Bachelor thesis

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The influence of non-resident father-child contact on mother's wellbeing

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Abstract

In this study we did research on the influence of father-child contact after a divorce on mother's wellbeing. Since the amount of divorces has increased from 12,1% till 36,5% between 1971 and 2011, many researchers examined the effects caused by the dissolution of the family. They emphasized the importance of non-residential father-child contact for the wellbeing of both. But how does this contact influence mother's wellbeing? On the basis of the research theory we stated three hypotheses. The first hypothesis predicted a positive effect of father-child contact on mother's wellbeing caused by the lower level of mother's loneliness. The second hypothesis predicted also a higher level of wellbeing due to the higher financial resources she will receive. The last hypothesis predicted a lower level of mother's wellbeing caused by a lower level of economic resources, due to the fact that the contact will substitute the financial contribution of the father. Using the data of the Netherlands Kinship Panel Studies (NKPS), findings revealed no significant effect of father-child contact on mother's wellbeing. Only the loneliness variable will predict mother's wellbeing significant. Based on these findings we could state that the frequency of father-child contact will not affect mother's wellbeing through these mediating variables.

Introduction

The amount of divorces has been increased since 1971, when the Dutch law legitimized divorce. Besides the creation of the new law, also the increased number of women participating participation of women in the labour force (resulting in their financial independence) has increased the dissolution of marriages by divorces (Harmsen, 2007). Along with the legal right to financial assistance after the divorce, ensured these social changes that divorce rate in the Netherlands has increased from 12,1% till 36,5% between 1971 and 2011 (source: http://statline.cbs.nl).

With the increase in number of divorces in the Netherlands, also the number of scientific studies of divorces increased. Both the causes and the consequences of divorces are getting more attention in the social sciences.

When two people decide to divorce, this critical event will affect the entire family system (Hetherington, Cox & Cox, 1976). Thereby, both the functioning and the interaction of the family members after divorce will be influenced. In 2004 were in 50% of all of the divorce cases minor children involved (Spruijt, 2005). The children will experience a lot of negative consequences. The parental divorce is associated with negative outcomes in the areas of academic

achievement, behaviour, psychological adjustment, self-esteem and social relations (Amato & Keith, 1991). The negative consequences of divorce on children are not the only effects of divorce on the family; also both parents will experience a lot of negative consequences. Researches on the effect of divorce on mothers focused on the economic consequences (e.g. Sayer, 2006), the role change of the parents after the divorce (e.g., Arditti & Madden-Derdic h, 1995) and mothers' psychological wellbeing (Markham et.al, 2007). Although the fact that most of the parents will together decide to separate, a lot of negative consequences will follow from that decision. Mothers will experience financial difficulties, social isolation and more child-care responsibilities than their ex-partners (Pearlin & Johnson, 1977).

One of the most important changes caused by divorce is the loss of contact with the non-residential parent (Spruijt, 2005). In 1993, Amato came up with a resume of 32 studies about divorce, which emphasizes the influence of the contact of non-custodial fathers with their children on children's wellbeing. Amato reported 15 studies which found a significantly and positively effect on children's wellbeing, 7 studies came up with a significantly and negatively effect and 10 studies found no significant association (Amato & Gilbreth, 1999). Those various outcomes give rise to many researchers to conclude the effect of the contact with the non-resident father on children's wellbeing is difficult to determine (e.g., Seltzer, 1994; McLanahan & Sandefur, 1994; Furstenberg & Cherlin, 1991; Spruijt & De Goede, 2001).

In most cases, the father will become the non-residential parent and the mother obtains custody over minor children (Graaf, P. M., Fokkema, T., 2007). Almost 80% of the children continue living with their mother, while only 15% of all children will stay with their father (Graaf, 2001). Cases in which the father will be the custodial parent or two parents choose to be co-parents, are found to be relative scarce. If the mother will be the custody parent, it will lead to suppression of the post-divorce relationship between fathers and children. 20% of all children lose the contact with the non-resident parent. It appears that both the resident and the non-resident parent are dissatisfied with the amount of contact between the children and the non-resident parent.

Scholars argued the importance of fathers in their children's lives and so many courts responded by interpreting the 'best of the child', pointing to the continual contact with both parents after divorce (Maccoby et.al., 1990). Although the science are not consistent about the influence of father-child contact on children's wellbeing, many studies emphasized that children who stay living with their mother were better off when they keep in contact with their father (Hetherington, Cox, & Cox, 1978; Wallerstein & Kelly, 1980).

The effect of contact with children after the divorce for fathers is investigated in many ways too. Bokker et.al. (2006) researched examined the relationship between the emotional wellbeing of recently divorced fathers and the amount of contact they have with their children. This

investigation has shown that fathers who have had more contact with their children shortly after the divorce, had significantly higher levels of emotional wellbeing than fathers with less contact with children after divorce. Also other studies found a significant positive effect of the frequency of father-child contact on the father's wellbeing (Shapiro & Lambert (1999).

Despite the vast amount of research on post-divorce father involvement and child and father's wellbeing, little is known about the consequences of father-child contact for the wellbeing of the mother.

King & Heard (1999) examined the mother's satisfaction with the father's visitation. They expected a positive relation between frequent visitation and mother's satisfaction. Many mothers wanted the father to stay involved with their children. The data shows, even if some conflict over visitation exists, mother's satisfaction with the father's contact is high. Besides the fact that this research presents the satisfaction of mothers, no research is done towards the influence of the contact between the children and father on the wellbeing of mothers.

What is the effect of frequency of contact for the wellbeing of the mother? Does she feel better if the father still have some influence on the children or does she benefit from an exclusive right to raise the children?

In this research, the influence of the contact between the non-residential parent and the children on the residential parent will be tested. The research question is:

How does the frequency of non-resident father-child contact influence mother's well being?

The influence of the contact between fathers and children on the wellbeing of mothers will not only have a scientific relevance. As previous research presented, both the father and the children will benefit of the contact. If the contact will also influence mothers' wellbeing positively, many professions could anticipate to this knowledge. For example, therapists who are contend with depressed or less fortunate mothers after a divorce could adjust their therapy on the frequency of father-child contact. If it appears that mothers benefit from this contact, the therapist could emphasize the importance of contact with the non-residential ex-partner. If the contact is negatively correlated to mother's wellbeing, the therapist could emphasize that the mother could better pay attention to other things that do positively affect her wellbeing. In that way, negative consequences after a divorce can be weakened.

For the general wellbeing of people, it is important to see the effects of contact after divorce on mothers' wellbeing to be sure mothers will not get in a depression.

In the next chapter, previous research findings will be set out. Three hypotheses will be tested by the basis of the resource theory by focussing on the financial restrictions and the social ties of mothers. The hypotheses will be tested by using the data of the Netherlands Kinship Panel Study (NKPS). Finally, with taking into account some shortcomings of this research, the conclusion will be stated and some recommendations for further research will be given.

Theory

Many previous studies have investigated the influence of children's contact with their non-residential father on both the father and the children. Also some research is done with regard to the satisfaction of the mother about the children's contact of the non-residential father (King & Heard, 1999), but little research has been done on the influence on the wellbeing of mothers. First we will take a closer look at previous studies to state some hypotheses. These hypotheses will be tested in the following chapters by using the data of Netherlands Kinship Panel Studies (NKPS). With the results we will try to get the answer to the research question; *How does the frequency of non-resident father-child contact influence mother's well being?*

The frequency of children's non-residential father contact can influence mother's wellbeing in many different ways. One important mechanism behind this relation is the addition of resources the mother will receive as a result of the contact.

