fi2	.880	.858	.913	.779
		fi3	.862			

Source: Authors

Discriminant validity refers to how measurements representing different concepts remain separate. In this study, the Heterotrait-Monotrait (HTMT) ratio is used to assess discriminant validity. Kline (2011) has suggested a threshold of .85 or less for the HTMT ratio, while Teo, Tsai, and Yang (2013) argue for a less stringent threshold of .90 or less. As Table 4 shows, all values are below .85.

Table 4 Heterotrait - Monotrait Ratio in first order (HTMT)

	Education	Fertility attitude	Fertility intention	Health	Insurance	Skill	Social trust support
Education							
Fertility attitude	.599						
Fertility intention	.545	.619					
Health	.552	.647	.607				
Insurance	.631	.696	.656	.670			
Skill	.619	.702	.618	.692	.704		
Social trust support	.592	.713	.649	.653	.699	.702	
Socioecono	.614	.667	.601	.6	.702	.	.706

mic status		91	677

Source: Authors

Table 5 Heterotrait - Monotrait Ratio in second order (HTMT)

	Fertility intention	Human capital	Leave policy satisfaction
Fertility intention			
Human capital	.753		
Leave policy satisfaction	.318	.272	

Source: Authors

As Fornell and Bookstein (1982) suggested, the variance inflation factor (VIF) is used to assess multicollinearity between indicators. According to Hair, Ringle, and Sarstedt (2011), five or fewer indicate no collinearity problems between the indicators. In this study, the observed values of the variance inflation factor are between 1.720 and 2.543, which confirms the absence of multicollinearity problems between the indicators.

Structural Model Assessment

1) Explanatory Power

After implementing the repeated indicators approach to reduce the complexity of the model, it is essential to assess the structural model's predictive power, relevance, and adaptability. A path analysis is then performed to validate the hypotheses. In partial least squares analysis, the coefficients of determination R-squared and f-squared are generally used to evaluate the predictive power of the structural equation model. When examining the correlation between the latent variable and its indicators, researchers often use Stone-Geisser's Q-squared value for evaluation (Geisser, 1974; Stone, 1974). As for the model's goodness of fit, this study mainly considers the standardized mean square residual and the standardized goodness of fit index.

As seen from Table 6, the R-squared value of the internal factor construct fertility intention is .461, which means that human capital has a medium explanatory power for fertility intention. As for the f-square, the value of the explanatory effect of the external construct of human capital on the internal construct fertility intention is .283, which is a medium effect. In summary, external constructs have a medium explanatory power over internal constructs. In addition, the Q-squared is greater than 0, which means the model has good predictive power. The standardized mean squared residual is .045, and the standardized fit index is .941 (Table 7). Thus, this study fulfills the general criteria for model fit of PLS-SEM.

Table 6 Explanatory Power

Predictors	Outcomes	R square	f square	Q square
Human capital	Fertility intention	.461	.283	.432

Source: Authors

Table 7 Model Goodness of Fit

Fit summary	Estimated model
Standardized root mean squared residual	.045

d_ULS	.134
d_G	.058
Chi-square	222.796
Normed fit index	.941

Source: Authors

2) Path coefficients analysis

This study examined the effect of human capital on fertility intention across genders by grouping and the moderating effect of satisfaction with leave policy on the effect of human capital on fertility intention. The male group was set to 0, and the female group was set to 1. The data were then subjected to bootstrap multigroup analysis to determine their effects.

In the male group (Table 8), the path coefficient between human capital and fertility intention is .513, p = .000, and the t-value is 8.460 (greater than 1.96), which means that human capital positively affects fertility intention. In the moderator assessment, the t-value (2.921) and p-value (.004) are significant, meaning that satisfaction with the vacation policy moderates human capital and fertility intention.

