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Do mothers manipulate grandparental care?

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Abstract

Many studies have been done on grandparental investment, asking why grandparents distribute their resources skewered. Maternal grandmothers invest most, and parental grandfathers invest least in their grandchildren. Here resemblance is used as an indicator of kin, asking if grandparents feel their grandchildren resemble them and looking at how they invest in these grandchildren. Daughters do not more frequently talk about grandparents resemblance to grandchildren than sons. Yet, when both sons and daughters are reported to emphasize resemblance between grandparent and grandchild, daughters are more intensively arguing that grandparents resemble the grandchildren than sons. It appears that daughters are more intensive that sons about their children's resemblance to their parents possibly to influence their parents investment.

Introduction

For mammals in general females do the majority of offspring care (Clutton-Brock 1991). For humans (*Homo sapiens sapiens*) fathers do tend to provide some offspring care, yet mothers are still the major contributors with help from kin (Sear and Mace 2008). This has been explained with classical sex role divergence. That is, females give more care because they have more to lose if the offspring dies, while the males, which only contribute with a small sperm cell to the zygote, are more focused on mate competition. These are the classical female and male arguments as raised by Trivers (Trivers 1974). However, the argument rests on a Concorde fallacy, in which the previous investment in a project should not determine that the project is continued even if it is not profitable (Kokko and Jennions 2008). Females should be more interested in rearing the offspring because they produce few, large gametes which are costly, and consequently have fewer mating opportunities. This influence on the operational sex ratio leads towards female choice of mating partner, and male investment in competitive traits.

Another factor influencing sex differences in parental investment may be male paternity uncertainty (Kokko and Jennions 2008). Males contribute only with small sperm cells, so a male's reproductive rate is limited by the sex ratio in the population. In theory if females are abundant males can reproduce faster by not staying with one female but mating with more. In polygamous populations, the male try to ensure he is the father of his harems offspring by competing for and holding a harem. Human males can never be sure that they are the biological father of their mate's offspring. Because of the concealed ovulation in human females, males have to mate guard to insure that he is the father of her children. Nevertheless, he cannot always watch his mate so she might be impregnated by another male leaving him to care for someone else's child. This cuckoldry is a problem for males as they should be selected to further their own genes, not waste resources on children they are not related to. Meaning males could have evolved some mechanism for recognizing kinship in children (Thornhill and Gangestad 2008). The fear of cuckoldry, which have evolved in our ancestral environment, might be higher than what should be expected from the current rate of cuckoldry. Today some estimates go as high as 30% illegitimate children, but a more reasonable number is 2 to 3% in our western societies (Anderson 2006, Voracek, Haubner et al. 2008). One possible way of determining paternal kinship is resemblance between parent and child. Unfortunately humans are not good at determining newborns parents based on the newborns facial resemblance to adults (Daly and Wilson 1982). The mother is also confounding males' impression of resemblance by biasing her newborn resemblance to her mate (McLain, Setters et al. 2000, Alvergne, Faurie et al. 2007). Thus, human females somehow try to reassure their male mates that the offspring she has produced is their offspring. Resemblance may be an indicator of kin-detection and parental investment in humans (Daly and Wilson 1982, Burch and

Gallup Jr 2000, McLain, Setters et al. 2000, Apicella and Marlowe 2004, Bressan and Grassi 2004, Alvergne, Faurie et al. 2007, Alvergne, Faurie et al. 2009, Heijkoop, Semon Dubas et al. 2009, Kaminski, Dridi et al. 2009). For example, human males might be more likely to invest time and care in children they feel resemblance to (Platek, Burch et al. 2002, Apicella and Marlowe 2004, Alvergne, Faurie et al. 2009), but resemblance and care may influence each other meaning fathers who care more for their children feel that their children resemble them more (Volk, Darrell-Cheng et al. 2010) Conversely, males are more likely to be violent towards children they felt less resemblance to (Burch and Gallup Jr 2000). This gives some merit to the use of resemblance as an indicator of perceived paternity and kinship, which may explain why mothers will ascribe their newborns resemblance to their mate. Grandparents have similar problems to that of fathers, how to know they are investing in their biological kin.