Already in the 50s, many researches have emphasized the importance of someone's resources (Thibault & Kelley, 1959). Individuals are partially depending on resources of whom they know. For example, think about the situation where you have to make a decision (which car you have to buy) but you do not know the best choice. You can ask people around for their knowledge about different cars and you can base your decision on their information. Without these people it would not have been possible for you to make such an adequate decision, but now you can benefit from their knowledge. Traditional models suggest that resources are 'objects to be exchanged' (e.g., Adams 1965; Homans 1961, 1974; Thibault & Kelley 1959). The exchange is primarily based on self-interest whereby individuals will keep in mind their received information and what they have given in return. Think about the situation in which one student will assist the other with some mathematical task. For the helper, this is not in his favor, but he may help the other student bearing in mind that in another situation the other might help him. He could, for example, be advanced in the French language and may assist him in the future when he has difficulties with some French exercises.

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Tornblom & Kazemi (2012) described the three conditions on which social exchanges of individuals are based:

- Actors are dependent on each other for gaining resources;
- Actors will increase their positive resources and will decrease their negatively associated resources;
- Actors engage in recurring exchanges with more than one partner over time.

Foa and Foa (1974:36) explained social resources refer to *'any commodity – material or symbolic – which is transmitted through interpersonal behavior'*. Two years later they supplied that *'anything that can be transmitted from one person to another and anything transacted in an interpersonal situation'* (Foa & Foa, 1976:101).

The impact of what people provide and receive in their daily lives (thinking about love, respect, money, information and jobs) will influence someone's health, happiness, status and motivation (Tornblom & Kazemi, 2012). One can imagine that two persons who are getting into a relationship can provide each other with many resources. The strong relationship between two persons resulting out of marriage can be beneficial for both persons. Automatically, a divorce will lead to a reduction in resources, because of the loss of the partner's resources. Previous studies found that, compared with married women, single mothers experience greater stress, depression and physical health problems and are less happy as a result of being alone and the lack of resources from the partner (Demo & Acock, 1996). Not only single mothers will experience a less fortunate life, also those who are divorced are suffering from being alone. This mechanism will be explained further by two aspects based on the resources theory: the social support someone will receive and the economic resources.

- **Social support**

In a marriage, one important type of social resources a person receives is the social support. Demo & Acock (1996:1062) cited: *"Social support is the commitment, caring, advice and aid provided in personal relationships".* Social support (and especially emotional support) decreases depression, anxiety and other psychological problems and vice versa; the less social support one receives, the higher the chance on depressions, anxiety and other psychological problems (Kaplan, Robbins, & Martin, 1983; LaRocco, House, & French, 1980). Social support given by personal relationships provides a feeling of social bounding and the feeling that someone cares about you. Those feelings are closely related to wellbeing and will reduce the chance on depressions and other psychological problems. Fokkema & Dijkstra (2001) stated that the

relationship between spouses is a much stronger in intensity as other types of relationships (e.g.. friendship of relationship with you neighbors). When two people get divorced it is likely that they both experience the loss of a strong emotional bond. The residential-parent is left 'alone' with the kids and will experience less social support from the partner. If the non-residential parent keeps a lot of contact with the children after parental separation, the residential-parent may experience more social support. The feeling of standing 'alone' in raising the children will occur after the divorce, but when the other parent will stay in contact and helps with the parenting, the feeling of being supported will increase. For example, if the mother gets ill after divorce, a regularly involved father may be more willing to assist with taking care of the children. This may reduce the mother's feeling of the pressure of being alone in raising the children. Not only when the mother gets ill but also when there are problems with the children, the mother can experience more social support when the father remained in contact with the children. For example, if the child gets ill, it is likely that both the father and the mother will take care. If so, the mother is not forced to stop working and is able to divide the days for taking care. Consequently, the pressure the mother received through the illness of the child, may be less. The less pressure she may experience, the less decline in wellbeing she may receive. The more contact will exist between the father and the children after the divorce, the more social support the mother will experience. This social support will positively influence her wellbeing. Based on these ideas, we expect that the contact between the father and the children will influence mother's wellbeing positively.

The first hypothesis that will be tested which follows from the social support argument is;

Hypothesis 1: The higher the amount of contact between fathers and their children, the less lonely the mother feels and so the higher the mother's wellbeing will be. [1]

- **Financial support**

Next to the social support mothers can receive from the non-residential father, the economic resources of the father may influence the wellbeing of the mother as well. Firstly, the importance of the financial argument will be explained. Secondly, we will take a look at the relation between the financial support and contact between fathers and their children. Finally, we will extract two hypotheses about the influence of financial support of the non-residential father on the mother's wellbeing.

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[1] *The hypothesis is visually shown in figure 1*

The fact that married women exhibit more depressive symptoms can, for a great part, be related to the fact that they are in a worse financial situation (Fokkema & Dijkstra, 2001). Agrys, Peters & Smith (2003) found a positive significant effect between father and child-contact and the financial support given by the father. This can be explained first by the fact that it is actually easier for the father to give money to the mother when they are more connected (whether or not through the children). If the father stays in contact with his minor children, he is automatically obliged to stay in contact with his ex-partner. They have to talk about simple things (like which days of the week the father will meet his children) or about more complicated things (like how do you instill the right norms and values). The more contact the father will have with his children, the more he may feel responsible for raising them and so the more he has to consult his ex-wife about important things of their children's lives (like health, school performance, behavior etc.). So contact with his children will influence contact with the mother positively and so the chance of meeting his former family will increase the physical opportunity to give money (Nepomnyaschy, 2007).

Besides this, the chance of a greater financial support will be caused by the fact that the father will have more insight in the expenditures on his children due to the contact. Fathers who see their children frequently have a better view on what the children need and consequently a father is more likely to support them (Argys & Peters, 2003).

Now we will take a look at the consequences of the contact of father and child on the wellbeing of the mother through the financial contribution. This relation is based on the idea that economic wellbeing has a large effect on health and mental health (Kessler & Cleary, 1980). Many studies have emphasized the economic hardship experienced by families without a father, compared to two-parent families (McLanahan & Booth, 1989). Fokkema & Dijkstra (2001) found that lower wellbeing of divorced women is for a great part attributed to the higher level of economic problems that they experience. Also other studies in the USA found a great impact of the economic situation on the wellbeing of mothers. These studies are based on the idea that an individual is financially worse off after separation than before separation. Lower economic resources after divorce are resulting in economic distress, which lead to more depressive symptoms among mothers as well as fathers (Bronselaer, Koker & Van Peer, 2008). However, the impact of the financial loss after the divorce is greater for women than for men (Mastekaasa, 1994). Beside the psychological consequences of the loss of financial resources through divorce, divorce also influences many different material circumstances of one's life. Both the psychological consequences (economic distress) as those material implications (lower life standard) are casual factors of the lower wellbeing of women caused by the decline in financial resources (Mastekaasa, 1994).

There are two ways in which the father can support his former family financially; paying alimony for the children or paying alimony for the mother. Both contributions may lead to a lower level of stress by the mother. We first take a closer look at the consequences of giving alimony for the child. After that we will take a closer look at the effects of giving alimony for the mother.

First, with the financial support from the father for the child, the mother can save a part of her own income for herself instead of spending all of her money in favor of the child. With the contribution of the father, she can for example buy clothes for the children and can save her own income for other aspects of the household. Because the father will support the children financially, the financial pressure for the mother could be less. This indirect effect of financial support might reduce the importance of income by mother. The more financial support the father gives to the child, the less financial pressure the mother may experience, because the economic responsibilities of child rearing will not be only hers.

