



**An experimental GGS module:  
Measuring childbearing motives, desires  
and intentions based on the TDIB model**

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## 1. Name of the module

Childbearing motives, desires and intentions:

*A proposal for an alternative approach to reproductive decision making in the GGS: Beyond the measurement of intentions.*

## 2. Module organizers

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## 3. Abstract

This special model builds from the 'Traits-Desires-Intentions-Behaviour (TDIB) framework' (Miller, 1994) as the underlying model to study reproductive decision-making. The model has clearly defined the motivational sequence that leads to reproductive behaviours and differentiated its key concepts (motivational traits, desires, intentions and instrumental behaviours). The elements of this sequence develop and interact with other factors over the life course, making the model particularly suitable for a panel survey like the GGS.

Our proposed module, together with questions already available in the GGS longitudinal questionnaire (e.g. instrumental behaviours and intentions to have a child) will allow testing the complete TDIB model, as well as analyses of its different segments. The design of the questionnaire offers possibility to better explore ambivalence to childbearing as well as voluntary childlessness.

This module (version 2, 09/20) is still subject to pilot testing and subsequent modification.

## 4. Module Justification

### 4.1. What is the TDIB?

Traits-Desires-Intentions-Behaviour is a theoretical framework, first proposed in early 1990s by Warren Miller for analysing childbearing behaviours (Miller 1994). In the TDIB, a reproductive behaviour the outcome of a motivational sequence of four steps:

### 1) **Motivational traits** (motives or motivations)

Motivational traits are dispositions to react favourably or unfavourably to various aspects of childbearing. They are assumed to be genetically determined and shaped by individual experience to produce two broad dimensions: **positive childbearing motives** (PCM) are dispositions to react favourably to various aspects of childbearing, while **negative childbearing motives** (NCM) are dispositions towards unfavourable reactions (Miller, 1995). These two broad dispositions “become differentiated during the individual’s psychosocial development into two groups of narrower traits and, finally, into an array of specific attitudes towards various aspects of childbearing and childrearing” (Miller, 1995, p. 474). Miller developed his own ‘Childbearing Questionnaire (CBQ)’ to measure motivational traits, in which he identified five categories of positive motives and four categories of negative motives (Miller 1995).

### 2) **Childbearing desires**

Positive and negative motives, combined with other characteristics, psychological attributes and life course developments, may build into the desire to have a child. The relation between motivational traits and desires is quite straightforward: net of all other characteristics, the stronger positive motives and the weaker the negative motives – the stronger the desire. The desire describes what a person **wants** to do, but not necessarily plans to do.

### 3) **Childbearing intentions**

Childbearing intentions directly precede behaviour and they represent what a person actually plans to do. Intentions are based on desires but take into consideration what can be achieved. An important feature of the intention is that they are characterised by some level of commitment to act upon personal wishes, related to having children.

### 4) **Reproductive behaviour**

In response to intentions for children, under the right circumstances, subsequent contraceptive or proceptive behaviour will follow.

## 4.2. Why should the TDIB incorporated into the GGS?

### Design benefits:

- **Designed to measure reproductive decision-making**

The theory was designed within psychology to specifically explain reproductive decision-making, compared to more generic models of behavioural decision-making which have been applied to fertility behaviour. The theory has been widely accepted in reproductive psychology (Guedes et al. 2015; Varas and Borsa 2019; Avison and Furnham 2015; Mynarska and Rytel 2020) as well as seeing growing interest among demographers.

- **Clarity of concept definitions**

The model clearly distinguishes between its components (motives, desires, intentions, behaviour) making them intuitive to understand and implement in data collection and analysis.

