Mental health intervention and child development: Evidence from Pakistan

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1 Introduction

Mental health began receiving more attention in the discourse of public health and policy spheres only recently since the World Health Organization (WHO) published a report in 2001 highlighting the fact that understanding mental health is important in relation to its effect on the overall well-being of individuals. The enormity of the mental health problem can be realized from another report of the WHO which shows that in 2003 as many as 450 million people suffered from a mental or behavioural disorder, one in four families had at least one member with a mental disorder, and four of the six leading causes of years lived with disability were due to neuropsychiatric disorders (depression, alcohol-use, schizophrenia and bipolar disorder).

In a paper examining the patterns and consequences of mental health across countries Das et.al. (2008) using survey data from Bosnia, India, Indonesia, Mexico and Tonga find that mental health tends to significantly worsen with age for all countries except Tonga, and women tend to have worse mental health in all countries other than Tonga. For Mexico, they find that females were 8 percentage points more likely to be in the worst 10 percent of mental health scores. The authors find a strong association between the respondents mental health, his/her physical health, and the mental health of other members of the respondents household and community. In another study based on a survey from Urban India Das et.al. (2012) show that women tend to experience higher levels of mental distress than men, notably in families where they face adverse reproductive outcomes like the death of a child.

Depression around child birth is common and Rahman (2005) points out that perinatal depression affects 10-15 percent of all mothers in Western societies. Hospital based studies have found postnatal depression rates of 23 percent in Goa, India; 22 percent in eastern Turkey; and 15.8 percent in Dubai and a rural community based study in Pakistan found postnatal depression rates to be around 28 percent (Rahman 2005). Studies in a comprehensive literature documenting the effects of maternal depression on the psychological development of children have shown that maternal depression adversely affects a child's psychological development, intellectual competence, psychosocial function and rate of psychiatric morbidity (for e.g. Murray et.al. 1996, 1999).

Murray and Cooper (1997) explain that adverse effects of postnatal depression on infant development are mediated through the child's direct exposure to mother's depressive symptoms and difficulties of parenting associated with depression. The effects are more deleterious when the depressive episodes are severe and more prolonged and are associated in the context of personal and social adversity. Rahman

(2005) points out that in a developing country setting where population pressure, food insecurity, poor public health infrastructure are more prevalent, sub-optimal maternal care provided by depressed mothers can detriment the well-being of children.

As mental health of mothers affects the well-being of their children and more so in developing countries, we study the impact of a mental health intervention treating perinatal depression of mothers in Pakistan on the long run development outcomes of their children. This health intervention provided enhanced care to randomly selected mothers who were depressed during pregnancy in two rural districts of Pakistan in 2005. Mothers treated in 2005 were re-interviewed in 2013 and we use this follow-up survey to study whether the treatment had an impact on the cognitive and non-cognitive outcomes of the children 6-7 years after their mothers received the intervention.

Treated mothers in our sample were 28 percentage points less likely to be depressed a year after their child's birth and the intervention was effective in reducing the presence and severity of depression. Rahman et.al. (2008) find that infants of treated mothers in this study were more likely to have completed immunisation and were less likely to experience episodes of diarrhoea during a 12 month follow-up survey. Mothers and fathers in the intervention group were more likely to spend time playing with their children and treated mothers were more likely to use contraception. Mothers in the treatment group were more likely to exclusively breastfeed the child but they do not find any impact of the intervention on infant growth.

From the follow-up survey in 2013 we do not find an impact of the mental health intervention on the socio-emotional outcomes of children when they were 6-7 years old. Children whose mothers were non-depressed through the treatment did not exhibit better emotional and behavioral attributes. We find that children of depressed mothers displayed better cognitive outcomes on the measure of Visual Spatial index where they had a significantly higher scores by 7.63 points which is roughly 9 percent of the sample mean. We do not find any impact of the maternal depression status on literacy and numeracy outcomes, physical health measures and risk taking for children. We find that non-depressed mothers expected 1.12 more years of schooling for their children (approximately 7.8 percent of the sample mean) and they were likely to wait 1.08 years longer for their next birth post the intervention (approximately 34 percent of the sample mean). The effects are significant at the 1 percent and 5 percent level respectively.

Our findings contribute to the literature on the relationship between mental health and development and the literature on early life health interventions. A number of recent studies use randomized control trials (RCT) in low and middle income countries to examine the impact of treating perinatal depression on

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mother mood status and development outcomes of children and Rahman et.al.(2013) provide a summary of these studies. One set of studies examine the effect of treating perinatal depression on maternal depression status and child development outcomes (Cooper et.al, 2002, 2009; Baker-Henningham et.al.2005; Tripathy et.al. 2010; Hughes 2009; Morris et.al. 2012). A second set of studies analyze the effect of these interventions on maternal depression outcomes only. (Rojas et.al. 2007; Rahman et.al. 2008; Ho et.al. 2009; Gao et. al. 2010, 2012; Lara et.al. 2009; Mao et.al. 2012).

Experimental evidence from these developing countries suggest that mental health is key to mother's well-being and it impacts the development of their children at least in the short run. The studies cited above for e.g. aimed at improving mother-infant relationship through sessions with lay community workers (Cooper et.al, 2002, 2009), provided psycho-educational training to pregnant mothers (Gao et. al. 2010, 2012; Lara et.al. 2009; Mao et.al. 2012) and treated pregnant mothers identified with a high risk of postnatal depression (for e.g. Hughes 2009). But no study to our knowledge examines the impact of a psycho-educational training on maternal depression and child development outcomes more specifically in the long run.

The Cognitive Behaviour Therapy (CBT) sessions conducted by community health workers in this study focused on identifying and modifying cognitive distortions common in depression specific to how the mother views her own health, her relationship with the baby and the people around her (changing unhealthy thinking to healthy thinking). Mothers received health education and supporting materials with pictorial and verbal key messages to facilitate discovery of alternative health beliefs. The innovation related to guided discovery of healthy behaviour is not visible in other interventions in the literature and in this sense this intervention was unique. Further, existing studies in the literature examine the impact of maternal depression interventions on short run development outcomes of children and we contribute to the literature by examining the impact of a mental health intervention on long run development outcomes of children.

Conti and Heckman (2012) in a summary of recent evidence on child well-being explain how early childhood environment is crucial in explaining late outcomes as adults. Gaps in cognitive and personality traits that emerge very early in life and persist over time can explain differences in a number of adult outcomes. They cite examples of the Perry Preschool Project and the Abecedarian project in the U.S. that show positive effects of early environment enrichment for disadvantaged children (at age 3 for Perry Preschool) on behavioural traits, school achievements and job performance. Carneiro et al. (2007) using data from National Child Development Survey in Great Britain show that early home environment is an

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important determinant of non-cognitive skills.

Cunha and Heckman(2008) using the NLSY79 survey in the U.S. show that parental investments affect the cognitive skill development of children more strongly at early stages while they affect the noncognitive dimensions at a later stage. Heckman et al. (2006) using data from the NLSY79 survey find a strong impact of non-cognitive skills on educational attainment and wages. Conti and Heckman (2012) point out that dynamics of human development starts in the womb that lays the foundations of adult outcomes and our study uses this novel early life mental health intervention in Pakistan to examine the effects of treating perinatal depression on long run development outcomes of children.

2   Thinking Healthy Programme in Pakistan

The intervention called Thinking Healthy Programme (THP) used cognitive behaviour therapy techniques of active listening, collaboration with the family, guided discovery to treat perinatal depression of pregnant mothers in 20 randomly selected Union Councils (smallest administrative units) out of 40 in two rural areas of Pakistan in 2005. Village based community health workers were trained to provide this enhanced care with routine practice of maternal and child health education.

The study enrolled women in these 40 Union Councils from April 2005 to March 2006 and the participants were aged 16-45 years, married and in their third trimester of pregnancy. Women who fulfilled a specific criteria for depression (evaluated by psychiatrists) were recruited in the study and a baseline survey was conducted during the third trimester of pregnancy. Mothers in the treated councils received enhanced care by specially trained village health workers that comprised a session every week for 4 weeks in the last month of pregnancy, three sessions in the first postnatal month and nine 1 monthly sessions there onwards. Mothers in the control group received equal number of visits from routinely trained health workers and mothers in both the treatment and control groups were re-interviewed 6 months and 12 months postnatally.

Rahman et. al. (2008) study the effect of the THP intervention on perinatal depression of women and find whether treating perinatal depression has any effect on nutritional and health outcomes of infants. 463 mothers received this THP intervention programme, 440 mothers were in the control group and after 1 year 412 treated mothers & 386 mothers in the control group were analyzed in a follow-up study. Further, 360 infants in the treated group and 345 infants in the control group were analyzed at 1 year. They find that the intervention did not bring a significant change in the growth of the infants but the infants of

treated mothers were more likely to have completed immunization and had less episodes of diarrhoea. Mothers in the treated group were more likely to use contraception and both parents in the treated group reported spending more time playing with their infants. Further, they find that women receiving this intervention had less disability and better social functioning which were sustained after one year.

3   Saving Brains study in Pakistan

The Saving Brains programme successfully re-enrolled 83 percent of women and their children interviewed in the THP 1 year follow-up to study the impact of the mental health intervention on long term development outcomes of the children. 49.4 percent of the 585 women re-enrolled in the Saving Brains study were in the treated group. The THP was successful in reducing depression among treated mothers and the idea is to examine if children of treated mothers possessed better cognitive and non-cognitive attributes compared to children in the control group seven years post intervention. The THP measured the severity of depression of women at baseline using the Hamilton Depression scale and the Major Depressive Episode (MDE) severity specifier which gives a sense of how depressed the mothers were prior to the intervention. [1]

We begin by estimating the effect of baseline mother and household characteristics on the severity of maternal depression at baseline. Table 1 shows that mothers in households with enough money for food had a signficantly lower baseline Hamilton score by 0.82 points (which is approximately 5.6 percent of the sample mean). Further, a point increase in baseline MSPSS significantly reduced the baseline Hamilton score by 0.02 points. Mothers with more physical disability and more household income were significantly more depressed at baseline. Next, we test whether treatment was randomized by estimating the difference in means of a number baseline characteristics between treated and control mothers. We find from Table 2 that treated mothers had significantly fewer children at baseline and they had significantly fewer stillbirth or miscarriages as well. Treated mothers received significantly more social support measured by the MSPSS and they were significantly more likely to live with the grandmother of their children (see Table

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[1]Hamilton scale for depression of mothers is calculated by probing a number of questions including mood status, loss of appetite, weight loss or gain, agitation, retardation, feelings of guilt, suicidal ideation etc. and higher scores indicate severity of depression. The Hamilton scores rates the depression to be severe if the score is greater than 24, moderate if the score lies between 17-23, mild if its between 8-16 and no depression if the scores are between 0-7. MDE severity specifier takes the value 1 if depression is mild, 2 if depression is moderate, 3 if depression is severe without psychotic features, 4 if mood-congruent psychotic features are seen and 5 if mood-incongruent psychotic features are present.

2). Further, treated mothers were significantly more likely to live in households with electricity and they were significantly more likely to own washing machines (Table 2).

Table 3 shows whether treatment was randomized conditional on other characteristics. An extra year of schooling for fathers significantly reduced the likelihood of mothers being treated by 1.31 percentage points which is roughly 2.64 percent of the sample mean. Mothers having a stillbirth or miscarriage prior to the intervention significantly reduced the probability of being treated by 8.87 percentage points (17.9 percent of the sample mean) and living with grandmother significantly increased the likelihood of treatment by 14.33 percentage points which is 28.9 percent of the sample mean. A point increase in the baseline Hamilton score significantly increased the probability of being treated by 1.57 percentage points and a point increase in baseline MSPSS increased the probability of being treated by 0.38 percentage points. Thus being more depressed at baseline, having more social support or living with the child's grandmother increased the likelihood of being intervened while having a miscarriage in the past or having a more educated husband reduced the probability of being treated.

4 THP intervention and maternal depression

All mothers in the THP study were depressed at baseline but their recovery from depression was affected by the intervention. Depression status is evaluated by the criteria if the mother was having a major depressive episode which is a dummy that equals 1 if mothers were depressed and 0 if they were not. Table 4 shows that nearly 80 percent of treated mothers were not depressed during the THP 6 month follow-up compared to 48 percent mothers in the control group. Similarly 75 percent of treated mothers were not depressed during the THP 1 year follow-up compared to 42 percent mothers in the control group. These differences are statistically significant at the 1 percent level and indicate that the intervention was effective in reducing the presence of depression.

Beside influencing the status of depression the THP intervention was successful in reducing the severity of depression measured by the Hamilton scores. The mean Hamilton score at baseline was 14.49 with no significant difference between the treated and the control group (Table 2). Thus mothers on average had mild depression prior to the intervention but the severity of depression declined differentially post treatment between the two groups. Mothers in the treatment group had lower mean Hamilton score by 5.5 points (roughly 38 percent of the mean baseline Hamilton score) at the THP 1-year follow-up and this difference indicates that while on average treated mothers were not depressed at 1 year post their child

birth, mothers in the control group had mild depression at the same point in time (Table 4) [2] . However, using the MDE severity specifier we do not find any difference in the severity of depression between the two groups at baseline or in the THP follow-up surveys (Table 2 & Table 4).

The Kernel density estimates of baseline Hamilton scores in Figure 1 shows no overall difference in the distribution of scores by treatment status. Figures 2 and 3 show a leftward shift in the distribution of Hamilton scores at the THP 1 year follow-up compared to baseline for both the groups and we know from the mean differences that the decline in Hamilton scores was significantly higher for treated mothers.

Estimating the effect of treatment on depression status of mothers in the THP follow-up surveys shows treated mothers were 34 percentage points less likely to be depressed in the THP 1 year follow-up. (Table 5 Column 3). Thus the point estimate of treatment in Table 5 suggests that the intervention was effective in reducing depression among treated mothers. The extent to which the intervention influenced depression status depends on the baseline state of depression of mothers. We find that a point increase in baseline Hamilton score significantly increased the probability of being depressed during the THP 1 year follow-up by 3 percentage points (Table 5 Column 4). However, interacting the baseline Hamilton scores with treatment status we find that a point increase in baseline Hamilton score significantly reduced the probability of being depressed during the THP 1 year follow-up by 2 percentage points for treated mothers (Table 5 Column 4).[3]. Thus treated mothers who were more depressed at baseline were significantly less likely to be depressed in the THP follow-up surveys due to the intervention.