Besides the alimony the children will receive, it is also possible the father will support the mother directly financial in a great part. If the father will not only support the children financially but also pays alimony for the mother, the financial pressure for the mother will be less. If mothers receive financial support of the fathers after divorce, their financial situations will be less insecure, which may in turn lead to a higher psychological wellbeing. The mother will not be the only provider of the financial resources of the household. She will be less pressed by financial stress, because the contribution of the father will provide a supplement of her own income. The more financial resources she will receive, the less financial problems she will experience and so her stress will be less.

So, the contact between the father and the child leads to more financial support that will increase the economic wellbeing of the mother. A better economic wellbeing of the mother will lead to better mental en physical health. This will lead to the second hypothesis; *Hypothesis 2; The higher the amount of contact between the father and the children, the higher the financial support and so the higher the wellbeing of the mother will be.* [2]

Besides the fact that the economic support of the father may increase the level of wellbeing of the mother, it is also possible that the wellbeing of the mother is much lower. The third hypothesis will come from the idea that contact and financial support can be substituted for each other. So the higher the amount of contact between the father and the child, the lower the financial contribution will be. This is possible when the father will use the contact as a replacement for the financial support. He may, for example, go on vacation with his children or

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[2] *The hypothesis is visually shown in figure 1*

take them on a trip. This contact is seen as a social contribution of the father to his children and so the financial contribution is no longer required. The more time the father will spend with his children, the less money he will contribute to his former family (Seltzer et al., 1989). So besides the fact that the financial contribution of the father will increase as a consequence of the contact, it is also possible the father won't give financial support because he will substitute this by doing activities with his children. He will take a father-role by showing them he is actually concerned about them, but when he shows this by doing some activities, the importance of financial support will disappear. Except the fact the financial support will be better for the mother, if the father will show that he is involved by his kids, the social activities are enough. So the increased involvement of one dimension will reduce the level of involvement of another dimension (Huang, 2009).

The opposite of the second hypothesis can be stated now, because when the father will use social activities as a substitute for his financial support, the mother should have to earn more money by herself to take care of her children. The lack of the contribution of the non-residential father will lead to a lower level of economic wellbeing that in return will lead to a lower level of her general wellbeing.

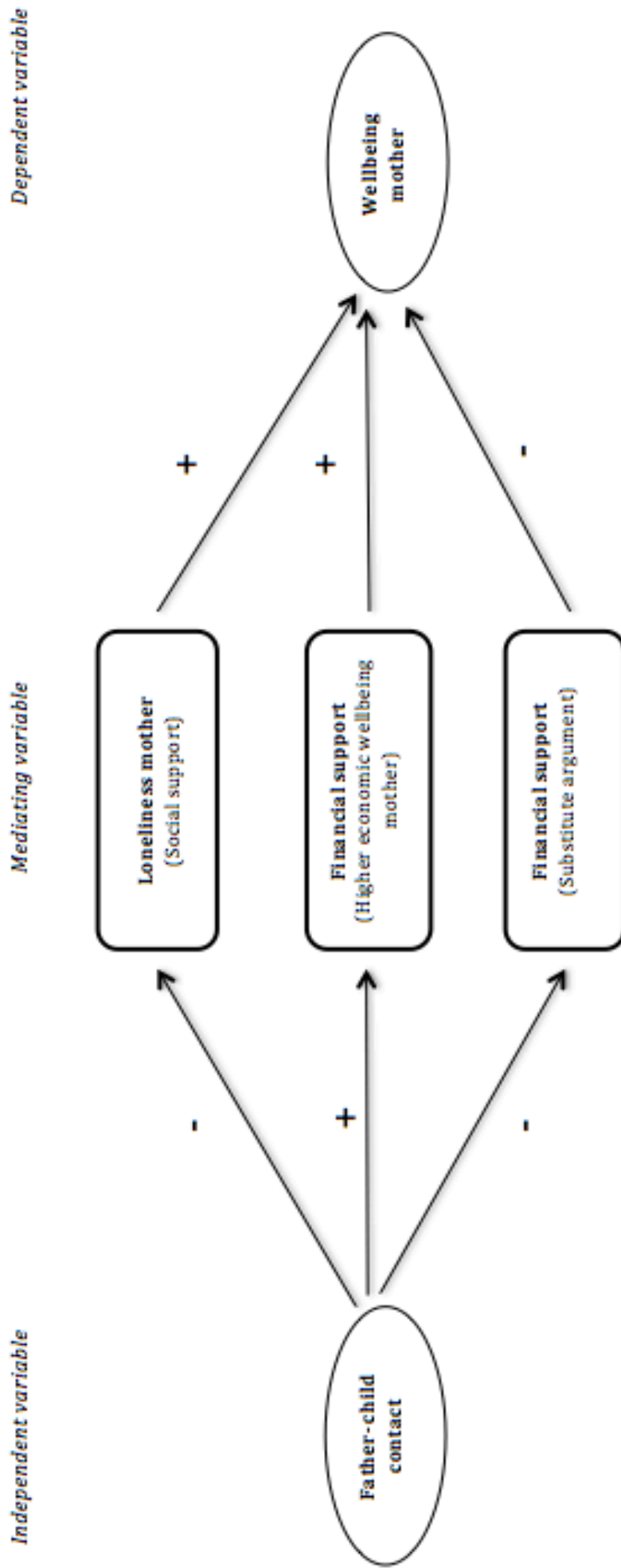Derived from the substitute argument, the third hypothesis that will be tested is:

Hypothesis 3: The higher the amount of contact between the father and the children, the lower the financial support and so the lower the wellbeing of the mother will be[3].

So along with the social support argument, the financial resources will lead to three hypotheses. All three hypotheses predict a relation between father-child contact and mother's wellbeing through another variable. To get a good view on the different relations the hypotheses explain, figure 1 summarizes the predicted connections between the variables.

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[3] *The hypothesis is visually shown in figure 1*

Figure 1: Visual summary hypothesis 1, 2 and 3.

Independent variable

Mediating variable

Dependent variable

Father-child contact

Loneliness mother (Social support)

Financial support (Higher economic wellbeing mother)

Financial support (Substitute argument)

Wellbeing mother

Method and data

To test the hypothesis, the *Netherlands Kinship Panel Study* (NKPS) is used. The NKPS data was collected between 2002 and 2004 (Dijkstra et al., 2005). The intention of the dataset was to examine family and kinship relationships in the Netherlands. They used a large-scale survey with pre-structured questions, combined with in-depth studies with flexible questions. The researchers used both face-to-face interviews as self-completion questionnaires. In this study, the first wave of the NKPS will be used. The data of the first wave have separated the answers of the native and the immigrants. The total sample consists of respondents with a minimum age of 18 and a maximum age of 89 (N=8161). The data are collected in different households of the Dutch population, whereby hospitals (and other care-institutions), penitentiaries, retirements and holiday homes are excluded from the samples. For the information of migrants, the four largest migrant groups in the Netherlands are selected (Turks, Moroccans, Surinamese and Dutch Antilleans) and people are stratified randomly involved.

The respondents are randomly sampled by using an address-sample. They matched names and telephone numbers by addresses that were relative easily obtainable through the Dutch Telecom. A random selection is made out of addresses from Cendris. 40.000 households were selected from seven million addresses in their file. The intended focus of the data was on non-standard families (like single parent families, cohabitants etc.), and so they preferred to have an under-representation of man and women in their first marriage. Furthermore was the intention to over-represent the four biggest immigrant groups in the Netherlands (Turks, Maroccans, Surinamese and Dutch Antilleans). They used the screening method by the interviewers to select these specific respondents.