- **Life course framework**

The components of the TDIB model are described from a developmental and life course perspective. Life course approach constitutes a major framework for studying fertility (Huinink



and Kohli 2014) and it is central in the GGP as well (Gauthier et al. 2018). The temporal order of TDIB elements makes the model a particularly good match for panel studies. We would also be able to investigate, to what extent any change in intention – that are more volatile than motives and desires and change over time – stems from external conditions, or whether any shift in the underlying motives or desires occurred. While the motives are considered to be the least susceptible to change, the GGS could allow for an exploration into the factors that impact them over time.

#### **Potential avenues for novel research:**

- **Potential to test hypotheses in relation to other factors**

As the components of the TDIB model are linked sequentially, it is possible to integrate hypotheses of how other factors interact with the pathway. For example, early life experiences are likely to impact childbearing motives but will have a weaker effect on the formation of desires and intentions (Rackin and Bachrach, 2016).

- **Potential to capture childbearing ambivalence**

Motives in the TDIB are measured along positive and negative dimensions. In doing so, it is possible to identify individuals with pro and anti-natal orientations, as well as those who are indifferent or ambivalent. Attempts to measure indifference and ambivalence at the level of motivational traits are being undertaken using non-representative data, collected with psychological questionnaires in for the US, Poland and Iran (Miller 2015; Mynarska 2017). GGS could open a new strand of research in this area. Reproductive ambivalence is an important determinant of inconsistent contraceptive use and it increases a risk of pregnancy even when no clear intention to have a child is expressed (Agadjanian 2005; Higgins et al. 2012; Higgins 2017; Yoo et al. 2014; McQuillan et al. 2011). Most studies on ambivalence have been done in the USA, this is an opportunity to expand the literature outside of this context.

- **Potential to comprehensively study voluntary childlessness**

It has recently been argued that the TDIB approach and prospective measures of childbearing motives and desires could contribute to our understanding of voluntary childlessness (Mynarska and Rytel 2018). Understanding people's choices to have no children constitutes an important research goal given a recent increase in childlessness (Sobotka 2017) that is attributed to—at least to some extent—personal preferences (Rowland 2007; Berrington 2017). Inclusion of the TDIB framework in the GGS will allow us to explore the phenomenon more comprehensively.

## 5. Module Design

### 5.1. Overall design of the module

In our proposal for the new GGS section on reproductive decision-making we have started with the following assumptions:

- Miller's motivational sequence of TDIB constitutes the theoretical framework of the questions and all elements of the sequence should be included.
- We want all TDIB concepts measured as continuous variables (except for behaviour – where it can be only measured as whether any behaviour takes place or not). Given that the TDIB



model assumes mediation effects, the continuous variables will give us more freedom to implement more sophisticated modelling methods (including structural equation modelling) in order to capture the whole motivational process.

- We want the module to complement the remaining GGS items on fertility (e.g. on childbearing ideals) giving researchers more flexibility to use various, well defined concepts also in reference to other theoretical models such as the cognitive-social model (Bachrach and Morgan 2013).

## 5.2. Measuring childbearing motives

The overall aim of these questions is to ask about respondents' opinions on / attitudes towards various costs and benefits of having children. The sum (or mean) of all attitudes towards benefits of having children will indicate the strength of positive childbearing motivation. Similarly, the sum (or mean) of all attitudes towards the related costs – the strength of negative childbearing motivation. It is important for the items to capture affective loading of people's responsiveness to children (an element of desirability, wanting or valuing certain outcomes).

The motives lie along two dimensions: positive benefits and negative costs, but there is no universal classification of these costs and benefits. We therefore aimed to detect categories and items that are consistent across previously used categorisations. These sources include:

- 1) Miller's Childbearing Questionnaire (Miller 1995), which itself is drawn from the Value of Children approach (Hoffman and Hoffman 1973). The five positive and four negative dimensions of the CBQ constitute our main point of reference.
- 2) Guedes et al. (2015) who used a bottom-up approach (based on the literature and qualitative studies) to reveal key dimensions of positive and negative motives. There is considerable overlap between the Guedes et al. and Miller items.
- 3) Analysis of the Miller's Childbearing Questionnaire on childless Polish individuals (Mynarska and Rytel 2014, 2018, 2020).
- 4) Analysis of questions on positive and negative childbearing consequences that were included experimentally in the Polish GGS wave 2, to verify the performance of different elements.