Table 8 Path Coefficient Analysis in Male Group

	Original (Group_0)	Mean (Group_0)	STDEV (Group_0)	t value (Group_0)	p-value (Group_0)
Human capital -> fertility intention	.513 ***	.517	.061	8.460	.000
Leave policy satisfaction x human capital -> fertility intention	.259 ***	.256	.089	2.921	.004

*** p-value ≤ .001

Source: Authors

The results show that human capital positively influences fertility intention in the women's group, with a path coefficient of .664 and a t-value of 14.212 (Table 9). Conversely, satisfaction with leave policy has no significant moderating effect on the relationship between human capital and fertility intention (path coefficient = .007, t = .094, p = .925).

Table 9 Path Coefficient Analysis in Female Group

	Original (Group_1)	Mean (Group_1)	STDEV (Group_1)	t value (Group_1)	p-value (Group_1)
Human capital -> fertility intention	.664 ***	.665	.047	14.212	.000
Leave policy satisfaction x human capital -> fertility intention	.007	.007	.071	.094	.925

*** means p-value ≤ .001

Source: Authors

This study conceptualizes human capital as a second-order construct comprising seven dimensions. The result shows a positive relationship between human capital and fertility intention, suggesting that higher levels of human capital, which include higher education, skills, insurance, socioeconomic status, fertility attitudes, health, and social trust and support, favor higher fertility intention. This finding is consistent with the existing literature, which indicates that individuals with higher education levels often prefer larger families while showing a lower propensity for childlessness or smaller family units (Bernardi et al., 2014; Heiland et al., 2005). However, there are different results in the literature. Some studies assume a negative correlation between education and fertility intention and postulate that education can delay marriage and childbearing (Liu, 2016; Yang & Zhang, 2018), while other studies find no significant correlation between education and fertility intention (Feng, 2010). There are also differences in terms of occupational status. Some studies report that people in managerial positions have a greater desire to have children than people in lower-skilled occupations (Kreyenfeld et al., 2022), consistent with our findings, while the opposite view is expressed elsewhere (Cheng & Hsu, 2020).

Regarding insurance coverage, LeGrand et al. (2003) point to a positive association between insurance coverage and fertility intentions, suggesting that people perceive offspring as a source of support and companionship in old age despite possible substitution effects, which is consistent with our conclusions. In addition, Jalovaara et al. (2019) point to a positive association between socioeconomic status and fertility, which further supports our findings. A positive attitude towards fertility is associated with an increased desire for parenthood (Holland & Keizer, 2015). People in good health are more confident in coping with the challenges of parenthood without worrying about the negative impact of health problems on family life (Alderotti & Trappolini, 2022). In addition, research shows that individuals who perceive strong social trust and support are more likely to become parents immediately due to encouragement and support from family and friends (Dommermuth et al., 2011; Esping-Andersen & Billari, 2015; Tanskanen & Rotkirch, 2014; Yoon, 2017).

Satisfaction with the leave policy moderates the relationship between human capital and fertility intentions differently across gender groups, showing a positive effect for men while it is not significant for women. This differential moderating influence of satisfaction with leave policy between genders is consistent with previous research by Goldscheider, Bernhardt, and Lappegård (2015) and Tamm (2019), which suggests that leave policy contributes to domestic gender equality and fertility. However, there is conflicting evidence on the direct effect of leave policies on fertility, as noted by Balbo, Billari, and Mills (2013), Hoem (2008), and Olivetti and Petrongolo (2017), indicating the need for further research. Following gender equality theory, it is postulated that leave policies may increase fertility by improving gendered family roles (Thomas et al., 2022). However, our results show that while satisfaction with leave policies positively affects men's fertility intention, it does not positively affect women's fertility intention. A plausible explanation for this discrepancy lies in the persistent "fertility penalty" that women face after having a child, as argued by Evertsson and Duvander (2011). The significant opportunity costs of childbearing for women, which include time, energy, and job security, are a formidable barrier that makes them shy away from parenthood. This inequality underscores the need for robust public childcare provision, incentives for men to take parental leave, legislative measures to ensure employment stability after childbirth, and parity of benefits for women. Such measures are essential to mitigate the negative impact of childbirth on women's careers and to promote equality in fertility.