To get in contact with the respondents, the interviewer first mailed an introductory letter. After that, the interviewer contacted the address by telephone to make an appointment for the interview. In total, for 75% of the addresses the telephone numbers were available. For 25% without a telephone number, the interviewers had to make home visits. After the interview, the self-completion questionnaire was handed out, which had to be collected by the interviewer after the respondent had completed the list. To be sure the selection of respondents in the households will be randomly, the birthday-rule was applied. If there were more than two people in the household between the 18 and 79 years and both speak Dutch fluency, the first person to have a birthday was the one to be interviewed.

The sample consists of 8161 usable interviews that were collected in 16 months: from October 2002 to January 2004. Of the total sample of 24425 contacted persons, only 37.1% agreed to be

interviewed. From the 13831 people who didn't agree to be interviewed, 50,9% refused, 10,5% was not reached and 1,5% could not be interviewed dedicated to health restrictions. The overall sample consists of more females (58,1%) than males (41,9%). The average age of the respondents was 46,43 with a standard deviation of 15,132 years. There is an over-representation of people from middle-age categories (35 – 50 years old), but this is due to the fact that the youngest categories (18 – 30 years) are under-represented.

Most of the respondents (42,8%) are living in the West areas of the Netherlands, which could be caused by fact that the West regions are most urbanized.

The response rate (45%) is lower than many other studies about family life, like the National Survey of Families and Households in de US (Sweet, Bumpass & Call, 1998) with a response rate of 57%. Several studies in the Netherlands are similar to the response rate of the NKPS like The Netherlands' Family Survey (Ultee & Ganzeboom, 1992) with an overall response of 43% and The Family Survey Dutch Population with a response rate of 47% (De Graaf, De Graaf, Kraaykamp & Ultee, 2002).

- **Measurement**

To test the hypotheses, only divorced mothers with at least one child will be included in the statistical tests.

The independent variable is the contact between the ex-partner and the children. The amount of contact between the father and his children is measured for each child separately. Thereby has been asked how many times the ex-partner has seen his shared children in the last 12 months, if the children are living by the respondent. The seven answers the respondent could give are 1 = never, 2 = once, 3 = a few times, 4 = at least once a month, 5 = at least once a week, 6 = several times a week or 7 = daily. The variable will remain unchanged, because the higher the answer of the respondent, the higher the amount of contact between the ex-partner and the children. This is the most logical way by which we can interpret the variable easily.

Only the first ex-partner with whom the mother has had children will be used in this variable, because there are only 20 respondents with shared children with their second ex-partner, 2 mothers with a third ex-partner and 1 mother with a fifth or six ex-partner. In total, the number of the first ex-partners is N = 241. The eighth answer the respondents could give means 'don't know' which will be recoded as a missing, because we cannot draw any conclusions from this. In total, there are 215 useful respondents.

The two mediating variables are the loneliness of the mother and the alimony the father pays for the children. Loneliness is measured by 11 components that are part of the 11-items of the loneliness scale of De Jong & Gierveld (2006). Those components are measured at a 3 point-scale whereby respondents could choose 1 = yes, 2 = more or less, 3 = no. To make one scale of the loneliness variables, 6 variables have to be recoded in the way that the higher the score, the lonelier the respondent feels. This makes the outcome of the scores easier to interpret. For example, the variable 'experience emptiness' was initially the higher the score, the less emptiness the respondents experience. Now the variable is recoded in the way that the higher the score, the more emptiness the respondent feels. Cronbach's Alpha of the 11 items of loneliness was .907 which is almost perfectly reliable. No item has to be deleted, because this will not improve the reliability. After controlling the Cronbach's Alpha, now a scale can be made of all of the 11 variables. To get one variable that describes the loneliness of the mother, the mean of all the loneliness variables will be measured. Thereby, the mean has been categorized at a 3-pointscale for 1 = no, 2 = more or less and 3 = yes. The mean describes the average feeling of loneliness of the divorced mother by which the higher the score, the lonelier she feels.

The financial support the father gives to his former family is measured by two components: the alimony the father pays for the children and the alimony the father pays for his ex-wife. Whether the father pays alimony for the children has been asked for each child separately whereby the respondents (mothers) could answer 1=yes, 2=no or 3=don't know. Because it is more common sense that the father will pay alimony if the score is higher, all the variables will be recoded. If the mothers do *not know* whether the father pays alimony, we cannot draw any conclusions from this answer. Therefore, we will recode all the answers with '3' into a missing. If the father does not pay any alimony, the score of the respondent has to be 0. If the father pays alimony for the children, the score on the alimony variable will be at least 1.
Next to the alimony for the children, it is possible the father pays alimony for his ex-wife. The respondents are asked whether the ex-partner pays alimony beside the alimony for the children whereby the respondents could answer 1 = yes or 2 = no. This variable will be recoded so that a zero-score will mean that the mother does not receive any alimony.
Both of the two components of the alimony the father pays, are combined in a multi-categorical variable by which the 0-score means that he does not pay any alimony for his former family (neither for his children nor for his wife) and the respondent gets at least a 1-score which means that the ex-partner pays at least one of them alimony.

The dependent variable is the wellbeing of the mother. The wellbeing of the mother is measured by 5 different variables of psychic health: very nervous, depressed, calm & composed, miserable

& dejected and happy. The respondents could choose 6 different answers, whereby 1 = always, 2 = usually, 3 = often, 4 = sometimes, 5 = seldom and 6 = never. Before we can make a scale of the wellbeing of the mother, we have to be sure all items are recoded in the same way so that the higher the score, the higher the level of wellbeing. For example, the variable 'happy' will be recoded, because now the highest answer means 'never happy', but we would like a higher score means a higher level of happiness. After recoding two variables, the reliability of the scale will be measured by a Cronbach's Alpha. Cronbach's Alpha of the 5 items of the wellbeing scale was .881 which is almost perfect reliable. No item has to be deleted, because this will not improve the reliability.

Now we can create one scale variable in which the overall wellbeing of the mother is measured. The scale 'wellbeing' is the average score of the respondents on the five variables of psychic health.

Beside the mediating variables, some control variables will be used. The age of the respondent in years (at the time of the interview) is added and the highest attained level of education is included (incomplete elementary, elementary school only, lower vocational, lower general secondary, medium general secondary, upper general secondary, intermediate vocational, higher vocational, university or post-graduate). Carstensen (2006) found a positive effect of age on wellbeing, so we can expect that the older the respondent, the higher her level of wellbeing. Veenhoven (1996) reported the negative influence of level of education on wellbeing. So we have to control the wellbeing variable for the age and education of the respondents to be sure that the effect of these variables does not explain any effect of the father-child contact on wellbeing. Also the variable about a new partner is added at the list of control variables. We expect that a new partner of the mother may influence the wellbeing of the mother positively (Baarsen & Broese van Groenou, 2001). The new partner could capture the feeling the loneliness of the mother. Also the new partner could contribute positively to her economic wellbeing. The respondents are asked whether they have a partner at the moment, with which they have had a relationship for at least three months (1 = yes, 2 = no). We recoded this variable so a 0-score means no partner, 1 means yes. Also the time since divorce will be added which is measured by the years from the date of started living separately till the date of the interview. Those answers will be categorized in a dummy variable; recently divorced (less than 3 years) and those who have been divorced longer. The variable is recoded so the recently divorced have code 0, those who have been divorced longer get score 1 (so the higher your score, the longer you're divorced). The split by the three years is chosen because of the many researches confirming the fact that mental health levels regain in their initial levels 2 to 3 years after divorce (Lorenzo et al, 1997; Symeons, 2013).

In table 1 the descriptive statistics of the dependent, mediating and independent variables and the control variables are shown. For each variable, the amount of respondents, the minimum and maximum, the mean and the standard deviation is given.

Table 1. Descriptive statistics for the dependent, mediating, independent and control variables, N = 196.