Studies have shown that mother's mother contribute most to the grandchild, then mother's father and father's mother as intermediate and least contributing is father's father (Fischer 1983, Euler and Weitzel 1996, Pashos 2000, Sear, Mace et al. 2000, Voland and Beise 2002, Ragsdale 2004, Gibson and Mace 2005, Laham, Gonsalkorale et al. 2005, Michalski and Shackelford 2005, Pashos and McBurney 2008, Sear and Mace 2008, Bishop, Meyer et al. 2009, Pollet, Nelissen et al. 2009, Kaptijn, Thomese et al. 2010). Mother's mother will always have the safest investment as she knows she is her daughter's mother, and she also knows her daughter is the mother of her grandchild. Mother's father and father's mother both have paternity uncertainty. That is, the father knows his daughter is the mother of his grandchild but is uncertain if he is the father of his daughter. The father's mother, on the other hand, knows she is the mother of her son, but is uncertain if her son is the father of her grandchild. Least certain of all is father's father who has two uncertainty links to his grandchild. Thus, the skewered investment by grandparents is reflective of possible fitness gain for each grandparent (Smith 1988). There has been done some studies on how grandparental uncertainty affects investment (Euler and Weitzel 1996, Pashos and McBurney 2008). Interestingly Pashos (Pashos and McBurney 2008) found that the skewered investment of grandparents are larger than one would expect from the paternity uncertainty and one would assume that also cultural praxis may influence this outcome (Pashos 2000). This also strengthens the statement that grandparents invest differently in their grandchildren, even if there is cultural pressure to invest equally.

Hamilton's inclusive fitness gives room for a grandparent to invest in their grandchildren, since they share 25% of their genes with their grandchildren (Hamilton 1964). The parent offspring conflict as to where the parents should give their resources is based on the 0.5 degree of relatedness between

parent and offspring, and an offspring is of course 100% related to itself (Trivers 1974), Thus, parents and offspring should not agree on how the resources are distributed between offspring. The offspring will want as much resources as possible to them, but the parents have to consider later mating in their efforts. If the parents are exhausting themselves on the current brood, they may not have enough resources for the next brood. It is also important to consider when to switch care from offspring to offspring's offspring. At one point the care given to the offspring will not further enhance the offspring's breeding success, so the care should be given down to the offspring's offspring to further its future breeding success instead (Hamilton 1964). The parent-offspring conflict of investment lasts until the cost of a full sibling is double the benefit of the present child; this indicates the correct time to shift the investment to maximize fitness. Human females live long after their reproductive period has ended, indicating that females may have been selected to care for their offspring even after they can no longer reproduce to enhance their reproductive success (Hawkes, O'Connell et al. 1998). When this shift happens grandparents with both a son and a daughter, who both have children, will have to choose how to distribute their investment between their grandchildren. Grandparents also have sex chromosome relatedness to their grandchildren that may affect how they choose to invest their care (Chrastil, Getz et al. 2006, Fox, Sear et al. 2010).

Busch (Busch 2010) found that daughters, unlike sons, more often reported that their children resembled their parents more than their brothers children. If daughters, more often than sons, also emphasized this biased opinion to their parents this could influence how grandparents invest in their grandchildren. I wish to follow up on this and see if grandparents have experienced that their children may have influenced them with regards to their opinion of resemblance to their grandchildren. If resemblance can be used as an indicator of relatedness, will influencing the perceived resemblance influence investment in that child? Asking if grandparents have experienced their son or daughter to influence their perceived resemblance to their grandchildren might show if sons or daughters try to manipulate their parents to invest more heavily into their children instead of their siblings children.