Through this process we decided on initial set of 5/6 positive childbearing motives, and 4/5 negative childbearing motives.

Section 6 presents the first attempt at operationalization of the TDIB model within the GGS framework. It was submitted to the GGP Questionnaire Task Force for evaluation (in response to the GGP call for new thematic modules in November 2019).

## 5.1. Measuring desires and intentions

When asking about desires and intentions, we wanted to be able to capture both a continuous measurement of wanting and intending, as well as capturing uncertainty in intentions. Uncertainty of childbearing intentions constitutes an important, yet underdeveloped, strand of research (Bernardi et al. 2015; Ní Bhrolcháin and Beaujouan 2015, 2011). We therefore opted to ask about desires and intentions both in a standard categorical way to capture uncertainty (through an 'unsure' response category), and a continuous measurement to capture what "unsure" really means. In other words, we could compare simple yes/no/unsure responses against a continuous scale of measurement. The continuous scale spans from 0-10. This scale has several advantages: it has a zero-point that appears natural to the respondents, allowing them to indicate no interest in having a child; it can be related to



percentages: 5 would be equal to 50%, meaning that a person feels “in the middle” (50/50); and a 0-10 scale is used in the GGS for questions on satisfaction – so we do not introduce too many different scales within the survey design. Moreover, the 0-10 scale has been used previously in other studies like HILDA. These scales also performed well in a Polish study based on the TDIB (Mynarska and Rytel 2018, 2020).

As the GGS already has existing questions capturing intention to have a child in the next 3 years with categorical response (FER 14) and a question on intended number of children (FER16), we therefore propose 3 new questions: one on desire (categorical), one on desire strength (0-10) and one on intention strength (0-10).

## 5.2. Measuring reproductive behaviours

GGS already includes several items on contraceptive and proceptive instrumental behaviour (e.g. whether trying to get pregnant, contraception use), as well as retrospective information (e.g. when did you first start trying to become pregnant). We deem the existing questions in the GGS sufficient to capture reproductive behaviours at the final stage of the TDIB pathway, so will not be offering any additional questions.





## 6. Module version 1: Submitted to the GGP Task Force (December 2019)

Items prepared by Monika Mynarska and Alyce Raybould. Submitted to the GGP Questionnaire Task Force in December 2019. Items in bold are items that already exist in the GGS.

Section TDIB Basic definitions	Proposed questions	Additional information on the items Comments
<b>Section T</b> <b>Motivational Traits, motives</b> Dispositions to react favourably or unfavourably to various aspects of childbearing; can be reflected in attitudes about benefits and costs of childbearing	<b>T1. There are various reasons for which people decide to have children. How important are these reasons for you at the moment?</b> <b>Rating scale:</b> completely unimportant, rather unimportant, neither important nor unimportant, rather important, very important <i>//The respondents rate the following reasons//</i>	The exact wording of the introductory questions T1. and T2. as well the rating scale might need alternative wording. They need to capture the core feeling of motives, which capture some degree of “urge” or “wanting”. In Miller’s questionnaire the questions are asked in terms of how desired / undesired different benefits and costs of childbearing are.
	T1.a. Having maternal / parental instinct	Biological drive. An alternative version: an item on feelings towards a new born baby. <i>Wanting to experience holding and cuddling a baby/ an infant</i>
	T1.b. Wanting to watch children grow and develop.	Satisfactions of childrearing (benefits related to older children)
	T1.c. Parenthood makes a relationship stronger	Relationship development
	T1.d. Having a child will provide parents with companionship and support later in life	Economic/utilitarian value of children
	T1.e. Parenthood means fulfilling religious feeling about family life	Traditional parenthood, religiosity, morality.
	T1.f. Children will take over the family name and traditions	Continuity.
	<i>T1.g. We experience a special love and closeness through parenthood</i>	<i>An optional item: A general item on overall positive emotions related to having children.</i>
	<b>T2. There are various reasons for which people decide not to have children. How important are these reasons for you at the moment?</b>	Rating scale and comment as in T1.