Divorced women with at least one child				
	M	SD	Min	Max
Independent variable				
Contact	2,99	1,53	1	7
Mediating variables				
Loneliness	1,89	0,61	1	3
Finance	0,23	0,54	0	1
Dependent variable				
Wellbeing	4,53	0,88	1	6
Control variables				
Age	56,88	8,23	22	79
Educational	5,14	2,26	1	10
New Partner	0,23	0,42	0	1
Time since divorce	0,97	0,17	0	1

- **Missing values**

Because we have used a lot of variables in the analysis, the chance a respondent misses one answer on one of the variables has a strong presence. If a respondent misses one answer on a variable, the analysis cannot be done (because you cannot determine a relation between father-child contact and mothers' wellbeing if there is no score at the wellbeing variable).

Before we do any analysis, we first check the amount of missing values and we will determine what the best solution for the missing values is.

With a missing value analysis we will check which (or how much) variables have a lot of missing answers. In table 2 you can find the univariate statistics of the missing analysis.

Table 2. Univariate Statistics of the missing analysis.

	N	Mean	Std. Deviation	Missing		No. of Extremes[a]	
				Count	Percent	Low	High
Age	482	50,88	12,041	0	,0	0	0
Education	481			1	,2		
New partner	482			0	,0		
Time since divorce	482			0	,0		
Wellbeing	443			39	8,1		
Loneliness	444			38	7,9		
Finance	482			0	,0		
Contact	215			267	55,4		

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

As we can see, the greatest missing value is on the father-child contact variable (267 missings). Because the father-child contact is de independent variable, this is a critical number of missings. It is not logical to take the mean of the contact variable for all of the missings variables, because more than half of the answers is missing. So if we do so, we state that 44,6% of the answers are representative for the whole dataset. If we choose the 'listwise deletion' option, all the answers of the respondents with at least one missing value will be deleted of the data set. We use this option if all of the answers have to be answered for an appropriate result of the mediating model. If we select the 'pairwise deletion' option, only the calculation with a missing variable will be left out. If a respondent does have an answer on all of the other variables, the calculation with these variables will be done.

To control the effect of all of the independent variables through the mediating variables on the dependent variables, we have to include the contact variable. So we select the 'listwise' deletion option for the great number of missings on the contact-variable.

Results

Because we expect that there are two mechanisms behind the relation between father-child contact and mother's wellbeing, a mediation analysis will be done by using a multiple regression in PASW 20.0. With the hierarchical regression method, we could do a basic multiple regression with a fixed order of entry for variables in order to control the effects of covariates or to test the effects of certain predictors independent of the influence of others.

In the first box, we will put all our control variables to test their effect on our dependent 'wellbeing' variable to make sure that these variables do not explain away the relation between father-child contact and mother's wellbeing. In the second box, our independent variable father-child contact will be added to check the effect on the dependent variable, controlled for our control variables. In the third box, the loneliness variable will be added. We can now check how much predicted power is added to the model by the addition of the loneliness variable. In the fourth box, we will control the mediating effect of father's financial contribution to his former family. At least, we will put all the variables in the fifth box to control the prediction for mother's wellbeing of the whole model.

In table 3 you can find the outcome of the hierarchical regression method with 5 boxes.

Table 3. Results of the hierarchical regression analysis.

		Model 1		Model 2		Model 3		Model 4		Model 5	
		β	s.e.	β	s.e.	β	s.e.	β	s.e.	β	s.e.
1.	Age	.011	.008	.010	.008	.009	.007	.009	.008	.010	.007
	Education	.059*	.028	.061*	.028	.042	.025	.063*	.028	.040	.025
	New Partner	.199	.151	.227	.152	.161	.137	.224	.152	.164	.137
	Time since divorce	.363	.363	.343	.362	.459	.325	.330	.364	.472	.327
2.	Father-child contact			-.057	.042	-.059	.037	-.056	.042	-.060	.038
3.	Loneliness					-.631**	.092			-.639**	.093
4.	Finance							-.063	.188	.056	.107
	R	.215		.235		.238		.494		.495	
	R^2	.046		.055		.244		.057		.245	
	ΔR^2	.046		.009		.189		.002		.188	

Note: N = 195, * $p <.05$, ** $p<.01$

The hierarchical multiple regression revealed that by the first step, the control variables (age, education, new partner and time since divorce) contributed non-significant to the regression model, $F_{(4,191)} = 2.312$, $p > 0.05$ and accounted for 4,6% of the variance in wellbeing. Only the education variable does have a significant influence on the wellbeing $\beta = .059$, $p = .036$ which implicate that the higher the educational level, the higher the wellbeing of the respondent.

Including the independent variable (father-child contact) in the model, leads to an additional explanation of 0.9% of the variation in the wellbeing of the mother. This change was not significant $F_{(5,190)}=2.231$, $p >0.05$. So, controlled for the control variables, the influence of father-child contact on mother's wellbeing was not significant. But the variable does reduce the effect of two control variables. Also the model does predict more of mother's wellbeing than only

the control variables did. So adding the father-child contact variable does benefit positively to predicting mother's wellbeing.

Adding loneliness to the regression model explained an additional 18,9% of the variation in wellbeing and was significant $F(6,189) = 10.174$, $p < 0.05$. So the second variable is a significant predictor of mother's wellbeing. But the overall effect of the model whereby the effect of father-child contact is measured through loneliness is not significant. Therefore, we can state that the first hypothesis is not confirmed. The addition of the loneliness variable does enhance the predicted variance in wellbeing of the mother. So beside the fact that the model is not significant, we will predict a greater part of mother's wellbeing by including the loneliness variable.

If we add only the finance variable in model 3, the additional percentage of the predicted variance in mother's wellbeing is 0,2% which was not significant $F(6,189) = 1.899$, $p > 0.05$.

So both the second and third hypothesis could not be confirmed. There was found no significant effect of father-child contact on mother's wellbeing through the financial contribution. Adding the financial variable by the control variables does not enhance the percentage of predicted variance in mother's wellbeing noteworthy. So to predict mother's wellbeing, the financial variable does not have to be included beside the control variables.

At least, all the variables in model 5 together will account for 24,5% of the variation in mother's wellbeing. The model was significant $F(7,188) = 8.726$, $p < 0.05$. All variables taken together, the overall model does predict the variance of mother's wellbeing significantly. With the hierarchical regression model, we can see what all those variables separately will add to the predicted variance in the wellbeing of the mother. The prediction of all variables taken together is 24,5% of the wellbeing of the mother which is for a great part due to the predicted value of the loneliness variable; 18,9%.

With the previous model, we have suggested that all those variables will have the same influence on the wellbeing of the mother, controlled for four variables. But as you can see in figure 1, we expect that the after-child contact has influenced the wellbeing of the mother *through* loneliness and financial contribution. So we expect that those two mediating variables will be the mechanism behind the relation between father-child contact and mother's wellbeing.

Because we expect that these two variables are mediating variables, a mediation analysis will be done by using a multiple regression in PASW 20.0. The two methods mostly used to establish the mediation effect of variables are the method of Baron and Kenney (1986) and the mediation or indirect method of Preacher and Hayes (2008). The indirect method of Preacher and Hayes estimates a total, indirect and direct effect of the independent variable on the dependent

variable through one or more mediator variables and eventually controlling for one or more variables (Hayes & Preacher, 2013). The Baron and Kenney method is not able to test two mediating variables together so we will use the method of Preacher and Hayes. The method allows a multi-categorical independent variable (which is the case by the father-child contact variable). Because all our variables are multi-categorical, we will use the indirect method. After calculating the coefficients for different paths in the mediating hypothesis, a conclusion will be stated about the mediating effect of the two variables. There are two possible outcomes of the mediating model; the mediators are fully or partially mediating variables (Baron & Kenny, 1986). By a fully mediator, the effect of the independent variable on the dependent variable will disappear by inclusion of the mediating variables. By a partial mediation, the effect of the independent variable on the dependent variable stays significant but will be reduced after adding the mediating variables. With a partially mediating effect, there is not one single mediator that drops the effect of the independent variable on the dependent variable to zero. Because it is possible that there are many more variables that are mediating through the father-child contact on mother's wellbeing, we expect a partially mediating effect of the two variables.