4. Conclusions

This study focuses on the influence of human capital on fertility intention. It examines the moderating effect of satisfaction with vacation policy on the relationship between human capital and fertility intention. In a departure from previous research methods, the subjects in this study are stratified by gender, which leads to exciting results. Empirical evidence points to a positive effect of human capital on fertility intentions in both the male and female groups. In the male subgroup, satisfaction with the leave policy significantly increases the moderating effect on the relationship between human capital and fertility intentions. In contrast, satisfaction with leave policy has no moderating effect among women**.**

Contributions

This paper analyzes human capital composition, considering both explicit and implicit dimensions. Previous research efforts need to address implicit, inherently unquantifiable human capital. By conceptualizing human capital as a reflexive second-order latent variable, this study highlights the intricate interrelationships between the individual factors at a macroscopic and comprehensive level, thus enhancing the theoretical sophistication

of the existing literature on fertility decisions.

More importantly, the article found that satisfaction with leave policy has a positive moderating effect between human capital and fertility intention only in the group of men. In contrast, it has no significance in the group of women. The research results can help governments and companies to formulate more precise policies. The government and enterprises can formulate policies to help people improve their human capital, such as education, insurance, and health, increasing their willingness to have children. In addition, it is necessary to create a more relaxed and reasonable working environment for women of appropriate ages and women who want to have children and increase women's prosperity.

Limitation

Fertility intentions are subject to a complex interplay of socioeconomic and cultural determinants, which makes comprehensive quantification difficult. Further research is needed to identify and prioritize the relevant variables amidst the complex influences. Because the study on surveys of people of childbearing age between 20 and 49 may not provide a complete picture of fertility intentions, certain factors prevalent in other age cohorts may need to be accounted for. This limitation underscores the need for broader demographic inclusion to capture the full spectrum of fertility dynamics.

Future Research

Expanding the sample to include people from a more comprehensive age range and different geographical regions could increase the completeness of the data set. In addition, there is an opportunity to investigate further the moderating influences of job flexibility and satisfaction with parental leave arrangements on the relationship between human capital and fertility intentions. A deeper understanding of the mechanisms underlying the effects of employment conditions on fertility decisions could provide policymakers with nuanced insights and facilitate the formulation of tailored policies to promote improvements in fertility rates.

Reference

[1] Abma, J. C., & Martinez, G. M. (2006). Childlessness among older women in the United States: Trends and profiles. Journal of marriage and family, 68(4), 1045-1056. https://doi.org/10.1111/j.1741-3737.2006.00312.x

[2] Alderotti, G., & Trappolini, E. (2022). Health status and fertility intentions among migrants. International Migration, 60(4), 164-177. https://doi.org/10.1111/imig.12921

[3] Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. Journal of Personality, 80(2), 313-344. https://doi.org/10.1111/j.1467-6494.2011.00734.x

[4] Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the academy of marketing science, 16, 74-94. https://doi.org/10.1007/BF02723327

[5] Baizan, P., Arpino, B., & Delclós, C. E. (2016). The effect of gender policies on fertility: The moderating role of education and normative context. European Journal of Population, 32, 1-30. https://doi.org/10.1007/s10680-015-9356-y

[6] Balbo, N., Billari, F. C., & Mills, M. (2013). Fertility in advanced societies: a review of research: La fécondité dans les sociétés avancées: un examen des recherches. European Journal of Population/Revue europeenne de demographie, 29, 1-38. https://doi.org/10.1007/s10680-012-9277-y

[7] Bergsvik, J., Fauske, A., & Hart, R. K. (2020). Effects of policy on fertility: A systematic review of (quasi) experiments.