	T2.a. Pregnancy and delivery are strenuous for women	Biological component, fears related to pregnancy and delivery.
	T2.b. Children put strain onto a relationship	Stress for parents.
	T2.c. Raising children is financially difficult	Economic costs.
	T2.d. Raising children is a burden on parents' time and energy	Non-financial costs.
	T2.e. Children add to the ecological crisis	Environmental concerns.
	<i>T2.f. For women it is difficult to combine work and childbearing</i>	<i>An optional item: It would be important from theoretical point of view</i>
	<i>T2.g. Fears and worries about the future for a child</i>	<i>An optional item: Overall fear for children's future (e.g. possibility of wars)</i>
<b>Section D</b> <b>Desires</b> Motivational state that describes what a person wants to do, but not necessarily plans to do	Next, we have several questions about having a(nother) child. First, we ask about your desires to have a(nother) child and the next – about your actual intentions to have one. <b>D1. Assuming that you could have a(another) child at a chosen moment of your future life, do you want to have a(another) child?</b> <b>Rating scale:</b> Definitely not/Probably not/Unsure/Probably yes/Definitely yes	Given that in the next item the strength of desire is measured in a continuous way, even a simpler rating scale could be considered here: No / Unsure / Yes  The middle answer of “unsure” is crucial for any study on uncertainty in childbearing decision-making.
	<b>D2. If you had to rate how much you want a(nother) child sometime in the future, with 0 being not wanting a(nother) child at all and 10 being wanting a(nother) child as much as possible, how would you rate yourself? (0-10)</b>	Strength of desire.
	<del><i>FER16c (general ideal family size) Generally speaking, what do you think is the ideal number of children for a family?</i></del>	<del><i>This question is in the current version of the GGS. It does not fit with the TDIB model as it relates to more overall norms. It could be included for other research purposes.</i></del>
	<b>D3. FER16b (personal ideal family size) For you personally, what would be the ideal number of children you would like to have or would have liked to have had?</b>	This item appears in numerous surveys. It is included into the current GGS. It could be considered to indicate a child-number desire.

<b>Section I Intentions</b> Motivational state that captures what a person actually plans to do, desires constrained by reality, convey some level of commitment to act.	<b>I1. FER14 (intention to have a child in next 3 years) Considering all your feelings about having children as well as your own life situation and plans, do you intend to have a/another child during the next 3 years?</b> <b>Rating scale:</b> Definitely not/Probably not/Unsure/Probably yes/Definitely yes	This is an adjusted version of the item from the current version of the GGS (FER14). Again, given that in the next item the strength of intention is measured in a continuous way, even a simpler rating scale could be considered here: No / Unsure / Yes
	<del>FER15 (intention to have a child at all) Supposing you do not have a/another child during the next 3 years, do you intend to have any (more) children at all? Definitely not/Probably not/Unsure/Probably yes/Definitely yes</del>	<del>This question is in the current version of the GGS. Such long term intentions are closer to childbearing desires, and desires are now captured with a different set of items.</del>
	<b>I2. If you had to rate how much you intend to have a(nother) child in the next 3 years, with 0 being not intending to have a(nother) child at all and 10 being completely intending, how would you rate yourself? (0-10)</b>	Strength of intention.
	<b>I3. FER16a (total no. of children intended) How many more children do you intend to have overall?</b>	This question is in the current version of the GGS. It captures the child-number intention.
<b>Section B Behaviour</b> Instrumental behaviours (contraceptive or proceptive) that lead to a reproductive outcome.	<b>B1. FER10a (trying to get pregnant) Are you and your current partner trying to get pregnant?</b>	The exact ordering of items in section B might need to be adjusted.
	<b>B2. FER10b (date started trying to get pregnant) When did you or your current partner first start trying to get pregnant?</b>	The exact ordering of items in section B might need to be adjusted.
	<i>[If trying] Which of the following statements best expresses how you and your partner first started trying to get pregnant?</i> <ol style="list-style-type: none"> <li>1. We abruptly discontinued our regular method of contraception;</li> <li>2. We switched to a less effective method of contraception and then stopped using anything at all;</li> </ol>	<i>Optional item, suggested by Warren Miller to better understand proceptive behaviours.</i>