The contact between father and child will influence the feeling of loneliness of the mother and financial contribution of the father. These both in return will influence the wellbeing of the mother. The two mediating variables are seen as a mechanism between the independent and dependent variable. In figure 2 you can see the different correlations that will be measured for establishing the mediating effect.

The letters *a, b* and *c* stand for direct effects between those variables. The mediation effect in which the father-child contact will lead to the wellbeing of the mother through financial contribution and loneliness is the indirect effect. This effect represents the proportion of the relation between the contact and wellbeing that is mediated by loneliness and financial contribution.

All those effects will be measured by one mediating model in which also the control variables (age, education, new partner and time since divorce) are added.

The different outcomes in table 4 give an overview of the following correlations:

1. Path a: the effect of father-child contact on the mediating variables (loneliness and finance contribution)
2. Path b: the direct effect of the mediators on the wellbeing of the mother
3. Path c: the total effect of the father-child contact on wellbeing
4. Patch c': the direct effect of father-child contact on wellbeing

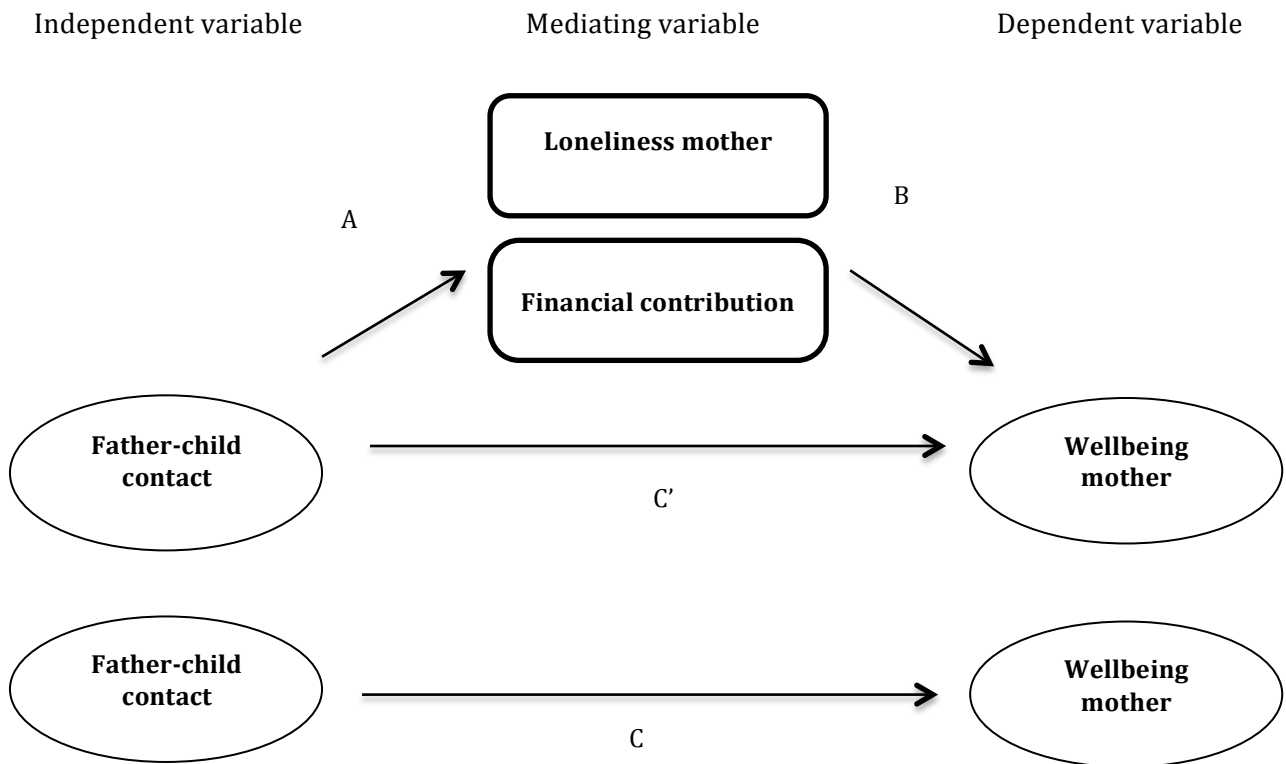*Figure 2: Visual presentation of path a, b, c and c' for testing the mediating effect.*

Independent variable   Mediating variable   Dependent variable

Table 4. Mediating analysis, IV = father-child contact, DV = wellbeing, M = loneliness and finance;(N = 196).

	Coefficient	SE	t	p.
Independent variable to mediators (path a)				
Loneliness	-.0030	.0296	-.1029	.9182
Finance	.0111	.0257	.4315	.6666
Direct effects of mediators on dependent (path b)				
Loneliness	-.6389	.0933	-6.8498	.0000
Finance	.0560	.1075	.5213	.6027
Total effect of independent on dependent (path c)				
Contact	-.0571	.0418	-1.3665	.1734
Direct effect of independent on dependent (path c')				
Contact	-.0597	.0376	-1.5880	.1140
Partial effect of control variables on DV				
Age	.0101	.0072	1.2034	.1622
Education	.0401	.0254	1.5809	.1156
New partner	.1635	.1369	1.1948	.2337
Time since divorce	.4730	.3270	1.4466	.1497

Model summary for dependent model

R^2	Adj R^2	F	df1	df2	p
.2445	.2171	8.7261	7.000	188	.0000

There are a number of outstanding coefficients from the results of the mediating analyses. The most notable outcome is the non-significant (a >.05) correlation between the independent and dependent variable. The direct effect from father-child contact on mother's wellbeing is not significant with b = -.0597, $t(196)$ = -1.5880, p =.1140.

It seems rather illogical that when there is a non-significant small effect between those variables, another (mediating) variable will be the mechanism behind this. Actually, there is not any relation to explain. MacKinnon, Fairchild and Fritz (2007) argued that if there is no significant effect between the causal variable and the dependent variable there might be still mediation that they called *inconsistent mediation*. The mediator acts like a suppressor variable; the total effect (independent and mediating variables) on the dependent variable is likely to be small because the direct effect and indirect effects negate each other.

In our model, this might be the fact because there are different mediating variables which both have different effects on the wellbeing of the mother (see figure 1). One effect may negatively influence the wellbeing of the mother (like loneliness), but the other mediating variable could positively influence the wellbeing of the mother (like financial contribution), so that both influences cancel each other. So, interpreting the other paths is still necessary to establish the mediating effect.

First we will take a closer look at the control variables. None of these variables have a significant effect on the dependent variable. So we can state that if we had found a relation between one of the other variables, the relation has not been caused by one of the control variables.

The table gives information about the outcome of four different paths that are visually shown in figure 3. Path a: the effect of father-child contact on the mediating variables (loneliness and finance contribution) is not significant b = -.0030, $t(196)$ = -.1029, p =.9182.