[8] Bernardi, L., Mynarska, M., & Rossier, C. (2014). Uncertain, changing and situated fertility intentions: a qualitative analysis. In Reproductive decision-making in a macro-micro perspective (pp. 113-139). Springer. https://doi.org/10.1007/978-94-017-9401-5_5

[9] Brzozowska, Z., & Beaujouan, E. (2021). Assessing short-term fertility intentions and their realisation using the Generations and Gender Survey: Pitfalls and Challenges. European Journal of Population, 37(2), 405-416. https://doi.org/10.1007/s10680-020-09573-x

[10] Channar, Z. A., Talreja, S., & Bai, M. (2015). Impact of human capital variables on the effectiveness of the

organizations. Pakistan Journal of Commerce and Social Sciences (PJCSS), 9(1), 228-240.

[11] Cheng, Y. h. A., & Hsu, C. H. (2020). No more babies without help for whom? Education, division of labor, and fertility intentions. Journal of marriage and family, 82(4), 1270-1285. https://doi.org/10.1111/jomf.12672

[12] Chin-Ching, L., Huang, S.-M., Lai, J. C.-Y., Hsiung, Y., Yi-Heng, C., & Ching-Fang, L. (2018). Development and validation of a fertility intention scale in breast cancer survivors. Journal of Nursing Research, 26(3), 177-184. https://doi.org/10.1097/jnr.0000000000000223

[13] Clarke, V., & Hammarberg, K. (2005). Reasons for delaying childbearing: a survey of women aged over 35 years seeking assisted reproductive technology. Australian family physician, 34(3). https://doi.org/10.3316/informit.369442588940486

[14] Dommermuth, L., Klobas, J., & Lappegård, T. (2011). Now or later? The theory of planned behavior and timing of fertility intentions. Advances in life course research, 16(1), 42-53. https://doi.org/10.1016/j.alcr.2011.01.002

[15] Duvander, A.-Z., Lappegård, T., Andersen, S. N., Garðarsdóttir, Ó., Neyer, G., & Viklund, I. (2016). Gender-equal family policy and continued childbearing in Iceland, Norway, and Sweden. Stockholm: Stockholm University, Department of Sociology (Stockholm Research Reports in Demography 2016: 02).

[16] Esping-Andersen, G., & Billari, F. C. (2015). Re-theorizing family demographics. Population and Development Review, 41(1), 1-31. https://doi.org/10.1111/j.1728-4457.2015.00024.x

[17] Evertsson, M., & Duvander, A.-Z. (2011). Parental leave—possibility or trap? Does family leave length affect Swedish women's labor market opportunities? European Sociological Review, 27(4), 435-450. https://doi.org/10.1093/esr/jcq018

[18] Eydal, G. B., Rostgaard, T., & Hiilamo, H. (2018). 15. Family policies in the Nordic countries: aiming at equality. Handbook of family policy, 195. https://doi.org/10.4337/9781784719340.00024

[19] Feng, X. (2010). Having a second child: Analysis of the willingness and related factors of "single couples." Social Science (5), pp. 58–66. https://doi.org/10.3969/j.issn.0257-5833.2010.05.008.

[20] Fornell, C., & Bookstein, F. L. (1982). Two structural equation models, LISREL and PLS, were applied to consumer exit-voice theory. Journal of Marketing Research, 19(4), 440–452. https://doi.org/10.1177/002224378201900406

[21] Geisser, S. (1974). A predictive approach to the random effect model. Biometrika, 61(1), 101-107. https://doi.org/10.1093/biomet/61.1.101

[22] Goldscheider, F., Bernhardt, E., & Lappegård, T. (2015). The gender revolution: A framework for understanding changing family and demographic behavior. Population and development review, 41(2), 207-239. https://doi.org/10.1111/j.1728-4457.2015.00045.x

[23] Gratton, L., & Ghoshal, S. (2003). Managing Personal Human Capital:: New Ethos for the 'Volunteer' Employee. European Management Journal, 21(1), 1–10. https://doi.org/10.1016/S0263-2373(02)00149-4

[24] Hair, J., Joe F, Sarstedt, M., Matthews, L. M., & Ringle, C. M. (2016). Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I–method. European Business Review, 28(1), 63-76. https://doi.org/10.1108/EBR-09-2015-0094

[25] Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139-152. https://doi.org/10.2753/MTP1069-6679190202

[26] Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of partial least squares structural equation modeling in marketing research. Journal of the academy of marketing science, 40, 414-433. https://doi.org/10.1007/s11747-011-0261-6

[27] Heiland, F., Prskawetz, A., & Sanderson, W. C. (2005). Do the more educated prefer smaller families?