	<p>3. <i>We were not using contraception very regularly and then stopped using it all together;</i></p> <p>4. <i>We were not using contraception and decided we would make a real effort to get pregnant.</i></p>	
	<p><i>[If trying] Which of the following statements best expresses your own state of mind while trying to get pregnant?</i></p> <p>1. <i>I intended to get pregnant and was actively trying to make it happen.</i></p> <p>2. <i>I intended to get pregnant but was letting it happen naturally and without any special efforts</i></p> <p>3. <i>I did not really intend to get pregnant although I did not feel I would mind getting pregnant.</i></p>	<p><i>Optional item, suggested by Warren Miller to better understand proceptive behaviours.</i></p>
	<p><b>B3. FER11 (infertility treatments) Have you ever done any of these things to help you get pregnant? (List)</b></p>	<p>While this item is asked in retrospect, such treatments constitute an important element of proceptive behaviours. The exact ordering of items in section B might need to be adjusted.</p>
	<p><b>B4. FER13 (had intercourse last 4 weeks) Did you have sexual intercourse in the past 4 weeks? Y/N</b></p>	<p>Proceptive behaviour. The exact ordering of items in section B might need to be adjusted.</p>
	<p><b>B5. FER12 (contraception) Are you and your partner using or doing any of these things to prevent pregnancy at this time? (List)</b></p>	<p>Contraceptive behaviour. The exact ordering of items in section B might need to be adjusted.</p>



## 7. Revisions made since GGP Task Force meeting, December 2019

The GGP Questionnaire Task Force was positive about the proposed TDIB module and provisionally accepted it for the GGS follow up questionnaire (ie wave 2). Nonetheless, it was apparent that operationalization of the model and the exact formulation of the items needed to be further discussed and tested. Between December 2019 and July 2020, the authors discussed the content and the structure of the module with the author of TDIB model, Warren Miller, and several other colleagues with expertise on fertility, fertility intentions and survey measurement. The authors are grateful for feedback, advice and consultation from the following colleagues.

- Eva Beaujouan, Vienna University of Economics and Business
- Zuzanna Brzozowska, Vienna University of Economics and Business
- Lars Dommermuth, Statistics Norway
- Anne H. Gauthier, Netherlands Interdisciplinary Demographic Institute
- Izabela Jaworska, Cardinal Stefan Wyszyński University in Warsaw
- Irena E. Kotowska, Warsaw School of Economics
- Trude Lappegard, University of Oslo
- Peter Lugtig, University of Utrecht
- Anna Matysiak, University of Warsaw
- Warren Miller, Transnational Family Research Institute
- Gerda Neyer, Stockholm University
- Daniele Vignoli, University of Florence

Since the initial proposal was made to the GGP Task Force in December 2019, the following revisions were made, to be tested in the pilot studies:

### 7.1. Revisions to measurement of childbearing motives

*Warren Miller* found the original wording of the items to be too detached and impersonal, focusing too much on the cognitive component and not the emotional component of attitudes. This would have been a large deviation from the theoretical model, as affective loading is central in how childbearing motives are conceptualized (see: definition of motivational traits in Section 4).