As baseline characteristics of the mother and her family are likely to influence whether she is depressed we check how these baseline features affect depression status over time. Table 6 Columns 1 shows that for all mothers (both treatment and control) grandmother living with the family, number of miscarriage or stillbirth and social support at baseline are significant predictors of depression status at the THP 1-year follow-up. Table 6 Column 3 show that mothers in the control group living with the child's grandmother at baseline were nearly 15 percentage points less likely to be depressed at the THP 1-year follow-up while we find no such effect for treated mothers. It seems that living with grandmother acted as a substitute for the intervention as mothers in the control group were less likely to depressed if they were living with the child's grandmother at baseline.

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[2]The mean Hamilton score of treated mother at the 1-year follow-up is 5.04 between 0-7 which indicates the average treated mother had no depression while the mean Hamilton score of control mother at the same point is 10.58 between 8-16 which suggests that the average control mother had mild depression

[3]Using the MDE severity specifier as the measure of severity of depression we also find that treated mothers who were more depressed at baseline were less likely to be depressed in the THP follow-up surveys (Table 5)

Thus we find that the THP intervention was effective in reducing the presence and severity of depression in the span of 1 year post the child birth. Rahman et.al. (2008) find that the THP intervention affected some parental and child development outcomes in the 1-year follow-up study and we study the effect of treatment on development outcomes in the THP 6-month and 12-month follow-up surveys in the next section.

5 Intervention and development outcomes in the THP follow-up surveys

The THP 6-month and 1-year follow-up surveys assessed outcomes related to mother's functioning and perceived social support and Table 7 summarizes these outcomes. Physical disability score indicates the level of physical disability of the mother with possible scores ranging from 0 to 16 and higher scores indicate more disability. The Global Assessment of Functioning (GAF) score assigns a number to the individuals overall functioning level (scores ranging from 0 to 100) and high scores indicate better functioning. The Multidimensional Scale of Perceived Social Support (MSPSS) score indicates the support received from friends and family as perceived by mothers. The possible scores range from 12 to 84 and high scores indicate better social support. Rahman et. al. (2008) find that treated mothers had significantly lower disability scores by 3 points, significantly higher GAF score by 9 points and significantly higher MSPSS scores by 8.5 points in the THP 1-year follow-up survey (Table 7 Rows 4, 5 and 6).

For mothers re-interviewed in the Saving Brains (2013) survey we find that treated mothers showed lower physical disability, better functioning and had better social support in the THP 6-month and 12-month follow-up surveys (Table 7). The effects are significant at the 1 percent level and our results are similar in size to the Rahman et.al.(2008) study. Thus the intervention was effective in reducing physical disability and improving overall functioning of mothers.

Estimating the effect of the intervention on infant growth Rahman et.al. (2008) find that differences between the treatment and control groups in weight-for-age Z scores or height-for-age Z scores at 6 months or 12 months were not significant, although at 12 months the number of stunted infants in the treatment group was less than that in the control group (Table 8).

Rahman et.al.(2008) find that infants in the treatment group were less likely to have diarrhoeal episodes in 2 weeks preceding the 12-month follow-up and were more likely to have completed their immunisation (Table 9). Contraceptive use by mothers in the treatment group was significantly higher than in the

control group in the 12-month follow-up and both parents in the treated group reported spending more time playing with their children than parents in the control group in the 12 month follow-up (Table 9). We find similar results for the outcomes discussed above using the sample of mothers re-interviewed in the Saving Brains (2013) survey.

Infants of treated mothers were 7 percentage points less likely to experience a diarrhoeal episode in the THP 6-month and 12-month follow-up surveys and the effects are significant at the 10 percent level (Table 9 Rows 7 and 8)[4]. Treated mothers were 10 percentage points more likely to use contraceptives during the 12-month follow-up and they were 9 percentage points more likely to exclusively breastfeed their child at the 6-month follow-up (Table 9 Rows 9 and 10). Both effects are significant at the 1 percent level. We also find that both parents in the treated group were significantly more likely to play with their children similar to the the Rahman et.al. (2008) study (Table 9 Rows 11 and 12)[5]. Table 10 summarizes a number of child development and parental outcomes that were not previously analyzed in the Rahman et.al. (2008) study.

Using a regression analysis we estimate the effect of the intervention on child development and parental outcomes measured in the THP 6-month and 12-month follow-up surveys. Controlling for baseline house-hold characteristics we find from Table 11 (Spec 2) that treated mothers had lower physical disability score by 1.73 points (nearly 55.27 percent of the sample mean), higher GAF score by 7.05 points (approximately 9 percent of the sample mean) and higher MSPSS score by 6.10 points (approximately 13 percent of the sample mean) at the 6-month follow up survey. The effects are significant at the 1 percent level and indicates that the intervention reduced physical disability and improved functioning and social support of mothers. We find similar effects of treatment on disability, functioning and social support of mothers at the 12-month follow-up survey (see Table 11 for details).

Mothers in the treated group were 9 percentage points more likely to exclusively breastfeed their child at the 6 month follow-up (Table 12 Column 1 Spec 2) but we do not find any effect of the intervention on the number of times mother breastfed the child daily or the age of child when she stopped breastfeeding (Table 12Columns 2 to 4). Table 13 (Columns 1 and 2 Spec 2) show mothers and fathers in the treatment group were 25 and 21 percentage points more likely to play with their children at the 12 month follow-up

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[4]The no. of diarrhoeal episodes is based on the information whether the child had diarrhoea within 2 weeks prior to the survey. We create a dummy that equals 0 if the child had no diarrhoeal episode and 1 if the child had at least once diarrhoeal episode

[5]The frequency of playing with children is a dummy that equals 1 if the mother/father played with the child at least once a day in the month preceding the survey and 0 otherwise

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survey and the effects are significant at the 1 percent level. Thus parents in the treated group displayed actions like playing with infants that could positively impact the emotional and behavioural traits of their children as they grow old. Further, we find that mothers in the treated group were 12 percentage points more likely to use birth spacing (Table 13 Column 4 Spec 2) during the THP 12-month follow-up survey.

Women in the THP 12 month follow-up survey were asked questions about the relationship with their husband. We find from Table 14 (Columns 2 and 3 Spec 2) that husbands in the treatment group were 10 percentage points more likely to give their wives pocket money which is nearly 13.5 percent of the sample mean and women in the treatment group were 5 percentage points more likely to report that their husband understood their feelings (approximately 5.7 percent of the sample mean). The effects are significant at the 5 percent and 10 percent level respectively. Table 14 (Column 4 Spec 2) shows that treated women were 7 percentage points more likely to report that their husband support in difficult times and this effect is significant at the 1 percent level. Overall, we find that women in the intervention group received more support from their husbands than those in the control group.

In the THP 12-month follow-up survey mothers were asked about health behaviours practiced during the delivery of their baby. Mothers in the treated group were significantly more likely to report that safer practices were adopted during the delivery of their baby. (See Table 15 for details).

Estimating the effect of the intervention on child height and weight, we find from Table 16 (Columns 1 and 3 Spec 2) that children of treated mothers had significantly lower weight by 0.2 kg and 0.19 kg at the THP 6-month and 12-month follow-ups respectively. Further children of treated mothers had a significantly lower height at the 6 month follow-up.

Table 17 (Column 2 Spec 2) shows that children of treated mothers were 23 percentage points less likely to have an ARI episode during the 12-month follow-up survey which is approximately 57.5 percent of the sample mean. However, we do not find any effect of the intervention on diarrhoeal episodes experienced by children in the THP 6-month and 12-month follow-up surveys (Table 17 Columns 1 and 3 Spec 2)

Thus we find that mothers in the treated group displayed better functioning and received more social support at the 12-month follow-up survey. Mothers as well as both parents in treated group were more likely exhibit behaviours that could positively impact the development of their children like exclusively breastfeeding the child and spending more times playing with the child. Wives in the treated group reported getting more support from their husbands and families in the treatment group were more likely to take steps for the safe delivery of the baby. The only positive impact of the intervention on child development that we found was children of treated mothers were less likely to experience ARI episodes at

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the 12-month follow-up survey. Overall, the THP intervention had positive impact on some parental and child development outcomes measured in the THP follow-up surveys and so we proceed to estimate the effect of the intervention on a number of child development and parental outcomes when their mothers were re-interviewed in the Saving Brains (2013) survey. Before estimating the effect of treatment on outcomes measured in the 7-year follow-up we check whether the THP intervention had a sustained impact on maternal depression over time.

6 Persistence in depression status

First, we estimate the effect of observable characteristics on maternal depression in 2013, intermediate episodes of depression, on the likelihood of permanent recovery and the probability of never recovering from depression.To sense how the state of maternal depression changed over time between the THP intervention in 2006 and the Saving Brains survey in 2013, mothers in the Saving Brains study were asked to report if they had one or several major depressive episodes in the seven years between the two surveys.[6] We define permanent recovery as a dummy that equals 1 if women not depressed in the THP 1-year follow-up were also not depressed in the 7-year follow-up survey and 0 otherwise. Further, we define never recovered as a dummy that equals 1 if women depressed in the THP 1-year follow-up were also depressed in the 7-year follow-up survey and 0 otherwise.

Table 18 Column 1 and 3 shows that women with working husbands and physical disability at baseline were significantly more likely to be depressed and also significantly more likely to have never recovered depression. Further, women with more social support at baseline were significantly less likely to depressed in 2013 and also less likely to have never recovered (Table 18 Columns 1 and 3). Women with more educated husbands, living with the grandmother and more social support at baseline were significantly more likely to have permanently recovered from depression (Table 18 Column 2). Working women were significantly less likely to have never recovered from depression (Table 18 Column 3). Some of these baseline features affected the intermediate episodes of depression (see Table 18 for details).

Table 19 shows the path of depression status over time. Mothers who were depressed in the THP 1 year follow-up survey were 16 percentage points more likely to be depressed in 2013 and this effect is significant at the 1 percent level (Table 19 Column 1). Mothers who experienced at least one depressive

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[6]Major depressive episode A was the depressive episode that followed the THP 1-year follow-up survey and episodes B and C were subsequent depressive episodes.

episode in the years between the THP and Saving Brain surveys (i.e. MDEA) were 39 percentage points more likely to be depressed in 2013 and the effect is significant at the 1 percent level. Finally, mothers who experienced three depressive episodes in the intermediate years were 19 percentage points more likely to be depressed in 2013. However, only 0.5 percent of all mothers experienced three intermediate episodes of depression in our sample. Differences in the trajectories of depression status by treatment are described in Table 19 (see Columns 2 and 3).

When we estimate the year-wise effects of past depression on current depression we find that for everyone in the sample being depressed in 2011 significantly increased the probability of being depressed in 2013 by 34 percentage points and being depressed during the THP 1-year follow-up significantly increased the probability of being depressed in 2013 by 16 percentage points (Table 20). (See Table 20 Columns 2 and 3 for differences in these effects by treatment status).Overall our results suggest that past depression status is predictive of current depression as mothers who were depressed in the THP 1-year follow-up or had a depressive episode thereafter were more likely to be depressed in 2013 and thus there is some evidence on the persistence of depression. As discussed before, the THP intervention significantly reduced depression among treated mothers and so we estimate the effect of the intervention on a number of mother and household outcomes in the next section.

7   THP intervention, mother and household outcomes in the 7 year follow-up survey

We summarize a number of mother and household outcomes in the 7-year follow-up survey by treatment status (See Tables 21 and 22 for details). We estimate the effect of depression status of mothers at the THP 1-year follow-up on mother and family outcomes where we instrument the depression status by treatment. As the first stage result we find that treated mothers were 28 percentage points less likely to be depressed at the 1-year follow-up and the effect is significant at the 1 percent level (Table 23 Column 2).

We find from Table 24 (Column 4 Spec 2) that depressed mothers had significantly higher household income at the 7-year follow-up. Further, we find from Tables 25 and 26 that depressed mothers were significantly more likely to disagree that they received more social support at the 7-year follow-up. Thus non-depressed mothers received significantly more social support in the 2013 follow-up survey. Table 27 shows that non-depressed mothers were significantly more likely to receive pocket money from their

husbands in 2013. Non-depressed mothers waited significantly longer for their next born after the index child (Table 28 Column 3) but we find no effect of depression status on any other fertility outcome. Non-depressed mothers spent significantly more money on the education of their children (Table 29 Column 5 Spec 2) but we find no effect of depression status on household debt status or other expenditures.

As an exploratory analysis we check if children of treated mothers were living in a home environment that is more conducive for their overall development.The Saving Brains 2013 survey evaluates a score for the Home environment of households based on how responsive are parents to child's needs, whether they encourage maturity of their children, the emotional climate at home, availability of learning materials for the child, enrichment of the child, family companionship, family integration and the physical environment at home. Higher total scores and high scores for each component indicate a better home environment. We estimate the effect of treatment on the Home total score and its components and Table 30 (Column 1 Spec 2) shows that treated households had a significantly higher Home total score by 1.25 points which is roughly 3.5 percent of the sample mean.

Table 31 (Column 1 Spec 2) shows that higher Home total score of treated households is driven by a significantly higher enrichment score by 0.26 points (nearly 9 percent of the sample mean), higher family companionship score by 0.37 points (approximately 11.5 percent of the sample mean) and a significantly higher family integration score by 0.14 points (nearly 5 percent of the sample mean). Thus parents in the treated group were more likely to encourage children to develop hobbies, engage children in the family's recreational activities, take children to cultural events and visit relatives, engage in outdoor recreation with children.

8 THP intervention and child development outcomes in the 7-year follow-up survey

8.1 Socio-emotional outcomes of the index child

The Saving Brains (2013) follow-up study to the THP intervention in 2005 asked mothers a number of questions about the socio-emotional outcomes of the index child who were 6-7 years old at the time of the survey. The questions were broadly classified into the Strength and Difficulties Questionnaire (SDQ) and questions about the Spence Anxiety Scale. The SDQ was administered to parents where they responded about the emotional and behavioral characteristics of their children and the extent of distress

caused by them. The total difficulties score was a sum of the Emotional symptoms scale score (EMSS), Conduct problem scale score (CPSS), Hyperactivity scale score (HSS) and the Peer Problem score (PPS). Each of these scores were calculated based on responses from a subcategory of questions. High total scores indicate more socio-emotional distress displayed by the index child.[7] The Pro-Social score (PSS) displayed helpfulness of the index child and the Impact score measured the impact of the child's emotional and behavioral attributes on their lives and their family.