Material and method

A Norwegian questionnaire was constructed and respondents was found through friends and family primarily in Narvik, Sortland and Steigen, recruitment notes at the local elderly center in Tromsø, shops in Tromsø and Narvik, and mailing lists at the University of Tromsø and Høyskolen i Narvik, as well as face to face recruitment in the city of Tromsø and Narvik. The criteria to be included as subjects was that grandparents needed at least one son and one daughter who both had at least one child each. Throughout the questioning, the grandparents were asked to focus their attention on their

son and daughter's firstborn child. In order to avoid pseudo replication either grandmother or grandfather answered for each son-daughter pair. In total 31 eligible grandparents answered; 4 grandfathers and 27 grandmothers. They were asked about how similar they felt their grandchildren are to them on a scale from one being the lowest and seven being the highest resemblance, and if their son or daughter ever said that the grandparents were similar or not similar to their grandchildren. They were also asked how often they meet their grandchildren of their son and daughter and how far away they lived from their grandchildren. In addition, they were asked questions about their age, how many sons and daughters they had, their age of their first son and first daughter to have a child, and how many children the first son and the first daughters to have a child have (see appendix 1). Several grandparents were not interested in answering all the questions. Thus, sample sizes vary throughout. The most common reason was they did not like the questions, they felt they had little to no resemblance to the children in question or they did not have the time. Because of the criteria for the grandparents the suitable grandparents were limited in number and difficult to find. Most did not respond well to a stranger asking about their personal relationship with their grandchildren, and many did more than once ask if the questions were answered anonymously. The small sample size is a reflection of the difficulties in gathering answers from grandparents.

The average age of the grandparents were 69 years old (range: 58-87), but seven grandparents did not report their age. The grandparents had 1.6 (range: 1-5) girls and 1.8 (range: 1-4) boys on average, and the average age of their first daughter to have a child was 43 years (range: 29-62) and the first son to have a child was 44 (range: 29-62) years old. The average number of children from the daughters was 2.5 (range: 1-5) and 2.3 children (range: 1-4) from the son. The first child of the daughters were 12 boys and 19 girls at an average age of 17 (range: 2-41) years. The first child of the sons were 13 boys and 18 girls at an average age of 15 (range: 1.5-40) years.

When asked about how long it takes to travel by bus or car to the grandchildren 45% of the grandparents lived 30 minutes or less from their daughter's child, 23% lived 30 minutes to 4 hours away from their daughter's child and 32% lived more than 4 hours by bus or car from their daughter's child. For the son's child 39% of the grandparents lived 30 minutes or less from the child, 13% lived 30 minutes to 4 hours from their son's child and 48% lived more than 4 hours from their son's child. The grandparents were also asked to estimate travel costs to the two grandchildren in question. Here 65% of the grandparents estimated a cost of 500 NOK or less to travel to their daughter's child, 3% estimated between 500 NOK and 1500 NOK to their daughter's child and 32% estimated more than 1500 NOK to travel to their daughter's child. For travel costs to the son's child 48% estimated 500 NOK or less, 13% estimated between 500 NOK and 1500 NOK, and 39% estimated more than 1500 NOK.

When asked about how often the grandparents meet their two grandchildren 6% of the grandparents met their daughter's child daily, 39% met their daughters' child every week, 16% met their daughter's child every month, 29% met their daughter's child every six months and 10% met their daughter's child every year. For the son's child 6% of the grandparents met their son's child daily, 20% met their son's child every week, 10% met their son's child every month, 42% met their son's child every six months and 10% met their son's child every year and 3% met their son's child more seldom than once a year. The daughters were more often living together with their child's father (81%) than not (19 %) For the son's it was a bit more even with 65 % living with their child's mother and 35% not living with their child's mother.