**Revision:** In the CBQ questionnaire, the emotional component is covered by the setup of the questions (“how desirable/undesirable...”) but this would not work in a large survey like the GGS with little space for detailed instructions. Our solution therefore is to load each item emotionally (including a favourable/unfavourable emotional reaction to childbearing in the statements). For example, T1b in the original proposal has been modified from ‘wanting to watch your child grow and develop’ to ‘Watching your child grow and develop brings great joy’. We then ask the respondents how much they agree with that statement. This is a change from the original set up, which asked respondents to rate how important each element was to them. Noteworthy, in the first pilot it was decided to test both formats of the items (split ballot) to fully understand the difference between them.

There will be limited space in the GGS so the scales (list of items) to measure positive and negative motives need to be carefully constructed: they cannot cover too many items, but the key costs and



benefits of childbearing need to be included. To make an informed choice as to the selection of the items, we have decided to run a pilot on a longer list of positive / negative attitudes. The more extensive list was prepared based on our original proposal, but drawing heavily on the TDIB model, discussions with *Warren Miller* and previous CBQ studies. We acknowledge support and input from *Izabela Jaworska* at this step.

**Revision:** The following items have been added for piloting purposes:

Item	Theoretical grounding
T1a: It is a wonderful feeling to hold your new-born baby in your arms	Affectional bond gained through pregnancy birth and infancy (ties with item T1b on maternal/paternal instinct)
T1e: Having a child brings you closer to your own parents	Affectional bonds with family and friends that develop as a result of being a parent. Ties in with original items on passing on traditions and strengthening relationship with partner, and new item T1l on gaining admiration from friends and family.
T1g: Guiding and teaching your child is greatly satisfying	Affectional bond strengthened while parenting an older child (ties in with item T1f on watching child grow and develop)
T1h: Having a child brings lifelong happiness	Affectional benefit associated with lifelong bond with child. Ties in with T1i, T1j and T1n.
T1i: Having a child protects you from loneliness as you get older	Original item encompassed both companionship and support, this has now been split into two: T1i and T1n. T1i covers affectional benefits associated with a lifelong bond with a child
T1j: Having a child makes parents' life richer	Affectional benefit associated with lifelong bond with a child. Ties in with T1h, T1i, T1j and T1n.
T1k: Knowing that I am fertile is important to me	Affectional benefit associated with early milestones of parenting
T1l: By becoming a parent, you gain admiration from your family and friends	Affectional bonds with family and friends that develop as a result of being a parent. Ties in with original items on passing on traditions and strengthening relationship with partner, and new item T1e on becoming closer to one's own parents.
T1n: Having a child ensures parents will be supported in later life	Affectional benefits associated with lifelong bond with a child. Ties in with new item T1h on lifelong happiness, T1i on protecting against loneliness and T1j on making life richer.
T1o: It's good for a child to have siblings	The only item from the original CBQ that directly addresses second and higher order births.
T2c: Being responsible for your child is very difficult	Additional item oriented towards the costs of childbearing enhanced by the norm of intensive parenting.

T2f: Raising a child limits your freedom to do other things	Fear related to restrictions of parental responsibilities related to items on financial difficult and burden on time and energy.
T2i: I fear failing as a parent	Additional item oriented towards the costs of childbearing enhanced by the norm of intensive parenting.
T2j: I fear I am not knowledgeable or competent enough to be a good parent	Additional item oriented towards the costs of childbearing enhanced by the norm of intensive parenting.
T2l: After pregnancy and childbirth it is difficult for women to get back into shape	Fear associated with pregnancy and childbirth, related to item on worrying nature of childbirth.
T2m: It requires a huge amount of money to ensure your child has a good standard of life	Additional item oriented towards the costs of childbearing enhanced by the norm of intensive parenting.

## 7.2. Additional questions

- Two questions were added to measure the strength of respondent's partner's childbearing desire and intention (as perceived by the respondent).

**Revision:** The items are phrased "How would you rate how much your partner wants / intends to have a (another) child?" with 0-10 scale.