Table 32 summarizes the SDQ total score and its subcategories. The mean SDQ total score is 11.34 with no differences by treatment status. The mean SDQ scores shows that on average children did not have clinically significant socio-emotional problems and there was no difference in these problems by treatment status of mothers. The Spence Children's Anxiety scale (SCAS) is another measure of the child's socio-emotional outcomes with the total score ranging from 0-114 and high scores indicate more anxious behavior for the index child. [8] Table 32 shows the mean SCAS total score is 21.33, children in the treated group have a higher total score by 1.95 points and the effect is significant at the 10 percent level.

Maselko et.al. (2014) using the Saving Brains programme study the effect of treatment on socio-emotional outcomes of the index child. They use a random-effects generalized linear model and find no impact of treatment on SDQ total scores and its subcategories. Further, they also find treated children to have significantly higher Spence total score compared to those in the control group and our results are quite similar to their study.

Since treated mothers were more likely to be non-depressed post the THP intervention we estimate the effect of depression on child development outcomes using an instrumental variables(IV) approach. We hypothesize children of treated mothers to exhibit better development outcomes and the channel through which intervention affects child development is by reducing the presence of depression among treated mothers. Thus the equation we estimate is as follows

$$Childoutcome_{2013} = Depressionstatus_{2006} + Baselinecontrols_{2005} + e \qquad (1)$$

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[7]The range of the SDQ total score is 0-40. SDQ total score between 0-13 show that clinically significant problems are unlikely, if the score is between 14-16 there is a slight risk of clinically significant problems and scores between 17-40 display a substantial risk of clinically significant problems

[8]The questions corresponding to SCAS were also administered to parents and it comprises the following sub scales: Panic and Agoraphobia, Separation Anxiety, Fears of Physical Injury, Social Phobia, Obsessive Compulsive Problems, and Generalized Anxiety.

where $Childoutcome_{2013}$ denotes the socio-emotional, cognitive, educational, physical and risk taking outcomes of the index child in the 2013 survey, $Depressionstatus_{2006}$ denotes the depression status of mothers in the THP 1 year follow-up survey (a dummy variable that equals 1 of mother was depressed and 0 if she was not) and $Baselinecontrols_{2005}$ denote a number of mother and household characteristics at baseline.[9] We instrument the depression status of mothers by treatment and thus our first stage regression is as follows

$$Depressionstatus_{2006} = Treatment_{2005} + Baselinecontrols_{2005} + e \qquad (2)$$

where $Treatment_{2005}$ is a dummy variable that equals 1 if mother was treated and 0 if she was in the control group.

The first stage regression in Table 23 shows that treated mothers were 28 percentage points less likely to be depressed at the THP 1-year follow up and this effect is significant at the 1 percent level (Table 23 Column 2). As discussed earlier we find strong evidence that the intervention reduced the presence of depression among treated mothers. Table 33 shows that status of maternal depression had no impact on the child SDQ total score and its subcategories. We find that depressed mothers had lower SDQ total scores by 1.21 points (Table 33 Column 1 Spec 2) but the effect is not statistically different from zero.

Table 34 shows that children of depressed mothers had lower Spence total score by 5.47 points (Column1 Spec 2) but the effect is not different from zero. As lower SDQ and Spence total scores indicate better socio-emotional outcomes for children, contrary to our hypothesis we find that children of depressed mothers displayed better socio-emotional outcomes though the effect is statistically indistinguishable from zero.[10] Table 34 (Columns 2 and 6 Spec 2) shows that children of depressed mothers show significantly lower scores of panic attack and compulsive disorder by 1.54 and 2.02 points respectively.Thus we find a result opposite to our premise since children of depressed mothers displayed better behavior for a subcategory

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[9]Baseline controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. It also includes the Hamilton score, disability score and social support score of mothers at baseline.

[10]The coefficient of depression status is approximately 10.7 percent of the mean SDQ score and nearly 25.6 percent of the mean Spence total score. These effect sizes may be statistically indistinguishable from zero due to the sample size of our study

of socio-emotional outcomes.

8.2   Educational outcomes of the index child

Table 35 shows that 99 percent of children in our sample went to school and 45 percent of them went to a private school. Children of treated mothers were 11 percentage points more likely to go to a private school and the difference is statistically significant at the 1 percent level. Treated mothers expect 0.45 more years of schooling for their children and the effect is significant at the 5 percent level. As before we estimate the effect of depression status of mothers on child educational outcomes using the IV approach where we instrument the depression status of mothers at the THP 1 year follow-up by treatment.

Table 36 (Column 2 Spec 2) shows that children of non-depressed mothers were 44 percentage points more likely to go a private school (significant at 1 percent) and non-depressed mothers expect 1.12 more years of schooling for their children (which is roughly 7.8 percent of mean schooling years mother expects her child to complete). The effect is significant at the 10 percent level and our findings suggest that non-depressed mothers are more optimistic about their child's future and expect more years of schooling for their children.

Children in the Saving Brains 2013 survey were asked to recognize alphabets, words, read sentences, recognize numbers and do simple additions to assess their literacy and numeracy capabilities. We find from Tables 37 and 38 that depression status of mothers had no impact on the literacy and numeracy outcomes of the index child.

8.3   Cognitive, risk taking and physical outcomes of the index child

The cognitive outcomes of children are measured by the major composite scores that consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). Higher scores of VCI, VSI and FSIQ reflect better cognitive outcomes of the index child. Table 39 (Column2 Spec 2) shows that children of depressed mothers have a significantly higher VSI scores by 7.63 points (approximately 8.8 percent of the mean VSI score) while depression status has no impact on VCI and the FSIQ.[11]Thus we find another

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[11]Table 39 (Columns 1 and 3 Spec 2) shows that coefficients of depression status are 1.7 percent and 1.8 percent of the samples means of VCI and FSIQ and they are statistically not different from zero

result opposite to our premise since children of depressed mothers displayed better results for one of the cognitive outcome measures.

Children in the Saving Brains (2013) survey participated in a risk taking game by placing balls in a risky bowl and we estimate the effect of depression status on the risk taken by the index child. The child got 4 tokens and each token corresponded to a single gift of choice from a gift bag with an assortment of small items such as toys, stationary, beads, hair bands etc. The child had a choice of putting tokens in a risky bowl with 50 percent chance of a good outcome where investment tripled and all was lost if outcome was bad. The child could also place tokens in a riskless bowl where investment stayed as it was. In an opaque urn there was one yellow and one purple ball of equal size/feel etc. If the yellow ball was drawn, the good outcome happened and if the purple ball is drawn the bad outcome happened. The child drew the ball her/himself after making the decision of how many tokens to put in the risky bowl and the child was paid immediately with toys.

We find from Table 40 (Columns 1 and 2) that the depression status of mothers had no effect on the risk taken by the index child. Further, we find that the depression status of mothers had no significant effect on the index child's weight, height, status of immunization and whether the child suffered from any serious illness (See Table 41).

8.4   Differences in child development outcomes by gender

In this sub-section we explore the heterogeneity in the effect of maternal depression on child development outcomes by their gender using the same IV approach as before. We first report the differences in development outcomes by depression status of mothers for a female child. There is no significant effect of mother depression status on their daughters' SDQ total score (Table 42 Column 1) but we find that daughters of depressed mothers had significantly higher conduct problem score by 1.73 points. Table 43 Columns 5 and 6 show that daughters of depressed mothers had significantly higher scores for social phobia by 2.31 points and significantly lower scores for obsessive compulsive disorder by 2.35 points. The effects are significant at the 5 percent and 1 percent level respectively. Thus for two subcomponents viz. problems with conduct and social phobia we find that daughters of non-depressed mothers showed better socio-emotional attributes than those of depressed mothers.

Daughters of depressed mothers were 58 percentage points less likely to go to a private school and they were significantly more likely to study in a higher grade compared to daughters of non-depressed mothers (Table 44 Columns 2 and 4). Mothers who were non-depressed in the THP 1-year follow-up survey

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expected nearly 2.6 more years of schooling for their daughters (significant at 1 percent level) which is approximately 18.3 percent of the sample mean (Table 44 Column 5). Thus we find non-depressed mothers were more likely to send their daughters to a private school and they were more optimistic about the educational achievement of their daughters.

We do not find any effect of depression status of mothers on the literacy and numeracy outcomes of their daughters except that daughters of depressed mothers had a significantly high score on Urdu word test (Table 45 Column 2). We do not find any impact of the maternal depression status on cognitive and risk taking outcomes for their daughters (see Tables 47 and 49) but we find that daughters of non-depressed mothers were significantly taller at the 7-year follow-up (Table 48 Column 2).

Sons of depressed mothers had significantly lower SDQ total score by 6.31 points(Table 50 Column 1) which is nearly 52 percent of the sample mean and a significantly lower Spence score by 10.13 points (52 percent of the sample mean) (Table 51 Column 1). Thus unlike our previous result where daughters of non-depressed mothers showed better socio-emotional outcomes (at least for 2 subcomponents) we find that sons of non-depressed mothers displayed worse socio-emotional behaviour as measured by the SDQ total score and the Spence total score. Sons of non-depressed mothers were 38 percentage points more likely to go to private school and the effect is significant at the 10 percent level (Table 52 Column 2). We do not find an effect of maternal depression status on their sons' other educational outcomes (Table 52 Columns 1, 3 ,4 and 5). The depression status of mothers in the THP 1-year follow-up survey had no effect on literacy, numeracy, cognitive, physical and risk taking outcomes for their sons (see Tables 53 to 57).

9   Components of mother depression and child development outcomes

Depression status of mothers derived from the Major Depressive episode is based on a number of questions on whether the mother was depressed, had loss of interest, experienced weight loss/gain, faced sleep disturbance, experienced psychomotor agitation or retardation, had fatigue, felt worthless or had inappropriate guilt, was unable to concentrate and had suicidal thoughts. The responses to these questions were yes, no or sub-threshold. For our analysis below we restrict our sample to mothers who said either yes or no to these questions and we kept out mothers were the response was sub-threshold for any of these components of depression. This left us a total of 452 mothers in our sample.

Our first stage results in Table 58 shows that treated mothers were 8 percentage points less likely to

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report being depressed (approximately 17 percent of the sample mean) in 2013 and 9 percentage points less likely to report having loss of interest (nearly 27 percent of the sample mean). The effects are significant at the 10 percent and 5 percent level respectively. But we do not find an effect of treatment on the other components of depression (see Table 58). So we regress child development outcomes on mothers being depressed or having a loss of interest in 2013 and as before we instrument these components of depression status by treatment .

Mothers being in a depressed mood in 2013 has no significant effect on child's socio-emotional outcomes measured by the SDQ and Spence scores (see Tables 59 and 60). Further, we do not find an effect of mothers being depressed in 2013 on the child's educational and cognitive outcomes (Tables 61 and 62). Mother's experiencing loss of interest in 2013 does not affect the child's socio-emotional outcomes in 2013 (see Tables 63 and 64). We find from Table 65 Column 5 that mothers having a loss of interest in 2013 expect nearly 5 less years of schooling for their children (nearly 35 percent of the sample mean) and the effect is significant at the 10 percent level. However, we do not find an effect of mother's loss of interest on the cognitive outcomes of children (Table 66).

10 Discussion

We find from our analysis that while the THP intervention improved some child development and parental outcomes when the children were 1 year old (Rahman et.al. 2008), we do not find any noticeable impact of the intervention on cognitive, non-cognitive, physical and risk taking outcomes of the children when they were 6-7 years old. Further, we find that children of depressed mothers were doing better than the treated group in specific measures of cognitive and non-cognitive outcomes. Maselko et.al. (2014) discuss a number of possibilities why we may not find an effect of the treatment on longer term outcomes. First, it could be the case that the intervention may not have started early enough to influence long term outcomes of children. Secondly, the absence of complementary resources like nutrition, social support could have dampened the effect of mental health intervention over time. A third possibility is that children in the control group may have received larger compensating investments to the extent their development outcomes are not distinguishable from children in the treated group. A fourth possibility could be that the impact of this early life intervention may not be visible in 6-7 years but they may affect teen and adulthood outcomes of these children. So if it is plausible to follow this children when they are teens or adults we may be able to study if early life intervention like the THP have an impact on development

outcomes later in life.