[28] Hoem, J. M. (2008). Overview Chapter 8: The impact of public policies on European fertility. Demographic research, pp. 19, 249–260.

[29] Holland, J. A., & Keizer, R. (2015). Family attitudes and fertility timing in Sweden. European Journal of Population, 31, 259-285. https://doi.org/10.1007/s10680-014-9333-x

[30] Jalovaara, M., Neyer, G., Andersson, G., Dahlberg, J., Dommermuth, L., Fallesen, P., & Lappegård, T. (2019).

Education, gender, and cohort fertility in the Nordic countries. European Journal of Population, 35, 563-586. https://doi.org/10.1007/s10680-018-9492-2

[31] Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. The SAGE Handbook of Innovation in Social Research Methods, pp. 562–589. https://doi.org/10.4135/9781446268261.n31

[32] Kreyenfeld, M., Konietzka, D., Lambert, P., & Ramos, V. J. (2022). Second Birth Fertility in Germany: Social Class, Gender, and the Role of Economic Uncertainty.

[33] LeGrand, T., Koppenhaver, T., Mondain, N., & Randall, S. (2003). Reassessing the insurance effect: A qualitative analysis of fertility behavior in Senegal and Zimbabwe. Population and development review, 29(3), 375-403. https://doi.org/10.1111/j.1728-4457.2003.00375.x

[34] Liu, H. (2016). The Impact of College Enrollment Expansion on the Age of First Marriage in my country——Analysis Based on Census Data. Population and Economy (1), pp. 19–28. https://doi.org/10.1111/j.1728-4457.2003.00375.x

[35] Marks, R., & Karkouti, E. (1996). Evaluation of the reliability of reflective marker placements. Physiotherapy Research International, 1(1), 50–61. https://doi.org/10.1002/pri.47

[36] Meier, V., & Rainer, H. (2017). Daddy months. Journal of Population Economics, 30, 875-892. https://doi.org/10.1007/s00148-016-0631-y

[37] Miller, W. B. (2011). Differences between fertility desires and intentions: Implications for theory, research, and policy. Vienna Yearbook of Population Research, 75-98.

[38] Miller, W. B., & Pasta, D. J. (1995). Behavioral intentions: Which ones predict fertility behavior in married couples? 1. Journal of applied social psychology, 25(6), 530-555. https://doi.org/10.1111/j.1559-1816.1995.tb01766.x

[39] Mills, M., Rindfuss, R. R., McDonald, P., Te Velde, E., Reproduction, E., & Force, S. T. (2011). Why do people postpone parenthood? Reasons and social policy incentives. Human Reproduction Update, 17(6), 848–860. https://doi.org/10.1093/humupd/dmr026

[40] Monstad, K., Propper, C., & Salvanes, K. G. (2008). Education and fertility: Evidence from a natural experiment. The Scandinavian Journal of Economics, 110(4), 827-852. https://doi.org/10.1111/j.1467-9442.2008.00563.x

[41] Myrskylä, M., & Margolis, R. (2014). Happiness: Before and after the kids. Demography, 51(5), 1843-1866. https://doi.org/10.1007/s13524-014-0321-x

[42] Olivetti, C., & Petrongolo, B. (2017). The economic consequences of family policies: lessons from a century of legislation in high-income countries. Journal of Economic Perspectives, 31(1), 205-230. https://doi.org/10.1257/jep.31.1.205

[43] Proudfoot, S., Wellings, K., & Glasier, A. (2009). Analysis of why nulliparous women over age 33 wish to use contraception. Contraception, 79(2), 98–104. https://doi.org/10.1016/j.contraception.2008.09.005

[44] Raute, A. (2019). Can financial incentives reduce the baby gap? Evidence from a reform in maternity leave benefits. Journal of Public Economics, pp. 169, 203–222.