Also the relation between the father-child contact and the financial contribution was not significant; b = .0111, $t(196)$ = .4315, p =.6666. The direct effect of the mediators (loneliness and financial contribution) on the wellbeing of the mother (path b) shows that the regression of the loneliness variable on wellbeing of the mother is significant (b = -.6389, $t(196)$ = -6.8498, p =.0000) and the financial contribution of the father on mother's wellbeing is not significant (b = .0560, $t(196)$ = .5213, p =.6027). Path c (the total effect of the father-child contact on mothers' wellbeing) is not significant with b = -.0571, $t(196)$ = -1.3665, p =.1734. The non-significant effects reject all three hypotheses. There was no partially or fully mediating effect of the loneliness and financial variable.

Figure 3: Visual presentation of mediating effects of path a, b, c and c'.

Independent variable   Mediating variable   Dependent variable
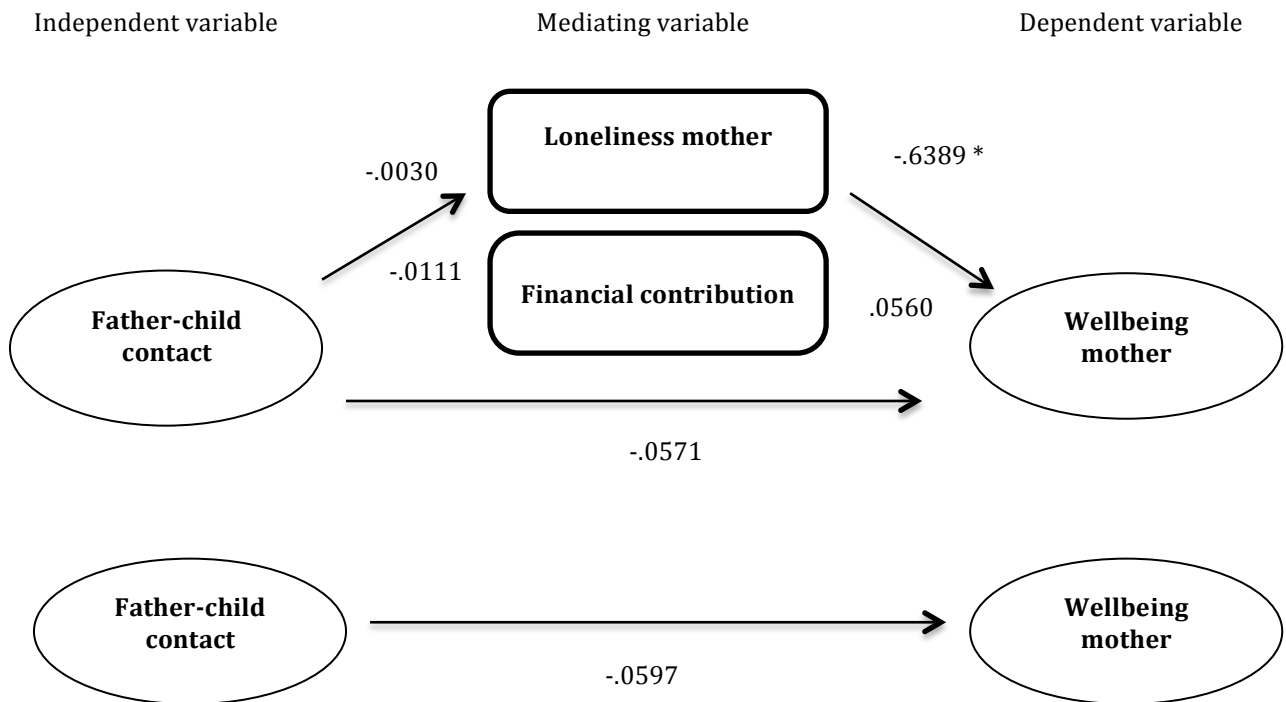
Conclusion and discussion

In this research, the impact of the father-child contact after a divorce on the mother's wellbeing has been studied. Many previous researches focused on the contact between divorced parents and the consequences on their wellbeing. Furthermore, much research is done to the influence of their contact on children's wellbeing with emphasis on attitude, school attainment and psychical health. This research found that when the father leaves the house, the children experience a lot of negatives consequences of being raised solely by the mother. Therefore, the government of many countries required the contact between father and child by different visiting regulations. But if the father interferes with his children, this may affect the wellbeing of the mother as well. The research question of this study therefore was: *How does the frequency of non-resident father-child contact influence mother's well being?*

Three important aspects of the impact of divorces on families were the economic consequences, the role change of parents and the mothers' psychological wellbeing. Many studies emphasized the interaction between these variables and their implications on mothers' wellbeing. In this

research, the interaction of the variables is studied by testing a mediation model. We predicted different effects of father-child contact on mother's wellbeing through two different variables, based on the resources theory. By using the data of the Netherlands Kinship Panel Study (NKPS), three hypotheses were tested by a hierarchical regression analysis. In addition, to test the mediation effect of the two mediators, a mediation analysis was done by using the method of Preacher and Hayes.

The first hypothesis predicted a significant effect of father-child contact on mother's wellbeing through loneliness. The feeling of the mother of being alone will be less if the father has more contact with his child. This hypothesis is not confirmed. The loneliness of the mother does have a significant effect on mother's wellbeing but the relation between father-child contact and loneliness is not significant. This could be due to the fact that father-child contact leads to a greater level of parental conflicts. McLanahan et al. (1994) found a positive effect of the financial support and the increased contact between the mother and the father. The positive relation can be explained by the fact that financial support will increase the amount of visits of the non-residential father because of his favor to monitor the way the custodial parent will spend the money (Sherwood, 1992). The father who lives apart from his children wants to control which part of his money is spent on the children and which part is spent on the mother herself (Arendell, 1992). The money the father will deliver to the mother is (most of the time) given in favor of the child. The father prefers to stay in contact with the mother and the child to control the pattern of spending money of the mother (Seltzer et al., 1989). The increased amount of contact and the father involvement can possibly lead to a greater conflict between both parents (Seltzer, McLanahan & Hanson, 1997). These conflicts could be caused by the fact that the mother feels controlled by the father and she prefers to do it by herself. Beside that, the more both the father and the mother will interfere with the children, the more they have to agree with each other on different aspects. They have to draw one line in raising children and this may lead to different several conflicts.

The second hypothesis predicted a significant effect between the contact of father and child on mother's wellbeing through the financial contribution. The financial contribution may lead to a lower level of financial stress and therefore to a higher level of wellbeing. We found no significant relation between the financial contribution of the father and mother's wellbeing. This may be due to the fact that the government in the Netherlands decided to give a payment to each single parent with a minor child (resource: www.rechtopbijstand.nl). Also the fact that more women became less financial dependent on their husband, because of the emancipation and the improved facilities for working mothers, have probably influenced the financial situation of

mothers. It is possible that a divorced mother is less dependent on her husband's income. She receives a financial contribution of the government and with the improved facilities like childcare, she may have enough financial resources to live from. She may therefore experience a lower level of financial stress. The additional financial contribution of the father may not affect her wellbeing noteworthy, because of the many other financial resources she receives.

If we take a closer look at the financial variable that is used in this study, we have to note some limitations. In this research, we used a categorical variable whereby the higher the score on the variable, the more children he will pay alimony for. But the alimony the father will give is dependent on the amount of his income (resource: www.nibud.nl). Research has not been done yet on this topic, but it might be the case that the higher the income from the father and thus the higher the alimony, the higher the wellbeing of the mother will be.

The third hypothesis predicted a lower level of mother's wellbeing caused by less financial contribution of the father because of the substitute role of the father-child contact. This hypothesis was hard to examine because fathers in the Netherlands are obliged by the law to pay alimony. There is no option to pay nothing at all and so the substitute argument is hard to assay. The substitute argument is already investigated in other countries (Huang, 2009) but to control the argument for the Netherlands, one have to take a closer look at the amount of the financial support. It is possible the fathers who are having more contact with their children do pay less financial support than those who are having less contact. They may, for example, pay only the obliged amount of financial support and refuse to give more in favour of his former family. Further research could take a look at the amount of financial support to ensure the effect of the father-child contact on financial support.