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Figure 1: Hamilton depression scores by treatment status (basline)

Kernel density estimate

kernel = epanechnikov, bandwidth = 1.2086
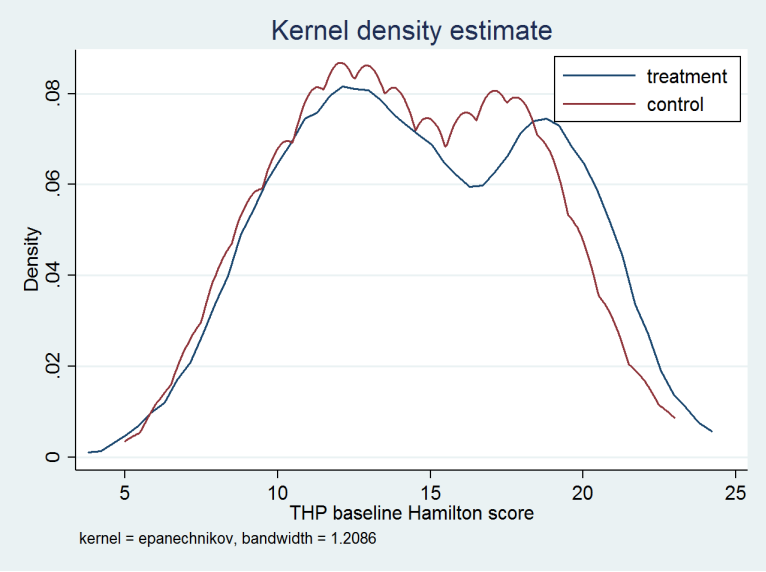
Figure 2: Hamilton scores of treated mothers (baseline vs post intervention)

Kernel density estimate

kernel = epanechnikov, bandwidth = 1.2086
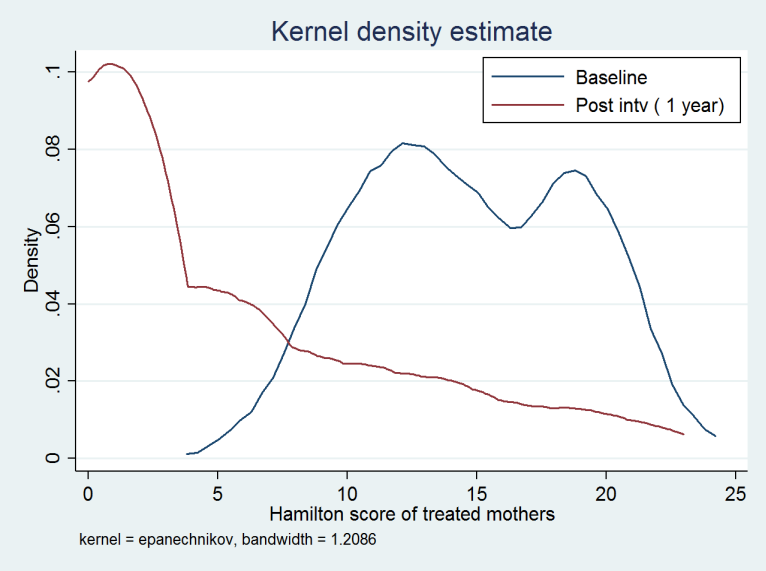
Figure 3: Hamilton scores of control mothers (baseline vs post intervention)

Kernel density estimate

Baseline
Post intv (1 year)

Density

Hamilton score of control mothers

kernel = epanechnikov, bandwidth = 1.1207
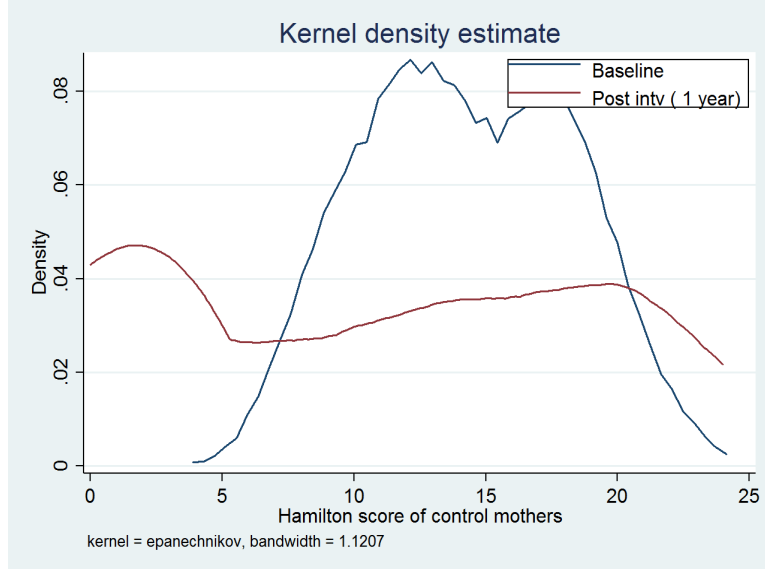
Table 1: What observable characteristics predict depression in the full baseline sample?

	Hamilton score baseline
Women characteristics	
Women age	0.40
	(0.41)
Women schooling (in years)	-0.15
	(0.40)
Women work status	0.63
	(0.75)
Women weight	0.03
	(0.18)
Women height	-0.02
	(0.13)
Women BMI	-0.11
	(0.44)
No. of children	0.06
	(0.11)
No. of children died	-0.13
	(0.23)
No. of stillbirth or miscarriage	0.20
	(0.21)
Husband characteristics	
Husband schooling (in years)	0.16
	(0.45)
Husband work status	0.05
	(0.12)
Family characteristics	
Family structure	-1.33
	(4.07)
Grandmother lives with	0.02
family	(0.43)

Table continues next page

Table 1: Contd: <u>What observable characteristics predict depression in the full baseline sample?</u>

	Hamilton score baseline
Family characteristics	
ln(Household income)	0.12**
	(0.06)
Household debt status	-0.09
	(0.10)
Enough money (food)	-0.82*
	(0.46)
Enough money (basic needs)	-0.26
	(0.36)
MSPSS score baseline	-0.02**
	(0.01)
Disability score baseline	0.79***
	(0.08)
Asset and other controls	Yes
Hamilton score baseline (Mean)	14.49
Hamilton score baseline (s.d)	4.03
N	585

Notes: The sample comprises women from the treated and control group in the THP study. The dependent variable treated is the Hamilton depression score at baseline. All independent variables are from the baseline THP survey. Family structure takes the value 0 if the family is nuclear and 1 if the family is joint/extended. Women and Husband work status are dummies that take the value 1 if they work and 0 otherwise. Grandmother living with family is a dummy variable that equals 1 if grandmother lives with the family and 0 otherwise. Household debt and household financial situation regarding food and basic needs are from the baseline THP survey. The variables are dummies that take the value 1 if the household is in debt, has enough money to buy food and meet basic needs and 0 otherwise. All asset variables are dummies that take the value 1 if the household owns a particular asset and 0 otherwise. Other controls include whether the household had piped drinking water, well with a pump and a flush toilet. The variables are dummies that equal 1 if the response is yes and 0 if no. Women age, schooling, work status, husband schooling and family structure are rescaled by a factor of 0.10

Table 2: Was treatment randomized?

Sample Characteristics at THP Baseline:	(1)	(2)	(3)
	Treated	Control	P-value
Women characteristics			
Age	26.66	27.07	0.31
	(4.76)	(5.09)	
Women education	4.31	3.81	0.12
	(3.94)	(3.85)	
Women work status	0.01	0.02	0.38
	(0.01)	(0.01)	
Women BMI	23.31	23.05	0.45
	(4.01)	(4.05)	
Women Height in CM	156.63	156.17	0.31
	(5.46)	(5.38)	
Women Weight in KG	57.28	56.29	0.27
	(10.93)	(10.54)	
No. of children	2.11	2.39	0.05**
	(1.69)	(1.76)	
No. of children died from any cause	0.61	0.70	0.23
	(0.98)	(0.90)	
No. of stillbirth or miscarriage	0.43	0.63	0.01***
	(0.83)	(1.04)	
Women Mental Health, Physical Disability and Social support			
Total score Hamilton (Depression severity)	14.74	14.24	0.14
	(4.17)	(3.88)	
MDE Severity (Depression severity)	1.41	1.43	0.29
	(0.49)	(0.50)	
Total score BDQ (Physical disability)	8.08	8.17	0.72
	(2.78)	(2.70)	
Total score MSPSS (Social support)	47.45	44.61	0.04**
	(16.45)	(16.33)	

Table 2: Contd: Was treatment randomized?

Sample Characteristics at THP Baseline:	(1)	(2)	(3)
	Treated	Control	P-value
Husband characteristics			
Husband education	6.96	7.21	0.43
	(3.77)	(3.75)	
Husband employed	0.90	0.90	0.88
	(0.02)	(0.02)	
Family characteristics			
Family structure (0=Nuclear 1=Joint/extended)	0.62	0.56	0.13
	(0.49)	(0.50)	
Grandmother living with family	0.55	0.44	0.01***
	(0.50)	(0.50)	
Household income and SES			
ln(Household income)	4.29	4.21	0.75
	(0.18)	(0.17)	
SES: LHW rating (1=Richest 5=Poorest)	3.55	3.63	0.32
	(0.95)	(0.96)	
Household in debt	0.71	0.83	0.30
	(1.21)	(1.61)	
Enough money (food)	0.86	0.87	0.72
	(0.35)	(0.34)	
Enough money (basic needs)	0.81	0.81	0.97
	(0.40)	(0.40)	
Household characteristics			
Has electricity	0.96	0.93	0.08*
	(0.19)	(0.25)	
Has radio	0.51	0.47	0.31
	(0.50)	(0.50)	

Table 2: Contd: Was treatment randomized?

Sample Characteristics at THP Baseline:	(1)	(2)	(3)
	Treated	Control	P-value
Household characteristics			
Has television	0.62	0.61	0.85
	(0.49)	(0.49)	
Has refrigerator	0.39	0.33	0.11
	(0.49)	(0.47)	
Has bicycle	0.31	0.30	0.85
	(0.46)	(0.46)	
Has motorcycle	0.10	0.12	0.41
	(0.30)	(0.32)	
Has room cooler	0.07	0.04	0.13
	(0.25)	(0.20)	
Has washing machine	0.31	0.25	0.07^{*}
	(0.47)	(0.43)	
Has water pump	0.43	0.38	0.24
	(0.50)	(0.49)	
Has car van or tractor	0.08	0.07	0.81
	(0.27)	(0.26)	
Piped drinking water residence	0.07	0.06	0.57
	(0.26)	(0.24)	
Well with pump	0.37	0.34	0.52
	(0.48)	(0.47)	
Any flush toilet	0.28	0.26	0.58
	(0.45)	(0.44)	
Sample size	289	296	585

* $p < .10$, ** $p < .05$, *** $p < .01$

Note: The sample comprises women from the treated and control group in the THP study. All variables are from the THP baseline survey.

Table 3: Was treatment randomized? (Conditional on other characteristics)

	Treated
Women characteristics	
Women age	0.08
	(0.61)
Women weight	0.02
	(0.02)
Women height	-0.01
	(0.02)
Women BMI	-0.04
	(0.06)
Women schooling (in years)	0.52
	(0.59)
Women work status	-1.15
	(2.66)
No. of children	-1.61
	(1.49)
No. of children died	5.20
	(3.45)
No. of still birth or miscarriage	-8.87***
	(3.03)
Husband characteristics	
Husband schooling (in years)	-1.31**
	(0.62)
Husband work status	2.72
	(1.96)
Family characteristics	
Family structure	-2.43
	(5.59)
Grandmother lives with	14.33**
family	(5.63)

Table continues next page

Table 3: Contd: Was treatment randomized? (Conditional on other characteristics)

	Treated
Family characteristics	
ln(Household income)	-0.01
	(0.01)
Household debt status	-0.87
	(1.40)
Enough money (food)	-4.26
	(6.61)
Enough money (basic needs)	-1.93
	(7.39)
Hamilton score baseline	1.57*
	(0.90)
MSPSS score baseline	0.38*
	(0.19)
Disability score baseline	-1.37
	(1.45)
Asset and other controls	Yes
Percent treated	49.40
N	585

Notes: The sample comprises women from the treated and control group in the THP study. The dependent variable treated is a dummy that takes the value 1 if women is treated and 0 if she is in the control group. All independent variables are from the baseline THP survey. Family structure takes the value 0 if the family is nuclear and 1 if the family is joint/extended. Women and Husband work status are dummies that take the value 1 if they work and 0 otherwise. Grandmother living with family is a dummy variable that equals 1 if grandmother lives with the family and 0 otherwise. Household debt and household financial situation regarding food and basic needs are from the baseline THP survey. The variables are dummies that take the value 1 if the household is in debt, has enough money to buy food and meet basic needs and 0 otherwise. All asset variables are dummies that take the value 1 if the household owns a particular asset and 0 otherwise. Other controls include whether the household had piped drinking water, well with a pump and a flush toilet. The variables are dummies that equal 1 if the response is yes and 0 if no. MSPSS score at baseline shows the extent of social support the women receives at baseline and Disability score shows the extent of disability at baseline.

Table 4: Was treatment effective on mother outcomes? (THP 6-month and 1 year follow-up)

Variable	Treatment	Control	P-value
Rahman et.al. (2008) study			
Percent diagnosed with MDE THP 6-month	23.20	52.75	0.00***
Percent diagnosed with MDE THP 12-month	26.94	58.55	0.00***
Saving Brains (2013) study			
Percent diagnosed with MDE THP 6-month	20.42	51.86	0.00***
Percent diagnosed with MDE THP 12-month	25.26	57.97	0.00***
Hamilton score THP 6-month	4.13	8.44	0.00***
	(5.78)	(7.33)	
Hamilton score THP 12-month	5.04	10.58	0.00***
	(6.29)	(8.18)	
MDE severity specifier THP 6-month	1.45	1.42	0.69
	(0.50)	(0.49)	
MDE severity specifier THP 12-month	1.46	1.58	0.11
	(0.50)	(0.50)	
Number of observations	585	289	296

Notes: The sample comprises mothers from the treated and control groups in the THP study. Depression status is a dummy variable that equals 0 if mothers are not depressed after 6 month/1 year from the baseline THP survey and takes the value 1 if they are depressed.The status is evaluated by the criteria if the mother was having a Major Depressive episode. Hamilton score and MDE severity specifier measure the severity of depression during the THP 6-month and 12-month follow-up surveys.

Table 5: Was treatment effective on mother outcomes? (THP 6-month and 1 year follow-up) (Interacting groups with baseline depression)

	Dep status THP 6 month	Dep status THP 6 month	Dep status THP 1 year	Dep status THP 1 year
Hamilton score				
Treated	-0.33***	-0.05	-0.34***	-0.08
	(0.05)	(0.13)	(0.05)	(0.15)
Hamilton score baseline	0.03***	0.04***	0.02***	0.03***
	(0.01)	(0.01)	(0.01)	(0.01)
Hamilton*Treated		-0.02**		-0.02*
		(0.01)		(0.01)
MDE severity specifier				
Treated	-0.32***	-0.06	-0.33***	-0.13
	(0.05)	(0.13)	(0.05)	(0.12)
MDE severity specifier	0.20***	0.29***	0.13***	0.20***
baseline	(0.04)	(0.06)	(0.04)	(0.04)
MDE*Treated		-0.18**		-0.14*
		(0.08)		(0.07)
Variable	Mean	s.d.		
Dep status THP 6 month	0.36	0.48		
Dep status THP 1 year	0.42	0.49		
N	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control groups in the THP study. The dependent variable is Depression status which is a dummy variable that takes the value 1 if the mother is depressed and 0 if she is not depressed. Depression status is evaluated in the THP 6 month and 1 year follow up survey. Treated is a dummy variable that takes the value 1 if mother is treated and 0 if she is in the control group. Hamilton score of mothers is used to measure the severity of depression by probing mood, feelings of guilt, insomnia etc. and higher scores indicates more depression. MDE severity specifier takes the value 1 if depression is mild, 2 if moderate, 3 if severe without psychotic features, 4 if mood-congruent psychotic features are present, 5 if mood-incongruent psychotic features are present and 9 if the question is not applicable. Mean and s.d. of the dependent variable denotes the percent of mothers depressed at a given point in time. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 6: What observable characteristics predict depression in the THP 1-year follow up?