[45] Rindfuss, R. R., Choe, M. K., & Brauner-Otto, S. R. (2016). The emergence of two distinct fertility regimes in economically advanced countries. Population Research and Policy Review, 35, 287-304. https://doi.org/10.1007/s11113-016-9387-z

[46] Roy, S., Morton, M., & Bhattacharya, S. (2018). Hidden human capital: Self-efficacy, aspirations, and achievements of adolescent and young women in India. World Development, pp. 111, 161–180. https://doi.org/10.1016/j.worlddev.2018.07.002

[47] Söderberg, M., Lundgren, I., Christensson, K., & Hildingsson, I. (2013). Attitudes toward fertility and childbearing scale: an assessment of a new instrument for women who are not yet mothers in Sweden. BMC pregnancy and childbirth, 13(1), 1-8. https://doi.org/10.1186/1471-2393-13-197

[48] Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. Journal of the Royal Statistical Society: Series B (Methodological), 36(2), 111–133. https://doi.org/10.1111/j.2517-6161.1974.tb00994.x

[49] Tamm, M. (2019). Fathers' parental leave-taking, childcare involvement, and labor market participation. Labour Economics, pp. 59, 184–197. https://doi.org/10.1016/j.labeco.2019.04.007

[50] Tanskanen, A. O., & Rotkirch, A. (2014). The impact of grandparental investment on mothers' fertility intentions in four European countries. Demographic Research, 31, 1-26.

[51] Teo, T., Tsai, L. T., & Yang, C.-C. (2013). Applying structural equation modeling (SEM) in educational research: An introduction. In Application of structural equation modeling in educational research and practice (pp. 1-21). Brill. https://doi.org/10.1007/978-94-6209-332-4_1

[52] Testa, M. R. (2014). On the positive correlation between education and fertility intentions in Europe: Individual-and country-level evidence. Advances in life course research, pp. 21, 28–42. https://doi.org/10.1016/j.alcr.2014.01.005

[53] Thomas, J., Rowe, F., Williamson, P., & Lin, E. S. (2022). The effect of leave policies on increasing fertility: a systematic review. Humanities and Social Sciences Communications, 9(1), 1–16. https://doi.org/10.1057/s41599-022-01270-w

[54] Wang, J., & Wang, G. (2016). A Study on the Difference between Fertility Intention and Fertility Behavior with China Low Fertility Level. Journal of Demography, 38. https://doi.org/10.16405/j.cnki.1004-129X.2016.02.001

[55] Xing, Y., Tarimo, C. S., Ren, W., & Zhang, L. (2022). The impact of health insurance policy on the fertility intention of rural floating population in China: empirical evidence from cross-sectional data. International Journal of Environmental Research and Public Health, 20(1), 175. https://doi.org/10.3390/ijerph20010175

[56] Yang, Z., & Zhang, C. (2018). The Impact of Education Deepening on First Marriage Age and Fertility——A Quasi-Experiment Based on the Execution of Compulsory Education Law of China in 1986. Population and Development(1), pp. 18–32.

[57] Yoon, S. Y. (2017). The influence of a supportive environment for families on women's fertility intentions and behavior in South Korea. Demographic research, pp. 36, 227–254. https://doi.org/10.4054/DemRes.2017.36.7

[58] Yu, L., Zhao, S., & Chen, Q. (2011). Research on Hidden Human Capital of Top Management Team. Industrial Technology & Economy(2), pp. 118–122.

[59] Zhang, X. (2017). Entrepreneurship education and hidden human capital development of the new generation of farmers. Agricultural Economy (5), pp. 112–113.

[60] Zhang, X., & Cui, Y. (2020). Do Women with High Human Capital Prefer to Have a Second Child? --On the Transformation of Fertility Desire Based on Human Capital. Journal of Tsinghua University(Philosophy and Social Sciences), 35(2), 182-193. https://doi.org/10.13613/j.cnki.qhdz.002936