- Two questions were added to measure social pressure related to childbearing. The items were suggested by *Eva Beaujouan* to capture perceived social pressure to have and to not have a child.

**Revision:** Two questions (SOC1 and SOC2) added to address this. "How often do you feel pressure to have / not to have a (another) child?"

## 7.3. Other revisions

Several other minor revisions have been made in relation to how the items are formulated. Among others, items on desires and intentions as well as the instruction have been simplified. We have also standardized the format of the items on childbearing motives: they are now all formulated as simple declarative statements avoiding subjunctives (i.e. 'a child is' rather than 'a child can be').

There has also been a change in the overall structure of the TDIB module. Initially, it was designed as a part of "Fertility" section of the GGS to be incorporated with other items of the section. At the moment, it is designed as a standalone module. It will be possible for country co-ordinators to request its inclusion at the end of the section or at the end of the survey. As noted before, items related to pro-ceptive and contraceptive behaviours are included in the GGS baseline questionnaire. A few of those items have been included into the module for piloting purposes only.

The version of the module that is going to be tested in the pilot is presented in Section 8. The module will be tested in September 2020 on a random, nationally representative sample of Poles aged 18-49 (n=1000). An additional pilot is being prepared in the UK. Following the results of the pilot studies,



final adjustments will be introduced and the final version of the module will be offered to the GGP Community.





## 8. Module version 2: Questions to be piloted in Poland (September 2020)

Items prepared by Monika Mynarska, Alyce Raybould and Izabela Jaworska based on the proposal by MM & AR submitted to the GGP Questionnaire Task Force in December 2019.

**Attitudes towards parenthood / motives – this part of the questionnaire has two versions (respondents will be randomly assigned to one of them).**

### T1. Attitudes - benefits

<p>//Theoretically grounded//</p> <p>Regardless of whether you are a parent or not, you are likely to have various feelings and attitudes about having children. Please read each statement below and indicate whether or not you agree with the attitudes it expresses. Please choose one of the following responses</p> <p>–2 strongly disagree –1 somewhat disagree 0 neither agree, nor disagree 1 somewhat agree 2 strongly agree</p>	<p>//Format used in the Polish GGS wave 2//</p> <p>There are many reasons why people decide to have a child. Please indicate how important is each of them to you personally?</p> <p>–2 completely unimportant –1 rather unimportant 0 neither important nor unimportant 1 rather important 2 very important</p>	<p>Order of items</p>
<p>T1a. It is a wonderful feeling to hold your new-born baby in your arms.</p>	<p>(same)</p>	<p>A1</p>
<p>T1b. *I have strong maternal / paternal instincts.</p>	<p>Strong maternal / paternal instincts.</p>	<p>B8</p>
<p>T1c. Having a child makes the parents' relationship stronger.</p>	<p>(same)</p>	<p>B1</p>
<p>T1d. It means a great deal to pass your family values and traditions on to your child.</p>	<p>The child will take over our family values and traditions.</p>	<p>A3</p>
<p>T1e. Having a child brings you closer to your own parents.</p>	<p>(same)</p>	<p>B7</p>
<p>T1f. Watching your child grow and develop brings great joy.</p>	<p>(same)</p>	<p>A2</p>



T1g. Guiding and teaching your child is greatly satisfying.	(same)	A7
T1h. Having a child brings lifelong happiness.	(same)	B2
T1i. Having a child protects you from loneliness as you get older.	(same)	A5
T1j. Having a child makes parents' life richer.	(same)	B6
T1k. * Knowing that I am fertile is important to me.	The child is a confirmation of the parent's fertility.	A6
T1l. By becoming a parent, you gain admiration from your family and friends.	(same)	A4
T1m. Parenthood is important for fulfilling religious values about family life.	Having a child means parents fulfil their religious values about family life.	B3
T1n. Having a child ensures parents will be supported in later life.	(same)	B4
T1o. *It's good for the child to have siblings	(same)	B5

\* Questions with an asterisk are a bit different in character and formulated in relation to the 'I' - but after long deliberations we decided to leave them in the pilot.