	Dep status THP 1 year (All)	Dep status THP 1 year(Treated)	Dep status THP 1 year (Control)
Women age	0.02	0.16	-0.52
	(0.59)	(0.50)	(0.84)
Women schooling	0.09	-0.17	0.53
	(0.61)	(0.74)	(0.84)
Women work status	-0.01	2.22	-0.19
	(2.56)	(4.87)	(1.47)
Women weight	-0.01	0.01	-0.01
	(0.02)	(0.03)	(0.02)
Women height	0.01	-0.01	0.01
	(0.02)	(0.02)	(0.02)
Women BMI	0.02	-0.02	0.02
	(0.05)	(0.09)	(0.06)
No. of children	0.64	1.10	0.34
	(1.52)	(1.72)	(2.15)
No. of children died	-1.63	-2.87	4.50
	(3.38)	(6.48)	(4.03)
No. of miscarriage or stillbirth	5.46*	4.20	1.88
	(3.12)	(7.23)	(2.71)
Husband schooling	0.13	0.68	-1.19
	(0.59)	(0.82)	(0.91)
Husband work status	0.16	0.26	0.60
	(2.27)	(3.09)	(2.03)
Family structure	-1.01	2.34	-1.22
	(5.53)	(7.63)	(7.19)
Grandmother lives	-11.04*	-1.82	-15.16***
with family	(5.66)	(7.75)	(4.67)

Table continues next page

Table 6: Contd: What observable characteristics predict depression in the THP 1-year follow up?

	Dep status THP 1 year (All)	Dep status THP 1 year(Treated)	Dep status THP 1 year (Control)
ln(Household income)	0.01	0.01	-0.00
	(0.01)	(0.01)	(0.01)
Household debt status	0.69	0.11	0.16
	(1.30)	(2.26)	(1.80)
Enough money (food)	5.45	3.81	6.45
	(8.53)	(11.70)	(10.47)
Enough money (basic needs)	-6.86	-8.21	-3.60
	(6.62)	(10.72)	(10.40)
Hamilton score baseline	0.01	0.01	0.02
	(0.01)	(0.01)	(0.01)
Disability score baseline	0.78	-1.05	1.57
	(1.05)	(1.41)	(1.60)
Social support score baseline	-0.33***	-0.15	-0.29
	(0.11)	(0.16)	(0.18)
Asset and other controls	Yes	Yes	Yes
Interviewer fixed effects	Yes	Yes	Yes
Dependent variable (mean)	0.42	0.25	0.58
Dependent variable (s.d.)	0.49	0.43	0.49
N	584	584	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. Depression status is a dummy variable that takes the value 1 if mother was depressed and 0 otherwise. The independent variables are all measured in the baseline THP survey. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 7: Was treatment effective on mother outcomes? (THP-6 month and 1 year follow-up)

	Treatment	Control	P-value	N
Rahman et.al. (2008) Study				
Physical disability score (6 months)	2.3	4.2	0.00***	818
	(3.1)	(3.9)		
GAF score (Functioning) (6 months)	79	72	0.00***	818
	(9.9)	(11.9)		
MSPSS score (Social support) (6 months)	50.8	43.7	0.00***	818
	(15.3)	(15.7)		
Physical disability score (12 months)	2.2	5.2	0.00***	798
	(3.3)	(4.5)		
GAF score (Functioning) (12 months)	78	69	0.00***	798
	(9.9)	(12)		
MSPSS score (Social support) (12 months)	51	42.5	0.00***	798
	(12.1)	(13.8)		
	Treatment	**Control**	**P-value**	**N**
Saving Brains (2013) Study				
Physical disability score (6 months)	2.2	4.1	0.00***	585
	(3.1)	(3.8)		
GAF score (Functioning) (6 months)	79.7	72.2	0.00***	585
	(9.7)	(11.8)		
MSPSS score (Social support) (6 months)	51.6	43.9	0.00***	585
	(14.9)	(15.9)		
Physical disability score (12 months)	2.1	5.2	0.00***	585
	(3.2)	(4.5)		
GAF score (Functioning) (12 months)	78.4	69.4	0.00***	585
	(9.7)	(12.2)		
MSPSS score (Social support) (12 months)	51.3	42.9	0.00***	585
	(12.1)	(13.9)		

Notes: s.d. in parentheses. The sample comprises mothers from the treated and control groups in the THP study.

Table 8: Was treatment effective on infant outcomes? (THP-6 month and 1 year follow-up) Replication from Rahman et.al. (2008) study

Variable	Intervention	Control	ICC	Adjusted Mean Difference (95% CI)	P-value
6-months				0.07(-0.09 to 0.23)	0.38
Stunted	32/368(9%)	32/359(9%)			
HAZ	-0.64(1.04)	-0.8(1.01)	0.019		
12-months				0.17(-0.02 to 0.35)	0.07
Stunted	66/360(18%)	81/345(23%)			
HAZ	-1.10(1.02)	-1.36(1.17)	0.032		
6-months				-0.02(-0.18 to 0.14)	0.76
Underweight	43/368 (12%)	43/359 (12%)			
WAZ	-0.83(1.06)	-0.86(1.00)	0.017		
12-months				0.07(-0.08 to 0.22)	0.37
Underweight	215/360(60%)	223/345(65%)			
WAZ	-2.03(1.01)	-2.16(1.03)	0.004		

Notes: Date are n/N(%) or mean (SD), unless otherwise indicated. HAZ=height-for-age Z score. WAZ=weight-for-age Z score. ICC=intra-cluster correlation coefficient.Adjusted for maternal height and weight, parity, education, infant sex, baseline depression, disability, and perceived social support scores with regression model with random eff ect for Union Council.A child is considered stunted or underweight if the growth is less than the anthropometric cutoff of ? SD below the median WAZ and HAZ scores of the National Center for Health Statistics/WHO international references

Table 9: Was treatment effective on infant outcomes? (THP-6 month and 1 year follow-up)

Variable	Treatment	Control	P-value	N
Rahman et.al. (2008) study				
Health outcome				
Diarrhoea episodes	32%	43%	0.04**	705
at 12 months				
Complete immunisation	94%	85%	0.001***	705
at 12 months				
Exclusive breastfeeding	17%	11%	0.20	727
at 6 months				
Contraceptive use	62%	53%	0.002***	791
at 12 months				
Play frequency with infant at 12 months				
Mother	69%	43%	0.00***	705
Father	63%	42%	0.00***	587
Variable	**Treatment**	**Control**	**P-value**	
Saving Brains (2013) study				
Health outcome				
Diarrhoea episodes	40%	47%	0.09*	585
at 6 months				
Diarrhoea episodes	34%	41%	0.07*	585
at 12 months				
Exclusive breastfeeding	20%	11%	0.004***	585
at 6 months				
Contraceptive use	65%	55%	0.01***	585
at 12 months				
Play frequency with infant at 12 months				
Mother	69%	42%	0.00***	585
Father	66%	42%	0.00***	484

Notes: Rahman et.al.(2008) study: Data are n/N (%), unless otherwise indicated. Adjusted for parity, education,infant sex, socioeconomic status, baseline depression, disability, and perceived social support with a random effect for Union Council. For the Saving Brains (2013) study, the tables shows the means of the variables by treatment status and the p-value corresponding to the test for mean differences.

Table 10: Was treatment effective on mother and infant outcomes? (THP-6 month and 1 year follow-up) (New results)

Variable	Treatment	Control	P-value
Health outcomes			
Child weight in kg (6 months)	6.71	6.81	0.16
	(0.87)	(0.98)	
Child height in cm (6 months)	64.96	65.11	0.51
	(2.59)	(2.69)	
Child weight in kg (12 months)	8.15	8.24	0.31
	(1.00)	(1.09)	
Child height in cm (12 months)	72.21	71.96	0.31
	(2.84)	(3.24)	
Acute respiratory infection episode of child (6 months)	40.48	44.25	0.36
	(49.17)	(49.75)	
Acute respiratory infection episode of child (12 months)	27.68	52.36	0.00***
	(44.82)	(50.02)	
Times breastfed in last 24 hours (6 months)	10.21	9.54	0.41
	(3.79)	(3.52)	
Times breastfed in last 24 hours (12 months)	5.79	5.55	0.31
	(2.67)	(2.31)	
Age of child (in months) when mother stopped	4.73	5.05	0.67
breastfeeding (12 months)	(3.99)	(4.08)	
Discussion with family and friends on child's	0.23	0.14	0.007***
emotional and cognitive development (12 months)	(0.42)	(0.35)	
Health behaviours (12 month follow-up)			
Selected appropriate place for delivery of baby	0.92	0.75	0.00***
	(0.26)	(0.43)	
Arranged transport for delivery of baby	0.91	0.69	0.00***
	(0.29)	(0.46)	
Arranged finances for delivery of baby	0.91	0.75	0.00***
	(0.28)	(0.44)	

Table continues next page

Table 10: Contd: Was treatment effective on mother and infant outcomes? (THP-6 month and 1 year follow-up) (New results)

Variable	Treatment	Control	P-value
Relationship with Husband (12 month follow-up)			
Husband looks after basic needs	0.90	0.86	0.14
	(0.29)	(0.34)	
Husband gives pocket money	0.80	0.68	0.00***
	(0.40)	(0.47)	
Husband understands feelings	0.91	0.85	0.04**
	(0.29)	(0.36)	
Husband supports in difficult situations	0.94	0.86	0.00***
	(0.24)	(0.34)	
Happy with husband behaviour	0.90	0.89	0.84
	(0.30)	(0.30)	
Arguments lead to physical violence	0.25	0.30	0.18
	(0.44)	(0.46)	
Number of observations	289	296	

Notes: s.d. in parentheses. The sample comprises mothers from the treated and control groups in the THP study. Acute Respiratory Infection (ARI) episode is a dummy that equals 1 if the child had at least on ARI episode in 2 weeks prior to the interview and 0 otherwise. Discussion with family and friends on child development equals 1 if mother discussed about the child's emotional and cognitive development at least once in the month before the interview and 0 otherwise. Health behaviours are dummies that equal 1 if mother responds yes to the question and 0 if the response is no. Relationship with husband variables are dummies that equal 1 if mother responds yes to the question and 0 if the response is no.

Table 11: Was treatment effective on mother outcomes ? (THP 6-month and 1-year follow-up) (Regression)

	BDQ score 6 month	GAF score 6 month	MSPSS score 6 month	BDQ score 12 month	GAF score 12 month	MSPSS score 12 month
Specification 1 (No Controls)						
Treated	-1.94***	7.52***	7.66***	-3.13***	9.03***	8.41***
	(0.40)	(1.23)	(1.65)	(0.47)	(1.31)	(1.75)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Treated	-1.73***	7.05***	6.10***	-2.78***	7.99***	7.06***
	(0.34)	(1.01)	(1.33)	(0.39)	(1.03)	(1.42)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.13	75.88	47.75	3.65	73.86	47.06
Dependent variable (s.d.)	3.59	11.40	15.86	4.22	11.92	13.73
N	585	585	585	585	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. The dependent variables are all measured during the THP 6 month and 12-month follow-up studies. Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. BDQ score indicates the level of physical disability and higher scores indicate more disability. The Global Assessment of Functioning (GAF) score assigns a number to the individuals overall functioning level. and high scores indicate better functioning. The Multidimensional Scale of Perceived Social Support (MSPSS) score indicates the support received from friends and family as perceived by mothers and high scores indicate more support. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 12: Was treatment effective on mother outcomes ? (THP 6-month and 1-year follow-up) (Regression)

	Exclusive breastfeeding 6 months	Times breastfed 6 months	Times breastfed 12 months	Age of child stopped breastfeeding
Specification 1 (No Controls)				
Treated	0.09*	0.67	0.24	-0.32
	(0.05)	(0.84)	(0.27)	(0.64)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Treated	0.09**	0.08	0.23	-0.10
	(0.04)	(0.90)	(0.25)	(0.78)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.15	9.97	5.67	4.90
Dependent variable (s.d.)	0.36	3.69	2.50	4.02
N	584	90	469	116

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. The variable exclusive breastfeeding takes the value 1 if the mother exclusively breast fed the child during the 6 month follow up and 0 if she did not. Times breastfed denotes the number of times mother breast fed the child in the last 24 hours asked during the THP 6-month and 12-month follow-up surveys. Age of child denotes the age of child (in months) when mother stopped breastfeeding and the question is asked during the THP 12 month follow-up survey. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 13: Was treatment effective on mother outcomes ? (THP 1-year follow-up) (Regression)

	Mother plays with child	Father plays with child	Mother discuss child development	Use birth spacing
Specification 1 (No Controls)				
Treated	0.28***	0.24***	0.09	0.10**
	(0.04)	(0.05)	(0.07)	(0.05)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Treated	0.25***	0.21***	0.04	0.12***
	(0.04)	(0.05)	(0.04)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.55	0.54	0.19	0.60
Dependent variable (s.d.)	0.50	0.50	0.39	0.49
N	585	484	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. Mother and Father play with child are dummies that equal 1 if they played with the child at least once a day everyday in the last month and 0 otherwise. The variable Mother uses birth spacing is a dummy that takes the value 1 if she uses birth spacing and 0 if she does not. The variable Mother discuss child development is a dummy variable that equals 1 if mothers discussed with their family and friends the emotional and cognitive development of their child at least once last month and 0 otherwise. All the dependent variables are measured in the THP 12 month follow-up survey. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 14: Was treatment effective on mother outcomes ? (THP 1-year follow-up) (Regression with new results)