Results

Asking about how much the grandparents felt their two grandchildren resembled them on a scale for 1 to 7, 1 being not at all similar and 7 being very high resemblance (see table 1). The grandparents answered on a curve peaking at four (29%) for the daughter's child physical resemblance and high values at three (32%), four (23%) and five (23%) for the daughter's child psychological resemblance to the grandparents. For the son's the curve peaked at three (32%) for physical resemblance and at four (32%) for psychological resemblance (see table 1).

Table 1: Statistics for the grandparents answers to how much they felt their daughter's and son's children resembled them both physically and psychologically on a scale from 1 to 7, 1 being lowest and 7 being highest resemblance.

Physical resemblance									
	Daughter's child's physical resemblance to grandparent								
Scale	**1**	**2**	**3**	**4**	**5**	**6**	**7**	Sum	
No of Obs	3	5	4	9	6	3	1		31
	Son's child's physical resemblance to grandparent								
Scale	**1**	**2**	**3**	**4**	**5**	**6**	**7**	Sum	
No of Obs	5	4	10	7	3	2	0		31
Psychological resemblance									
	Daughter's child's psychological resemblance to grandparent								
Scale	**1**	**2**	**3**	**4**	**5**	**6**	**7**	Sum	
No of Obs	1	2	9	7	7	3	2		31
	Son's child's psychological resemblance to grandparent								
Scale	**1**	**2**	**3**	**4**	**5**	**6**	**7**	Sum	
No of Obs	4	3	4	10	6	3	1		31

The grandparents felt slightly more physical resemblance to their daughter's child as 61% answered that their daughters child resembled them more, against 39% who felt their son's child resembled them more physically (chi square = 1.29, p two tailed= .26, n =11 son's child and n = 17 daughter's). For psychologically resemblance the numbers were more even at 45% for daughter's child, and 55% for son's child (child chi square = .31, p two tailed = .58, n = 16 son's child and n = 13 daughter's child).

Except for one grandparent, none reported having heard that they did not resemble their grandchildren. The grandparents reported that 32% of them had experienced that both their son and their daughter said they resembled their grandchildren, 6% had only heard their son say this, 16% had heard only their daughter say this, and 45% could not recall the son or the daughter ever saying they resembled their grandchildren. There was no significant difference between sons only and daughters only compared to what one would expect from a chance (exact binomial test p two tailed = .45, n = 2 sons and n = 5 daughters). However, when both their son and their daughter had said that the grandparent resembled their grandchild the daughter was more intensive and said it more often than the son (see figure 1).

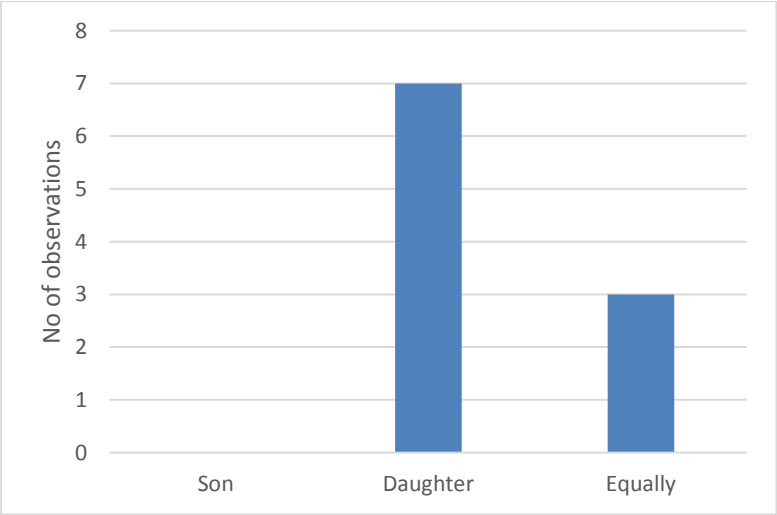

Figure 1: Number of grandparents reporting whether daughter or son have been more intensive in ascribing resemblance between grandparent and grandchild. The numbers are from the subset of data including grandparents reporting that both son and daughter have said they resemble their grandchildren. (Randomization test of goodness of fit, p-value two tailed = .024, n = 0 sons, n = 7 daughters and n = 3 equally intensive)

Grandparents who reported that their daughter had been more intensive than their son about the resemblance to their grandchildren, showed no preference for son's or daughter's child who resembled them more physically (chi-square= .31, p-value two tailed .56, n = 16 son's child and n = 13 daughter's child) or psychologically (chi-square=1.28, p-value two tailed = .26, n=11 son's child and n =

17 daughter's child). These grandparents lived close by both their daughter's and son's child, and met each child on a similar frequency.