## T2. Attitudes – costs (instruction as in T1)

<p>//Theoretically grounded//</p> <p>There are many reasons why people decide <b>not to have a child</b>. Please read each statement below and indicate whether or not you agree with the opinion it expresses. Please choose one of the following responses.</p> <p>–2 strongly disagree          –1 somewhat disagree          0 neither agree, nor disagree          1 somewhat agree          2 strongly agree</p>	<p>//Format used in the Polish GGS wave 2//</p> <p>There are many reasons why people decide <b>not to have a child</b>. Please indicate how important is each of them to you personally?</p> <p>–2 completely unimportant          –1 rather unimportant          0 neither important nor unimportant          1 rather important          2 very important</p>	Order of items
T2a. The discomforts of pregnancy and delivery are worrisome.	(same)	A1



T2b. Being a parent means having frequent fears and worries about your child's wellbeing.	(same)	A2
T2c. Being responsible for your child is very difficult.	(same)	B1
T2d. Raising a child brings financial strain.	(same)	A3
T2e. Raising a child is a great burden on parents' time and energy.	(same)	A5
T2f. Raising a child limits your freedom to do other things.	(same)	B2
T2g. Having a child adds strain to the relationship between the parents.	(same)	A6
T2h. Having a child is irresponsible given the ongoing climate change.	(same)	B6
T2i. *I fear failing as a parent.	Fear of failing as a parent.	A4
T2j. *I fear I am not knowledgeable or competent enough to be a good parent.	Lack of knowledge and competence to be a good parent.	B4
T2k. It is difficult to combine work and childrearing.	(same)	A7
T2l. After pregnancy and childbirth it is difficult for women to get back in shape.	(same)	B3
T2m. It requires a huge amount of money to ensure your child has a good standard of life.	(same)	B5

\* questions with an asterisk – as above

\*\*\*Note: Blocks T1 and T2 will be displayed to the respondents in two parts. The numbers in the last column indicate whether the item is displayed in the first step (A) or in the second (B) and in which order.



## Desires and intentions

DES1	We would like to ask you a few questions about having a(nother) child. First, we will ask about your desire (wanting) to have a(nother) child and next – about your actual intentions to have one. Do you want to have a (another) child sometime in the future?	Definitely not Probably not Unsure Probably yes Definitely yes
DES2	If you had to rate how much you want a(nother) child sometime in the future, with 0 being not wanting a(nother) child at all, 10 being wanting a(nother) child as much as possible how would you rate yourself?	0-10 NOTE: the scale displayed, with ends described: 0 "not at all", 10 "as much as possible", and 5 marked more clearly as the middle of the scale.
DES3	And how would you rate how much your partner wants a(nother) child? (only asked to those with a partner)	0-10 (scale as above)
INT1^	Do you intend to have a(nother) child in the next 3 years?	Definitely not Probably not Unsure Probably yes Definitely yes
INT2	If you had to rate how much you intend to have a(nother) child in the next 3 years, with 0 being not intending to have a(nother) child at all, 10 being completely intending, to have a child, how would you rate yourself?	0-10
INT3	And how would you rate how much your partner intends to have a(nother) child (only asked to those with a partner)	0-10
INT4^	How many more children do you intend to have overall?	
PRO^	Are you and your partner trying to get pregnant? (only asked to those with a partner)	Yes / No
CON^	Are you currently using any contraceptive methods to avoid pregnancy?	Yes / No



SOC1	How often do you feel pressure to have a(nother) child?	Never Rarely Sometimes Often Most of the time
SOC2	How often do you feel pressure not to have a(nother) child?	Never Rarely Sometimes Often Most of the time

^ The exact same or similar items are included in the GGS baseline questionnaire and are added here for the piloting purposes only.

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