	Husband looks at basic needs	Gives pocket money	Understands feelings	Supports in difficulty	Happy with His behavior	Any physical violence
Specification 1 (No Controls)						
Treated	0.04	0.12**	0.06*	0.07**	0.00	-0.05
	(0.03)	(0.05)	(0.03)	(0.03)	(0.03)	(0.04)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Treated	0.02	0.10**	0.05*	0.07***	-0.00	-0.02
	(0.03)	(0.04)	(0.03)	(0.02)	(0.03)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.88	0.74	0.88	0.90	0.90	0.28
Dependent variable (s.d.)	0.32	0.44	0.33	0.30	0.30	0.45
N	582	582	582	582	582	582

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. The dependent variables are all measured during the THP 12 month follow-up study.Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. Husband looks after basic needs is a dummy that equals 1 if wife answers yes to the question and 0 if she says no. The other dependent variables are coded similarly. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 15: Was treatment effective on mother outcomes ? (THP 1-year follow-up) (Regression with new results)

	Arrangement of appropriate place for delivery	Arrangement of transport	Arrangement of finances
Specification 1 (No Controls)			
Treated	0.18***	0.21***	0.17***
	(0.04)	(0.05)	(0.05)
Household demographic and and asset controls baseline	No	No	No
Baseline depression, disability and social support controls	No	No	No
Interviewer fixed effect	No	No	No
Specification 2 (All controls)			
Treated	0.16***	0.18***	0.14***
	(0.04)	(0.05)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Dependent variable (mean)	0.83	0.80	0.83
Dependent variable (s.d.)	0.37	0.40	0.38
N	585	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. The dependent variables are all measured during the THP 12 month follow-up study. Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. The dependent variables are dummies that equal 1 of the response is yes and 0 if the response in no. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 16: Was treatment effective on infant outcomes ? (THP 6-month and 1-year follow-up) (Regression)

	Child weight (kg) 6 months	Child height (cm) 6 months	Child weight (kg) 12 months	Child height (cm) 12 months
Specification 1 (No Controls)				
Treated	-0.11	-0.15	-0.09	0.26
	(0.09)	(0.25)	(0.09)	(0.29)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Treated	-0.20**	-0.40*	-0.19**	-0.02
	(0.08)	(0.22)	(0.08)	(0.25)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	6.76	65.04	8.19	72.08
Dependent variable (s.d.)	0.93	2.64	1.05	3.05
N	585	585	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 17: Was treatment effective on infant outcomes ? (THP 6-month and 1-year follow-up) (Regression)

	Diarrhoeal episodes	ARI episodes	Diarrhoeal episodes	ARI episodes
	12 months	12 months	6 months	6 months
Specification 1 (No Controls)				
Treated	-0.07	-0.25***	-0.08*	-0.04
	(0.06)	(0.06)	(0.05)	(0.06)
Household demographic and	No	No	No	No
and asset controls baseline				
Baseline depression, disability	No	No	No	No
and social support controls				
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Treated	-0.07	-0.23***	-0.07	-0.04
	(0.05)	(0.05)	(0.04)	(0.05)
Household demographic and	Yes	Yes	Yes	Yes
and asset controls baseline				
Baseline depression, disability	Yes	Yes	Yes	Yes
and social support controls				
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.38	0.40	0.41	0.42
Dependent variable (s.d.)	0.48	0.49	0.49	0.49
N	585	585	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is in the treatment group and 0 if she is in the control group. No. of diarrhoeal episodes is based on whether the child had diarrhoea within 2 weeks prior to the survey. We create a dummy that equals 0 if the child had no diarrhoeal episodes and 1 if the child had at least one diarrhoeal episode. Acute Respiratory Infection (ARI) episodes is based on whether the child had ARI episodes with 2 weeks prior to the survey. ARI is defined as the presence of cough, nasal/postnasal secretions, and rapid breathing. We create a dummy that equals 0 if the child had no ARI episodes and 1 if the child had at least one ARI episode.*, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 18: What observable factors predict depression in the 7-year follow-up and any intermediate episodes?

	Dep status in 2013	Permanently recovered	Never recovered	MDEA	MDEB
Women age	3.18	-3.46	-0.46	3.02	3.02
	(4.35)	(6.17)	(3.28)	(3.54)	(2.35)
Women schooling	-0.14	0.04	0.03	0.27	0.36
	(0.56)	(0.56)	(0.39)	(0.48)	(0.26)
Women work status	2.36	-3.75	-1.49*	1.85	0.05
	(2.83)	(2.89)	(0.74)	(2.15)	(0.45)
Women weight	-0.18	-0.38	-1.62	0.35	0.90
	(2.17)	(2.56)	(1.93)	(1.38)	(0.92)
Women height	-0.40	0.84	1.00	-0.68	-0.84
	(1.54)	(1.79)	(1.44)	(0.99)	(0.69)
Women BMI	-0.61	2.42	3.41	-1.03	-2.16
	(5.21)	(6.34)	(4.65)	(3.29)	(2.35)
No. of children	0.96	-0.92	0.66	0.77	-0.38
	(1.33)	(1.34)	(0.94)	(1.15)	(0.48)
No. of children died	1.05	1.75	1.18	0.35	3.00***
	(3.64)	(3.66)	(3.36)	(1.91)	(1.10)
No. of miscarriage or stillbirth	0.97	-5.36	0.99	-0.28	-3.22***
	(3.91)	(3.23)	(3.31)	(2.35)	(1.12)
Husband schooling	-0.54	0.86*	0.44	-0.21	-0.28
	(0.44)	(0.48)	(0.40)	(0.37)	(0.24)
Husband works status	-3.06***	1.11	-1.81**	-0.94	-0.25
	(0.87)	(2.34)	(0.70)	(0.58)	(0.32)
Family structure	-1.92	0.75	-2.35	-1.92	-2.18
	(4.51)	(6.04)	(4.04)	(3.82)	(1.82)
Grandmother lives with family	-1.44	8.99*	-3.32	2.98	1.42
	(4.61)	(4.75)	(4.44)	(3.88)	(1.68)

Table continues next page

Table 18: What observable factors predict depression in the 7-year follow-up and any intermediate episodes?

	Dep status in 2013	Permanently recovered	Never recovered	MDEA	MDEB
ln(Household income)	-0.01	-0.00	0.00	-0.00	0.00
	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)
Household debt status	1.06	-0.77	0.95	-0.53	0.27
	(0.88)	(1.31)	(0.91)	(0.85)	(0.69)
Enough money (food)	-4.72	-3.54	-2.77	-3.05	1.35
	(5.73)	(7.78)	(5.38)	(4.43)	(3.01)
Enough money (basic needs)	5.85	-0.76	-1.90	2.91	0.43
	(5.02)	(6.18)	(4.41)	(4.20)	(3.09)
Hamilton score baseline	0.55	-0.96	0.36	-0.15	0.27
	(0.61)	(0.73)	(0.43)	(0.34)	(0.19)
Disability score baseline	1.70**	-0.85	1.65**	0.13	-0.60*
	(0.82)	(0.98)	(0.69)	(0.65)	(0.31)
Social support score baseline	-0.17*	0.32***	-0.16*	-0.08	-0.05
	(0.10)	(0.11)	(0.09)	(0.09)	(0.05)
Asset & other controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent Variable Mean	0.27	0.47	0.16	0.13	0.04
Dependent Variable s.d.	0.45	0.50	0.37	0.34	0.18
N	585	585	584	566	566

Notes: Robust standard errors clustered by Union Council are in parentheses. Mean and s.d. of the dependent variable denotes the percent of mothers depressed at a given point in time. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 19: Persistence of depression over time (Depressive episodes)

	Depression status 2013	Depression status 2013	Depression status 2013
	All	Treated	Control
MDEC	0.19*		0.12
	(0.11)		(0.16)
MDEB	0.12	0.01	0.23
	(0.12)	(0.18)	(0.16)
MDEA	0.39***	0.47***	0.34***
	(0.07)	(0.13)	(0.09)
Depression status	0.16***	0.12*	0.21***
THP 1 year	(0.04)	(0.06)	(0.05)
Variable	Mean	s.d.	
Dep status 2013	0.27	0.45	
N	565	282	283

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. MDEA, MDEB and MDEC are dummy variables that take the value 1 if the mother had a depressive episodes A, B & C respectively and 0 if she did not. Depression status is a dummy variable that takes the value 1 if mother was depressed and 0 otherwise.*, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 20: Persistence of depression over time (Intermediate years)

	Depression status 2013	Depression status 2013	Depression status 2013
	All	Treated	Control
Dep status 2012	0.14	-0.07	0.20
	(0.11)	(0.23)	(0.12)
Dep status 2011	0.34***	0.59***	0.08
	(0.11)	(0.15)	(0.13)
Dep status 2010	0.13	-0.07	0.33**
	(0.14)	(0.21)	(0.15)
Dep status 2009	0.16	0.25	0.21
	(0.14)	(0.20)	(0.20)
Dep status 2008	0.09	-0.06	0.30*
	(0.15)	(0.20)	(0.14)
Dep status 2007	0.13	0.04	0.07
	(0.17)	(0.24)	(0.18)
Dep status 2006	0.25	0.59*	0.09
	(0.18)	(0.34)	(0.21)
Dep status THP 1 year	0.16***	0.13*	0.20***
	(0.04)	(0.06)	(0.05)
Variable	Mean	s.d.	
Dep status 2013	0.27	0.45	
N	566	566	566

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. Depression status is a dummy variable that takes the value 1 if mother was depressed and 0 otherwise. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 21: Was treatment effective on mother and family outcomes? (7 year follow-up) (Victoria)

Sample Characteristics:	(1)	(2)	(3)
	Treated	Control	P-value
Fertility and Birth spacing			
No. of children	4.17	4.33	0.15
	(1.39)	(1.43)	
No. born after index child	1.08	1.01	0.44
	(0.96)	(1.00)	
Birth interval 1	3.35	3.02	0.04**
	(1.61)	(1.55)	
Birth interval 2	2.44	2.44	0.98
	(1.34)	(1.32)	
Birth interval 3	2.04	2.67	0.05
	(1.14)	(1.03)	
Mother's Mental Health			
Overall health in past 30 days (1=Very good 5=Very bad)	3.12	3.16	0.60
	(0.94)	(0.96)	
Depressed (MDE)	0.24	0.30	0.11
	(0.94)	(0.96)	
Recovered permanently	0.60	0.34	0.00***
	(0.49)	(0.48)	
Never recovered	0.09	0.23	0.00***
	(0.29)	(0.42)	
Percent with MDEA	0.11	0.15	0.11
	(0.02)	(0.02)	
Percent with MDEB	0.03	0.04	0.66
	(0.01)	(0.01)	
Mother's characteristics			
Mother employed	0.13	0.09	0.16
	(0.34)	(0.29)	
Mother empowered	0.62	0.52	0.01**
	(0.49)	(0.50)	

Table continues next page

Table 21: Was treatment effective on mother and family outcomes? (7 year follow-up) (Victoria)

Sample Characteristics:	(1)	(2)	(3)
	Treated	Control	P-value
Father's characteristics			
Father employed	0.87	0.87	0.91
	(0.34)	(0.34)	
Father non-manual/professional worker	0.07	0.06	0.81
	(0.25)	(0.24)	
Family characteristics			
Family structure (0=Nuclear 1=Joint/extended)	0.56	0.48	0.04**
	(0.50)	(0.50)	
Grandmother' living with family	0.42	0.31	0.01**
	(0.49)	(0.46)	
Number of adults living	3.82	3.62	0.28
	(2.18)	(2.08)	
Household income and SES			
ln(Household income)	7.53	8.09	0.04**
	(3.57)	(3.09)	
SES: LHW rating (1=Richest 5=Poorest)	3.42	3.54	0.05**
	(0.72)	(0.76)	
Household source of drinking water (piped drinking water)	0.09	0.08	0.81
	(0.28)	(0.27)	
Principal type of toilet facility (flush toilet)	0.57	0.58	0.80
	(0.50)	(0.49)	

Table continues next page

Table 21: Was treatment effective on mother and family outcomes? (7 year follow-up) (Victoria)

Sample Characteristics:	(1)	(2)	(3)
	Treated	Control	P-value
Child outcomes			
Child Physical Health weight in kgs	20.70	20.87	0.58
	(0.24)	(0.21)	
Child Physical Health: length in cm	119.22	120.47	0.25
Completed immunization	0.98	0.98	0.75
	(0.01)	(0.01)	
Child Physical Health: severe illness	0.28	0.31	0.47
	(0.03)	(0.03)	
Child Physical Health: Hospitalized	0.12	0.19	0.01**
	(0.02)	(0.02)	
Child test outcomes			
Verbal comprehension index	86.26	85.29	0.40
	(0.83)	(0.79)	
Visual spatial index	85.92	87.55	0.16
	(0.78)	(0.89)	
Full scale IQ	82.53	82.15	0.69
	(0.67)	(0.66)	
Sample size	289	296	585

* $p < .10$, ** $p < .05$, *** $p < .01$

Note:

Table 22: Was treatment effective on mother and family outcomes? (7 year follow-up)

Sample Characteristics:	(1)	(2)	(3)
	Treated	Control	P-value
Household socio-economic status			
Enough money basic needs	0.64	0.58	0.10*
	(0.48)	(0.49)	
Enough money food	0.74	0.65	0.02**
	(0.44)	(0.48)	
Expenditure on food	6889.73	6804.46	0.87
	(6515.24)	(6481.91)	
Expenditure on health (last week)	837.28	1092.46	0.18
	(1895.12)	(2630.86)	
Expenditure on health (last month)	2053.75	2065.84	0.97
	(5054.29)	(3378.31)	
Expenditure on education (last month)	2589.11	2187.18	0.10*
	(3158.89)	(2764.70)	
Household debt status	0.65	0.62	0.44
	(0.48)	(0.49)	
MSPSS score			
Special person around in need	3.56	3.10	0.00***
	(1.34)	(1.44)	
Special person to share joys and sorrows	3.66	3.38	0.01**
	(1.29)	(1.38)	
Family tries to help	3.49	3.24	0.02**
	(1.26)	(1.35)	
Family provides emotional support	3.43	3.23	0.07*
	(1.29)	(1.35)	
Special person provides comfort	3.76	3.50	0.01**
	(1.19)	(1.31)	
Friends try to help	2.72	2.47	0.04**
	(1.50)	(1.43)	
Count on friends	2.68	2.52	0.20
	(1.49)	(1.46)	