Discussion

Grandparents reported that when only one child commented on resemblance between grandparents and grandchildren, daughters were not more frequently stating a resemblance compared to when the sons commented. Still, a few more daughters than sons commented on resemblance between grandparents and grandchildren. In cases where both sons and daughters commented on the resemblance between grandparents and grandchildren, daughters were more intensive about stating this resemblance.

Daughters do not seem to be more frequently stating grandparental resemblance to their grandchildren on a general basis. When only one child commented on grandparent-grandchild resemblance, two sons and five daughters had reported such a resemblance. This small sample size makes the result unreliable. In general it is common to comment on children's resemblance (Daly and Wilson 1982), and grandparents most often reported that both their son and daughter commented on the grandparent's resemblance to grandchildren. Fathers and mothers may both have something to gain from noting resemblance (Bressan 2002), and this may be applicable to grandparent-grandchild resemblance. This possible gain could lead to a social rule or be the result of such a social rule. Perceived resemblance between father and child may be a self-deceit on the fathers part to further his investment in the child (Bressan 2002). This may be because fathers have more to gain from producing children without phenotypic traits, thus his possible satellite children do not give away paternity. If the fathers believe his partners fidelity is high, which makes the actual non-paternity rate about 1.9% (Anderson 2006), the father see more resemblance between himself and the child and therefor invest more in the child (Bressan 2002, Bressan and Martello 2002). This possible self-deception combined with mothers trying to sell paternity certainty through resemblance (McLain, Setters et al. 2000, Alvergne, Faurie et al. 2007), makes it is not far-fetched to believe this has evolved as a social rule. This social rule could give mothers a way to help other mothers sell paternity certainty, and fathers could help other fathers' self-deceive paternity certainty. If fathers and mothers do note resemblance to convince partners and themselves of kinship, grandparents will also show this tendency. Busch (2010) did find some basis to say that daughters more often remark on positive resemblance to their mothers, and in this study there was a majority of female grandparents, so it was expected to find that more daughters than sons have commented on such a resemblance. However,

due to the low sample size of this survey compared to Busch (2010) there is overall more basis for the hypothesis that daughters say, more often than sons, that grandparents resemble their grandchildren.

When both the son and daughter had commented on the grandparents' resemblance, the grandparents reported that their daughter was more intensive about stating such a resemblance. The grandparents did not have more contact with one child over another, and no skewered investment in favor of the daughters' child was found. There was also no indication of what would explain why daughters were more intensively stating a grandparent-grandchild resemblance. To my knowledge, there are no studies on how parents convey to grandparents opinions about their resemblance to grandchildren. Looking at how mothers and fathers differ on noting resemblance is the closest parallel. It may be reasonable that mother's and father's sensation of resemblance would be reported to the grandparents in some way. Mothers are more likely to say their newborn resemble the alleged father if he is in the room with her (McLain, Setters et al. 2000, Alvergne, Faurie et al. 2007). Could this indicate that mothers are more likely to ascribe resemblance to possible investors in her proximity? Additionally, males who are fathers see more resemblance between labeled parent-child photographs than non-father males, but are not better at detecting actual parent-child pairs (Bressan and Dal Pos 2012). If it is in the mother's best interest to ascribe resemblance to her partner to get him to invest in the child, the same principle can apply to grandparents. Childcare has typically been a female occupation in western societies. Thus, mothers may have more natural opportunities than fathers, when in the presence of their parents, to comment on the grandchildren's resemblance. It is also worth noting that most grandparents who answered were grandmothers, so if the daughters talk more about resemblance to their mothers because this is "girl-talk material" the findings are not surprising. Daughters have much to gain by remarking on her mothers' resemblance to her children as her mother is the primary grandparental investor (Fischer 1983, Euler and Weitzel 1996, Pashos 2000, Sear, Mace et al. 2000, Voland and Beise 2002, Ragsdale 2004, Gibson and Mace 2005, Laham, Gonsalkorale et al. 2005, Michalski and Shackelford 2005, Pashos and McBurney 2008, Sear and Mace 2008, Bishop, Meyer et al. 2009, Pollet, Nelissen et al. 2009, Kaptijn, Thomese et al. 2010). However, paternity uncertainty theory suggest that the daughter's child is the safest investment for the grandparents regardless if their daughter have commented on resemblance or not. By remarking on grandparent-grandchild resemblance, the daughter could also try to prevent her brother from gaining resources to his child by indirectly creating doubt about her brother's paternity. Grandparental investment is after all a limited resource.