The overall effect of the model was not significant and the variables predicted 24,5% of mother's wellbeing. The fact that we found no significant effect of father-child contact on mother's wellbeing could be caused by the fact that more variables will be mediating between those two. The loneliness and financial variable could be good mediators but may not be the only ones. Think about the negative consequences the contact between father and child will bring to mother's life like more parental conflicts as described earlier. Also further research could take a look at the quality of contact between the father and his children (Flouri, 2006). It is possible the father feels obliged to get involved with his children and to see them frequently, but the quality of their relation might be worse than fathers who have relatively less direct contact with their children. This better relationship with less contact could lead to a greater feeling of being responsible for the children. If so, the father may contribute financially more than a father who sees his children frequently but has a poorer relationship with the children.

The results we have found may be a stepping-stone for further research. To get a better view of the impact of the father-child contact on mother's wellbeing, further research could use other predictable variables like parental conflicts or economic wellbeing. In this research we made the assumption that the alimony of the father will lead to a higher economic wellbeing, which will affect the overall wellbeing of the mother positively. Because we found no effect between those two variables, maybe the economic wellbeing of the mother has to be tested first. If we had taken a look at different aspects of wellbeing, like economic wellbeing, social wellbeing and physical wellbeing, we may have found a relation between those variables.

Also we made the assumption that interference of the father in his former family will lead to a lower level of the mother's loneliness. Further research may argue the other way around and emphasize the negative effects of interference of the father. The mother may feel pressed and feel 'controlled' by the father which may negatively influence her wellbeing. Because many researches found that the father-child contact influences the wellbeing of the children positively (McLanahan, 1999; Amato, 1993), the impact of children's wellbeing on mothers may be an interesting relation too.

Beside these other possible mediating variables, we have also put some marginalia by the dataset that is used. The dataset of the NKPS is large (N = 8161) but because of the fact that we selected only divorced mothers with at least one child and because we used a lot of variables, the number of usable respondents was relatively small (N = 196). There were four variables recoded and used to get an answer on our research question. Because we cannot draw any conclusions if a respondent has not answered on one of these variables, the useful sample was relatively small. To get a better view on the relation between different variables, further research could include more respondents to ensure that the sample approximates the population. The standard error will be less if the sample will resemble more to the population. To generalize the outcome of the research to other countries, also respondents of other nations could be included.

Next to the rise for other research to investigate the impact of different variables between father-child contact and mother's wellbeing, a practical contribution is also made with this study.

Because the wellbeing of the mother seems not to be influenced by the father-child contact in a great part, many therapist and other practitioners could better focus their therapy on different aspects of the divorce which are found to influence the treatment process significantly for the mothers. The perception of happiness of the mother seemed not be changed by the amount of

father-child contact and therefore our advice is not to spend any effort on this aspect. Only if other researchers find a significant effect between the father-child contact through other variables, the therapists should pay more attention to the father-child relationship to create a higher level of wellbeing for the mother.

Last but not least, this study could also be useful for mothers who find their own perception of wellbeing on a lower level after a divorce, because their feeling of wellbeing will not be influenced by changing the father-child relationship.

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APPENDIX A – Syntax

* Divorced mothers with at least one child

    Frequencies asex amarstat ankids.
    select if asex = 1 & amarstat = 2 & ankids>0.

*Loneliness

    RECODE as33b as33c as33e as33f as33i as33j (1=3) (2=2) (3=1) (ELSE=SYSMIS).

    COMPUTE Loneliness=MEAN(as33a,as33b,as33c,as33d,as33e,as33f,as33g,as33h,as33i,as33j,as33k).
    EXECUTE.

    FREQUENCIES as33a as33b as33c as33d as33e as33f as33g as33h as33i as33j as33k loneliness.

    RELIABILITY
     /VARIABLES=as33a as33b as33c as33d as33e as33f as33g as33h as33i as33j as33k
     /SCALE('Loneliness') ALL
     /MODEL=ALPHA
     /STATISTICS=DESCRIPTIVE SCALE CORR
     /SUMMARY=TOTAL.

    Recode Loneliness (lowest thru 1 = 1) (1 thru 2 = 2) (2 thru highest = 3).

*Wellbeing

    RECODE as32c as32e (1=6) (2=5) (3=4) (4=3) (5=2) (6=1) (ELSE=SYSMIS).

    COMPUTE Wellbeing=MEAN(as32a, as32b, as32c, as32d, as32e).
    EXECUTE.

    FREQUENCIES as32a, as32b, as32c, as32d, as32e Wellbeing.

    RELIABILITY
     /VARIABLES= as32a as32b as32c as32d as32e
     /SCALE('Wellbeing') ALL
     /MODEL=ALPHA
     /STATISTICS=DESCRIPTIVE SCALE CORR
     /SUMMARY=TOTAL.

*Finance

    RECODE ax1005c1 ax1005c2 ax1005c3 ax1005c4 ax1005c5 ax1005c6 ax1005c7 ax1005c8 ax1005c9
    ax1005d1 ax1005d2 ax1005d3 (1=1) (2=0) (ELSE=SYSMIS).
    RECODE ac407a_1 ac407a_2 ac407a_3 ac407a_4 ac407a_5 ac407a_6 ac407a_7 (1=1) (2=0)
    (ELSE=SYSMIS).

    RECODE ax1005c1 ax1005c2 ax1005c3 ax1005c4 ax1005c5 ax1005c6 ax1005c7 ax1005c8 ax1005c9
    ax1005d1 ax1005d2 ax1005d3 (ELSE=Copy) INTO zz1 zz2 zz3 zz4 zz5 zz6 zz7 zz8 zz9 zz11 zz12
    zz13.

```
RECODE ac407a_1 ac407a_2 ac407a_3 ac407a_4 ac407a_5 ac407a_6 ac407a_7 (ELSE=Copy) INTO
zz14 zz15 zz16 zz17 zz18 zz19 zz20.
DESCRIPTIVES zz19 zz18 zz17 zz16 zz15 zz14 zz13.

COMPUTE finance1 = SUM(zz1 to zz13).
COMPUTE finance2 = SUM (zz14 to zz20).
RECODE finance2 (0=0) (1 thru highest =1).
COMPUTE finance = SUM(finance1 to finance2).
FREQUENCIES finance1 finance2 finance.
```

*Contact

```
RECODE ac413_1 (1=1) (2=2) (3=3) (4=4) (5=5) (6=6) (7=7) (8=SYSMIS).
EXECUTE.
```

*New partner

```
RECODE AC101 (1=1) (2=0) (3=SYSMIS).
```

* Time since divorce

```
RECODE ac407_1 (2001 thru Highest=0) (Lowest thru 2000=1) (ELSE=SYSMIS).
EXECUTE.


Descriptives ac413_1 Loneliness Finance Wellbeing aage aedu ac101 ac407_1.
```

*Hierarchical regression

```
REGRESSION
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT Wellbeing
 /METHOD=ENTER aage aedu ac101 ac407_1
 /METHOD=ENTER ac413_1
 /METHOD=ENTER Loneliness
 /METHOD=ENTER finance.

REGRESSION
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT Wellbeing
 /METHOD=ENTER aage aedu ac101 ac407_1
 /METHOD=ENTER ac413_1
 /METHOD=ENTER Finance
 /METHOD=ENTER Loneliness
```

*Preacher & Hayes

```
INDIRECT y=Wellbeing / x=ac413_1 / m=Loneliness Finance aage aedu ac101 ac407_1 /C=4.
```