Table continues next page

Table 22: Was treatment effective on mother and family outcomes? (7 year follow-up)

Sample Characteristics:	(1)	(2)	(3)
	Treated	Control	P-value
Talk to family about problems	3.45	3.24	0.04**
	(1.27)	(1.31)	
Share joys and sorrows with friends	2.87	2.63	0.05**
	(1.51)	(1.47)	
Special person that cares about feelings	3.45	3.19	0.02**
	(1.37)	(1.42)	
Family helps in making decisions	3.60	3.27	0.00***
	(1.24)	(1.34)	
Talk about problems with friends	2.88	2.58	0.01**
	(1.49)	(1.49)	
Relationship with husband			
Husband looks after basic needs	0.84	0.81	0.34
	(0.36)	(0.39)	
Husband helps with doctor visit	0.90	0.88	0.50
	(0.31)	(0.33)	
Husband stops from doctor visit	0.06	0.06	0.93
	(0.24)	(0.23)	
Get pocket money from husband	0.66	0.58	0.05**
	(0.47)	(0.49)	
Husband understands feelings	0.84	0.79	0.12
	(0.37)	(0.41)	
Husband supports in difficulty	0.87	0.85	0.48
	(0.34)	(0.36)	
Happy with husband behaviour	0.87	0.82	0.11
	(0.34)	(0.38)	
Any physical violence	0.26	0.26	0.99
	(0.44)	(0.44)	

Table continues next page

Table 22: Was treatment effective on mother and family outcomes? (7 year follow-up)

Sample Characteristics:	(1)	(2)	(3)
	Treated	Control	P-value
Home environment			
Home environment total score	36.42	34.11	0.00***
	(8.76)	(9.05)	
Responsivity total sore	9.04	8.76	0.04**
	(1.52)	(1.75)	
Maturity total score	5.26	5.24	0.90
	(1.62)	(1.56)	
Emotional climate total score	4.79	4.53	0.11
	(2.01)	(1.53)	
Learning material total score	2.98	2.67	0.01**
	(1.55)	(1.50)	
Enrichment total score	3.04	2.66	0.00***
	(1.41)	(1.40)	
Family companionship total score	3.49	2.95	0.00***
	(1.69)	(1.77)	
Family integration total score	2.89	2.62	0.00***
	(0.88)	(0.92)	
Physical environment total score	4.93	4.67	0.19
	(2.33)	(2.39)	
Sample size	289	296	585

* $p < .10$, ** $p < .05$, *** $p < .01$

Note:

Table 23: First stage regression: Treatment and depression status 1-year follow-up

	Depression status THP 1 year	Depression status THP 1 year
Treated	-0.33***	-0.28***
	(0.04)	(0.04)
Household demographic and	No	Yes
and asset controls baseline		
Baseline depression, disability	No	Yes
and social support controls		
Interviewer fixed effect	No	Yes
Dependent variable (mean)	0.42	
Dependent variable (s.d.)	0.49	
N	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Treated is a dummy variable that equals 1 if mother is treated and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 24: Mother and household outcomes at 7-year follow-up as a function of depression status at 1-year follow-up (IV)

	Mother work status	Father work status	Mother Empowered	log(HH Income)	Family Structure	Grandmother lives with family
Specification 1 (No Controls)						
Dep Status THP 1 year	-0.11	0.01	-0.32*	1.79*	-0.26*	-0.33**
	(0.10)	(0.09)	(0.18)	(1.00)	(0.13)	(0.15)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Dep status THP 1 year	-0.11	0.01	-0.22	1.77*	-0.16	-0.22
	(0.11)	(0.11)	(0.13)	(1.01)	(0.12)	(0.15)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.11	0.87	0.57	7.81	0.52	0.37
Dependent variable (s.d.)	0.32	0.34	0.50	3.34	0.50	0.48
N	584	568	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Mother and father work status are dummies that equal 1 of they work and 0 otherwise. Mother empowered is a dummy that equals 1 if the father gives money to mother and the mother is free to decide on the use of money. Family structure equals 1 if joint and 0 if nuclear. Grandmother living with family equals 1 if grandmother lives with the family and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 25: Mother outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Special person in need	Special person share feelings	Family helps	Family gives emotional support	Special person to comfort	Friends help
Specification 1 (No Controls)						
Dep Status THP 1 year	0.45***	0.21*	0.32***	0.20*	0.26**	0.28**
	(0.13)	(0.11)	(0.11)	(0.12)	(0.11)	(0.14)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Dep status THP 1 year	0.43***	0.24*	0.25*	0.13	0.16	0.28**
	(0.14)	(0.13)	(0.14)	(0.15)	(0.14)	(0.12)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.32	0.26	0.30	0.32	0.22	0.57
Dependent variable (s.d.)	0.47	0.44	0.46	0.47	0.41	0.50
N	584	584	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Perceived social support variables equal 1 if the mother disagrees or strongly disagrees with the respective question and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 26: Mother outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Count on friends	Talk to family about problems	Friends to share feelings	Special person who cares	Family helps in decisions	Talk to friend about problems
Specification 1 (No Controls)						
Dep Status THP 1 year	0.15	0.17	0.24	0.20	0.38***	0.27*
	(0.14)	(0.13)	(0.15)	(0.15)	(0.13)	(0.16)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Dep status THP 1 year	0.15	0.12	0.25*	0.21	0.37***	0.30**
	(0.13)	(0.14)	(0.14)	(0.16)	(0.14)	(0.14)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.56	0.30	0.51	0.31	0.28	0.52
Dependent variable (s.d.)	0.50	0.46	0.50	0.46	0.45	0.50
N	584	584	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Perceived social support variables equal 1 if the mother disagrees or strongly disagrees with the respective question and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 27: Mother outcomes at 7-year follow-up as a function of depression status at 1-year follow-up (Relation with husband) (IV)

	Looks at basic needs	Helps with doctor visit	Stops from doctor visit	Gives pocket money	Understand feelings	Supports in difficulty	Happy with behaviour	Physical violence
Specification 1 (No Controls)								
Dep Status THP 1 year	-0.10	-0.06	-0.00	-0.26	-0.16	-0.07	-0.07	0.00
	(0.10)	(0.06)	(0.06)	(0.19)	(0.12)	(0.09)	(0.09)	(0.13)
Household demographic and and asset controls baseline	No	No	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No	No	No
Specification 2 (All controls)								
Dep status THP 1 year	-0.05	-0.02	-0.05	-0.20*	-0.14	-0.08	-0.15	-0.00
	(0.12)	(0.09)	(0.07)	(0.12)	(0.13)	(0.12)	(0.12)	(0.14)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.83	0.89	0.06	0.62	0.81	0.86	0.85	0.26
Dependent variable (s.d.)	0.38	0.32	0.24	0.49	0.39	0.35	0.36	0.44
N	567	567	567	567	567	567	567	567

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. Relationship with husband variables are dummies that equal 1 if the woman says yes to the respective question and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 28: Mother outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	No. of children	No. of children after index child	Birth Interval 1	Birth Interval 2	Birth Interval 3
Specification 1 (No Controls)					
Dep status THP 1 year	0.53*	-0.20	-0.97**	0.01	2.17
	(0.29)	(0.25)	(0.48)	(0.42)	(1.39)
Household demographic and and asset controls baseline	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No
Specification 2 (All controls)					
Dep status THP 1 year	0.19	-0.09	-1.08**	-0.40	-15.16
	(0.31)	(0.22)	(0.44)	(0.49)	(24.47)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	4.25	1.04	3.19	2.44	2.39
Dependent variable (s.d.)	1.41	0.98	1.59	1.86	1.32
N	584	584	373	184	47

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 29: Household outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Enough money basic	Enough money food	Monthly exp food	Monthly exp health	Monthly exp education	HH debt status
Specification 1 (No Controls)						
Dep Status THP 1 year	-0.21	-0.27*	-190.80	48.27	-1274.13	-0.09
	(0.15)	(0.15)	(1981.12)	(1166.45)	(884.65)	(0.15)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Dep status THP 1 year	-0.14	-0.19	-886.16	548.62	-2315.56***	-0.15
	(0.13)	(0.14)	(1795.97)	(1155.72)	(870.72)	(0.13)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.61	0.69	6846.66	2059.86	2386.08	0.63
Dependent variable (s.d.)	0.49	0.46	6492.99	4286.61	2970.59	0.48
N	582	576	583	583	583	575

multicolumn6p6.2in *Notes:* Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. Enough money (basic needs, food) and household debt status are dummies that equal 1 if the response is yes and 0 if no. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth, the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 30: Household outcomes at 7-year follow-up as a function of treatment

	Home Total score	Responsivity Total Score	Maturity Total Score	Emotional Climate score	Learning Material Score
Specification 1 (No Controls)					
Treated	2.32*	0.28	0.02	0.26	0.31*
	(1.18)	(0.20)	(0.19)	(0.21)	(0.17)
Household demographic and and asset controls baseline	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No
Specification 2 (All Controls)					
Treated	1.25**	0.18	-0.18	0.16	0.20
	(0.60)	(0.11)	(0.11)	(0.18)	(0.13)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	35.25	8.90	5.25	4.66	2.82
Dependent variable (s.d.)	8.98	1.64	1.59	1.97	1.53
N	585	585	585	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 31: Household outcomes at 7-year follow-up as a function of treatment

	Enrichment score	Family Companionship Score	Family Integration Score	Physical Environment score
Specification 1 (No Controls)				
Treated	0.38*	0.55**	0.26***	0.26
	(0.19)	(0.23)	(0.09)	(0.27)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All Controls)				
Treated	0.26*	0.37***	0.14**	0.12
	(0.13)	(0.12)	(0.07)	(0.15)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	2.84	3.22	2.75	4.80
Dependent variable (s.d.)	1.41	1.75	0.91	2.36
N	585	585	585	585

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 32: Was treatment effective on child outcomes? (7-year follow-up)

Variable	Total	Treatment	Control	Diff	P-value
SDQ Total Difficulties Score	11.34	11.55	11.13	0.42	0.33
	(5.27)	(5.32)	(5.23)		
Emotional Symptoms Scale Score (EMSS)	2.42	2.49	2.35	0.14	0.41
	(2.06)	(2.08)	(2.05)		
Conduct Problem Scale Score (CPSS)	3.30	3.29	3.31	-0.02	0.91
	(2.06)	(2.08)	(2.04)		
Hyperactivity Scale Score (HSS)	3.62	3.72	3.52	0.20	0.34
	(2.54)	(2.53)	(2.56)		
Peer Problem Score (PPS)	1.99	2.04	1.94	0.10	0.42
	(1.60)	(1.65)	(1.55)		
Pro-Social Score (PSS)	7.59	7.68	7.50	0.18	0.36
	(2.49)	(2.47)	(2.52)		
Impact score	7.64	7.58	7.71	-0.13	0.90
	(3.75)	(3.46)	(4.18)		
Total Score Spence Scale	21.33	22.31	20.36	1.95	0.09
	(13.77)	(14.14)	(13.35)		
Scoring of Panic attack and agoraphobia	1.75	2.01	1.49	0.52	0.04
	(3.05)	(3.37)	(2.68)		
Scoring of Separation Anxiety	6.10	6.30	5.90	0.40	0.24
	(4.17)	(4.32)	(4.00)		
Scoring of Physical Injury Fears	6.11	6.21	6.00	0.21	0.50
	(3.69)	(3.73)	(3.67)		
Scoring of Social Phobia	2.38	2.35	2.40	-0.05	0.85
	(2.90)	(2.87)	(2.94)		
Scoring of Obsessive Compulsive Disorder	1.40	1.61	1.20	0.41	0.03
	(2.26)	(2.53)	(1.94)		
Scoring of Generalized Anxiety Disorder	3.59	3.83	3.37	0.46	0.09
	(3.29)	(3.30)	(3.27)		
Number of observations	585	289	296		

Notes: The sample comprises mothers from the treated and control groups in the THP study who were re interviewed in the Saving Brains study . The scores depict the socio-emotional outcomes of the index child and the differences by the treatment status of their mothers.

Table 33: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS	ch_ImpScore
Specification 1 (No Controls)							
Dep status THP 1 year	-1.31	-0.43	0.09	-0.63	-0.33	-0.60	0.25
	(1.80)	(0.73)	(0.59)	(0.84)	(0.45)	(0.87)	(2.26)
Household demographic and and asset controls baseline	No	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No	No
Specification 2 (All controls)							
Dep status THP 1 year	-1.21	-0.43	-0.08	-0.68	-0.03	-0.16	6.69**
	(1.60)	(0.56)	(0.59)	(0.72)	(0.46)	(0.64)	(2.89)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	11.34	2.42	3.31	3.62	1.99	7.59	7.64
Dependent variable (s.d.)	5.27	2.06	2.06	2.54	1.60	2.49	3.75
N	584	584	584	584	584	584	55

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS,ch_ImpScore refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score, Pro-social score and the Impact score of the index child. High scores indicate worse outcomes for the index child except the Pro-Social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 34: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Specification 1 (No Controls)							
Dep status THP 1 year	-5.95	-1.63	-1.17	-0.61	0.15	-1.30*	-1.39
	(4.06)	(0.99)	(1.47)	(1.05)	(0.83)	(0.73)	(0.95)
Household demographic and and asset controls baseline	No	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No	No
Specification 2 (All controls)							
Dep status THP 1 year	-5.47	-1.54*	-1.15	0.07	0.13	-2.02***	-0.97
	(3.82)	(0.93)	(1.17)	(1.00)	(0.78)	(0.59)	(1.00)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	21.33	1.75	6.10	6.11	2.38	1.40	3.59
Dependent variable (s.d.)	13.77	3.05	4.17	3.69	2.90	2.26	3.29
N	584	584	584	584	584	584	55

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 35: Was treatment effective on child outcomes? (7-year follow-up)

Variable	Total	Treatment	Control	Diff	P-value
Receive any education	0.99	0.99	0.99	0.00	0.33
	(0.08)	(0.06)	(0.10)		
Private schooling	0.45	0.51	0.40	0.11	0.006
	(0.50)	(0.50)	(0.50)		
Years of prep/nursery school	1.79	1.78	1.79	-0.01	0.86
	(0.74)	(0.71)	(0.77)		
Current grade	1.89	1.85	1.93	-0.08	0.24
	(0.86)	(0.86)	(0.86)		
Expectations on child education	14.30	14.52	14.07	0.45	0.03
	(2.55)	(2.34)	(2.73)		
Number of observations	585	289	296		

Notes: The sample comprises mothers from the treated and control groups in the THP study. Receive any education is a dummy variable that takes the value 1 if the child receives any education and 0 otherwise. Private schooling denotes the percent of children going to private school. It is derived from the variable type of education takes the value 0 if the index child goes to a public/regular primary school, 1 if the child goes to a private school, 2 if Madrasa, 3 if there is Homeschooling and 4 if any other form of education is specified. Current grade denotes the current grade of the index child at the time of the survey. Expectations on child education denotes the no. of years of schooling the mother expects her child to complete.