If daughters state more often than sons that grandparents resemble their grandchildren and daughters talk more often about resemblance to her mother than sons, then what is there to gain for daughters, and their child? Resemblance between grandchildren and grandparents has been used in studies as a measure of relatedness, and relatedness should predict grandparental investment (Hamilton 1964, Trivers 1974). The use of resemblance as a kin-detection tool might be a bit backwards, as resemblance have been found to predict investment (Burch and Gallup Jr 2000, Alvergne, Faurie et al. 2009, Heijkoop, Semon Dubas et al. 2009), but belief in genetic relatedness has also been found to enhance the perceived resemblance (Bressan and Martello 2002, Oda, Matsumoto-Oda et al. 2005). This makes it possible for daughters to influence grandparental investment by playing on resemblance as indication of relatedness. Busch (2010) found that daughters were more likely to ascribe resemblance between her mother and her child than sons were. As a mother, the daughter will know for certain that her child carries her genes, and should have no hesitation about stating the resemblance between her child and the child's grandmother. If mothers state more often to her partner and her parents that they resemble her child to try to influence their investment, it is not clear if this tactic is successful. For the daughter it is important to make sure her offspring has the best possible start in life, and support later in life to ensure her cumulative fitness based on her offspring's fitness. Nevertheless, the lack of studies on how daughters versus sons convey their feelings on grandparental resemblance make the results from the study difficult to discuss. In regards to the main question; do mothers manipulate grandparental care, the answer is not conclusive. If daughter influence grandparents to invest in her children rather than her brothers' children by emphasizing the resemblance grandparents have to their daughters' child, no such effect were found in this survey. Even if this surveys data did not support the theory that grandmothers are influenced by their daughter's claims of resemblance as stated by Busch (2010) the low sample size makes the results unreliable. If mothers have something to gain in terms of fitness or child survival by stating that her partner resemble her newborn, it may be that this same gain is the reason for her stating this to her mother. It seems to be reason to believe that daughters influence grandparental investment through spreading paternity uncertainty. This may very well not be the most significant factor, but it can still play a part in reinforcing grandparental investment patterns.

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Appendix 1

Spørreskjema,

Barn er definert som det første genetiske barnet til din sønn og din datter.

Alle respondenter fritas fra å svare på spørsmål om de skulle ønske det.

For alle spørsmål etter spørsmål nummer 3 og 4 refereres det tilbake til den sønnen og den datteren.

F.eks i spørsmål 7 spør jeg etter kjønnet til ditt første barnebarn av din første datter som fikk barn.

For alle spørsmål om de aktuelle barnebarna spør jeg etter det spesifikt første barnet av din sønn og datter som først fikk barn.

1. Alder:

   Kjønn: mann / kvinne

2. Hvor mange barn har du?

   antall jenter: antall gutter:

3. Hvor gammel er din første datter som har fått barn?
4. Hvor gammel er din første sønn som har fått barn?

5. Hvor mange barnebarn har du via din datter?
6. Hvor mange barnebarn har du via din sønn?

7. Hvilket kjønn er ditt første barnebarn av din datter?
8. Hvilket kjønn er ditt første barnebarn av din sønn?

9. Hvor gammel er ditt første barnebarn av din datter?
10. Hvor gammel er ditt første barnebarn av din sønn?

11. Hvor lang reisetid med buss eller bil er det til din datters barn?
12. Hvor lang reisetid med buss eller bil er det til din sønns barn?

13. Hvor mye beregner du i reisekostnader til din datters barn?
14. Hvor mye beregner du i reisekostnader til din sønns barn?

15. Hvor ofte møter du din datters barn? Daglig / ukentlig / månedlig / hvert halvår / årlig / sjeldnere
16. Hvor ofte møter du din sønns barn? Daglig / ukentlig / månedlig / hvert halvår / årlig / sjeldnere

17. Reiser du oftere til din datters barn enn din datters barn kommer til deg? Jeg reiser oftest / barnet reiser oftest / vi reiser begge like mye / vet ikke
18. Reiser du oftere til din sønns barn enn din sønns barn kommer til deg? Jeg reiser oftest / barnet reiser oftest / vi reiser begge like mye / vet ikke

19. Hva er din datters forhold til barnets far? Bor sammen / bor ikke sammen
20. Hva er din sønns forhold til barnets mor? Bor sammen / bor ikke sammen

21. I neste del vil jeg sammenligne dine barnebarn av din sønn og din datter, og deres psykiske og fysiske likhet til deg på en skala fra 1 til 7, hvor 1 er minst lik og 7 er mest lik.

22. Hva forbinder du med psykisk/mental likhet?

23. Hva forbinder du med fysisk likhet?

    Fysisk likhet er definert som fysiske trekk som ansiktsform, kroppsform, kroppsholdning osv.

24. På en skala fra 1 til 7 hvor stor fysisk likhet føler du din datters barn har til deg? 1 2 3 4 5 6 7

25. På en skala fra 1 til 7 hvor stor fysisk likhet føler du din sønns barn har til deg? 1 2 3 4 5 6 7

    Psykisk/mental likhet er definert som likhet i oppførsel, tankemønster, talenter, personlighet, osv

26. På en skala fra 1 til 7 hvor stor psykisk likhet føler du din datters barn har til deg? 1 2 3 4 5 6 7

27. På en skala fra 1 til 7 hvor stor psykisk likhet føler du din sønns barn har til deg? 1 2 3 4 5 6 7

28. Hvilket av de to barnebarna du har tenkt på i denne undersøkelsen føler du er mest lik deg fysisk?
    Sønns barn / datters barn

29. Hvilket av de to barnebarna du har tenkt på i denne undersøkelsen føler du er mest lik deg psykisk/mentalt?
    Sønns barn / datters barn

30. Har dine barnebarns likhet til deg noen gang blitt påpekt av noen i din familie? Ja / nei
31. Hvis ja, hvem var det som påpekte likheten?

32. Hvilket barnebarn var kommentert?

33. Ble ditt barnebarn beskrevet som veldig lik eller mindre lik deg?

34. Har din sønn eller datter noen gang sagt du er lik ett av dine barnebarn?
    Begge / bare sønn / bare datter / ingen

35. Dersom begge har kommentert at du er lik ett av dine barnebarn, hvem har oftest og mest intensivt sagt dette? Sønn / datter / likt

36. Har din sønn eller datter noen gang sagt du er ulik ett av dine barnebarn?
    Begge / bare sønn / bare datter / ingen

37. Dersom begge har sagt du er ulik ett av dine barnebarn, hvem har oftest og mest intensivt sagt dette? Sønn / datter / likt