Table 36: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	ch_edu	ch_edu_type	ch_yrs_prep	ch_grade	expec_chedu
Specification 1 (No Controls)					
Dep status THP 1 year	-0.02	-0.36**	0.03	0.25	-1.39
	(0.02)	(0.18)	(0.43)	(0.25)	(0.92)
Household demographic and and asset controls baseline	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No
Specification 2 (All controls)					
Dep status THP 1 year	-0.03	-0.44***	0.20	0.42	-1.12*
	(0.02)	(0.16)	(0.18)	(0.26)	(0.62)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	0.45	1.79	1.89	14.30
Dependent variable (s.d.)	0.08	0.50	0.74	0.86	2.55
N	583	578	578	578	582

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_edu, ch_edu_type, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, whether the child goes to private/public school (1=private, 0=public) the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. High scores indicate worse outcomes for the index child.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 37: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Urdu alphabet score	Urdu word score	Urdu easy reading score
Specification 1 (No Controls)			
Dep status THP 1 year	0.04	0.30	-0.53
	(0.30)	(0.58)	(0.39)
Household demographic and and asset controls baseline	No	No	No
Baseline depression, disability and social support controls	No	No	No
Interviewer fixed effect	No	No	No
Specification 2 (All controls)			
Dep status THP 1 year	0.16	0.91	-0.25
	(0.31)	(0.55)	(0.36)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	3.54	1.95	0.94
Dependent variable (s.d.)	1.05	1.85	1.54
N	579	579	579

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better literacy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 38: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Number recognition score (single digit)	Number recognition score (double digit)	Addition score (single digit)	Addition score (double digit answer)
Specification 1 (No Controls)				
Dep status THP 1 year	-0.07	0.01	-0.21	-0.18
	(0.21)	(0.60)	(0.29)	(0.31)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Dep status THP 1 year	0.07	0.60	-0.10	0.06
	(0.23)	(0.58)	(0.27)	(0.30)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.78	2.66	1.49	1.24
Dependent variable (s.d.)	0.83	1.80	0.85	0.90
N	579	579	579	578

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 39: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Specification 1 (No Controls)			
Dep status THP 1 year	-3.14	4.95	-1.22
	(5.97)	(4.12)	(4.04)
Household demographic and	No	No	No
and asset controls baseline			
Baseline depression, disability	No	No	No
and social support controls			
Interviewer fixed effect	No	No	No
Specification 2 (All controls)			
Dep status THP 1 year	1.49	7.63**	1.50
	(4.65)	(3.68)	(3.31)
Household demographic and	Yes	Yes	Yes
and asset controls baseline			
Baseline depression, disability	Yes	Yes	Yes
and social support controls			
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	85.77	86.74	82.34
Dependent variable (s.d.)	13.87	14.14	11.36
N	583	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 40: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Risk taken	Risk taken
Dep status THP 1 year	0.05	-0.03
	(0.45)	(0.34)
Times intervened		-0.02
		(0.05)
Number of people intervening		0.02
		(0.07)
Child influenced		-0.04
		(0.08)
Decision time		-0.03
		(0.05)
Household demographic and and asset controls baseline	No	Yes
Baseline depression, disability and social support controls	No	Yes
Interviewer fixed effect	No	Yes
Dependent variable (mean)	2.49	
Dependent variable (s.d.)	1.31	
N	584	583

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed.The dependent variable in this risk taking game are no. of tokens placed by the child in the risky bowl. In column 2 we control for the number of times the child was intervened in the game, number of people who intervened in the game, whether the child was influenced by any intervention in the game and the decision time in minutes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 41: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV)

	Child Weight	Child Height	Complete Immunization	Severe Illness
Specification 1 (No Controls)				
Dep status THP 1 year	0.49	1.46	0.01	0.08
	(1.11)	(1.34)	(0.03)	(0.18)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Dep status THP 1 year	0.74	2.00	0.00	0.10
	(1.04)	(1.40)	(0.03)	(0.12)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	20.78	47.18	0.98	0.29
Dependent variable (s.d.)	3.87	5.21	0.15	0.46
N	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Child weight is in kg and Child length is in cm. Completed immunization is a dummy variable that takes the value 1 if the child completed immunization and 0 if immunization is incomplete. Diagnosed with severe illness is a dummy variable that takes the value 1 if the child was diagnosed with severe illness and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 42: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS
Dep status THP 1 year	1.66	0.37	1.73**	-0.50	0.07	-0.53
	(2.14)	(0.81)	(0.76)	(0.98)	(0.53)	(0.68)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	10.55	2.48	2.95	3.08	2.03	8.05
Dependent variable (s.d.)	4.84	2.09	1.93	2.31	1.62	2.25
N	296	296	296	296	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS,ch_ImpScore refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score, Pro-social score and the Impact score of the index child. High scores indicate worse outcomes for the index child except the Pro-Social score for which high score is good.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 43: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Dep status THP 1 year	1.65	-0.60	1.01	0.54	2.31**	-2.35***	0.75
	(4.77)	(1.17)	(1.50)	(1.30)	(1.04)	(0.79)	(1.21)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	23.24	1.83	6.46	7.16	2.49	1.52	3.78
Dependent variable (s.d.)	13.67	2.93	4.09	3.62	2.91	2.45	3.34
N	296	296	296	296	296	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 44: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	ch_edu	ch_edu_type	ch_yrs_prep	ch_grade	expec_chedu
Dep status THP 1 year	-0.02	-0.58***	0.12	0.84***	-2.59***
	(0.02)	(0.20)	(0.20)	(0.27)	(0.82)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	0.38	1.76	1.96	14.01
Dependent variable (s.d.)	0.06	0.48	0.75	0.85	2.70
N	295	293	293	293	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_edu, ch_edu_type, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, whether the child goes to private/public school (1=private, 0=public) the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 45: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	Urdu alphabet score	Urdu word score	Urdu easy reading score
Dep status THP 1 year	0.01	1.32**	0.23
	(0.29)	(0.64)	(0.46)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	3.66	2.11	1.10
Dependent variable (s.d.)	0.92	1.85	1.63
N	294	294	294

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better literacy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 46: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	Number recognition score (single digit)	Number recognition score (double digit)	Addition score (single digit)	Addition score (double digit answer)
Dep status THP 1 year	-0.28	0.26	0.10	0.02
	(0.24)	(0.58)	(0.33)	(0.37)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.80	2.71	1.53	1.28
Dependent variable (s.d.)	0.78	1.77	0.83	0.90
N	294	294	294	293

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 47: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Dep status THP 1 year	-0.35	6.34	-1.59
	(5.06)	(4.60)	(3.72)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	85.75	86.56	82.83
Dependent variable (s.d.)	14.16	14.82	11.77
N	295	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 48: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child))

	Child Weight	Child Height	Complete Immunization	Severe Illness
Dep status THP 1 year	-1.88	2.98**	0.04	-0.01
	(1.28)	(1.51)	(0.06)	(0.14)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	20.75	46.99	0.97	0.29
Dependent variable (s.d.)	3.98	5.15	0.16	0.45
N	296	296	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Child weight is in kg and Child length is in cm. Completed immunization is a dummy variable that takes the value 1 if the child completed immunization and 0 if immunization is incomplete. Diagnosed with severe illness is a dummy variable that takes the value 1 if the child was diagnosed with severe illness and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 49: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (female child)

	Risk taken
Dep status THP 1 year	-0.60
	(0.46)
Times intervened	-0.11
	(0.06)
Number of people intervening	0.10
	(0.07)
Child influenced	0.09
	(0.13)
Decision time	-0.06
	(0.10)
Household demographic and and asset controls baseline	Yes
Baseline depression, disability and social support controls	Yes
Interviewer fixed effect	Yes
Dependent variable (mean)	2.50
Dependent variable (s.d.)	1.31
N	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed.The dependent variable in this risk taking game are no. of tokens placed by the child in the risky bowl. In column 2 we control for the number of times the child was intervened in the game, number of people who intervened in the game, whether the child was influenced by any intervention in the game and the decision time in minutes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 50: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS
Dep status THP 1 year	-6.31**	-1.49	-2.81**	-1.59	-0.42	0.64
	(2.84)	(0.93)	(1.12)	(1.22)	(0.65)	(1.11)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	12.14	2.36	3.67	4.17	1.95	7.12
Dependent variable (s.d.)	5.58	2.04	2.13	2.65	1.58	2.64
N	288	288	288	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS,ch_ImpScore refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score, Pro-social score and the Impact score of the index child. High scores indicate worse outcomes for the index child except the Pro-Social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 51: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Dep status THP 1 year	-10.13*	-1.98	-3.18	0.74	-2.30	-1.27	-2.14
	(5.91)	(1.27)	(2.00)	(1.43)	(1.51)	(1.05)	(1.46)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	19.37	1.66	5.72	5.03	2.26	1.28	3.40
Dependent variable (s.d.)	13.61	3.16	4.21	3.46	2.89	2.05	3.23
N	288	288	288	288	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 52: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	ch_edu	ch_edu_type	ch_yrs_prep	ch_grade	expec_chedu
Dep status THP 1 year	0.00	-0.38*	0.35	0.07	-0.02
	(0.03)	(0.23)	(0.29)	(0.41)	(0.89)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	0.52	1.81	1.81	14.58
Dependent variable (s.d.)	0.10	0.50	0.74	0.86	2.36
N	288	285	285	285	286

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_edu, ch_edu_type, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, whether the child goes to private/public school (1=private, 0=public) the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 53: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	Urdu alphabet score	Urdu word score	Urdu easy reading score
Dep status THP 1 year	0.83	0.98	-0.73
	(0.63)	(1.11)	(0.62)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	3.42	1.79	0.77
Dependent variable (s.d.)	1.16	1.83	1.43
N	285	285	285

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better literacy outcomes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 54: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	Number recognition score (single digit)	Number recognition score (double digit)	Addition score (single digit)	Addition score (double digit answer)
Dep status THP 1 year	0.60	1.53	-0.32	0.30
	(0.44)	(0.95)	(0.38)	(0.44)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.75	2.60	1.45	1.19
Dependent variable (s.d.)	0.88	1.83	0.86	0.91
N	285	285	285	285

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 55: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Dep status THP 1 year	6.13	11.00	5.78
	(6.57)	(7.13)	(5.76)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	85.79	86.92	81.83
Dependent variable (s.d.)	13.61	13.45	10.92
N	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 56: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	Child Weight	Child Height	Complete Immunization	Severe Illness
Dep status THP 1 year	2.83	0.67	-0.02	0.07
	(1.78)	(1.81)	(0.04)	(0.15)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	20.82	47.39	0.98	0.30
Dependent variable (s.d.)	3.76	5.27	0.13	0.46
N	289	289	289	289

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Child weight is in kg and Child length is in cm. Completed immunization is a dummy variable that takes the value 1 if the child completed immunization and 0 if immunization is incomplete. Diagnosed with severe illness is a dummy variable that takes the value 1 if the child was diagnosed with severe illness and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 57: Child outcomes at 7-year follow-up as a function of depression status at 1-year follow-up(IV) (male child)

	Risk taken
Dep status THP 1 year	0.44
	(0.50)
Times intervened	0.18*
	(0.10)
Number of people intervening	-0.14
	(0.11)
Child influenced	-0.15
	(0.10)
Decision time	0.06
	(0.07)
Household demographic and and asset controls baseline	Yes
Baseline depression, disability and social support controls	Yes
Interviewer fixed effect	Yes
Dependent variable (mean)	2.48
Dependent variable (s.d.)	1.30
N	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. The dependent variable in this risk taking game are no. of tokens placed by the child in the risky bowl. In column 2 we control for the number of times the child was intervened in the game, number of people who intervened in the game, whether the child was influenced by any intervention in the game and the decision time in minutes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 58: First stage regression: Treatment and components of Mother depression in 2013

	Depressed in 2013	Loss of interest in 2013	Weight gain/loss in 2013	Sleep disturbance in 2013
Treated	-0.08*	-0.09**	0.02	-0.02
	(0.05)	(0.04)	(0.04)	(0.04)
Controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.46	0.33	0.26	0.33
Dependent variable (s.d.)	0.50	0.47	0.44	0.47
N	452	452	452	452
	Psychomotor agitation in 2013	Fatigue in 2013	Guilt feeling in 2013	No concentration in 2013
Treated	-0.02	0.01	0.02	0.00
	(0.05)	(0.05)	(0.04)	(0.04)
Controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.47	0.61	0.24	0.30
Dependent variable (s.d.)	0.50	0.49	0.43	0.46
N	452	452	452	452
	Suicidal or death thought in 2013			
Treated	0.00			
	(0.03)			
Controls	Yes			
Interviewer fixed effect	Yes			
Dependent variable (mean)	0.18			
Dependent variable (s.d.)	0.39			
N	452			

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the control group in the THP study. All dependent variables are dummies that takes the value 1 if the response is yes and 0 if no. Treated is a dummy variable that equals 1 if mother is treated and 0 otherwise. All controls are measured at baseline. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 59: Child outcomes at 7-year follow-up as a function of mother being depressed at 7-year follow-up(IV)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS
Depressed in 2013	-5.74	-1.28	-2.26	-1.21	-1.00	1.78
	(7.40)	(2.54)	(2.94)	(2.98)	(1.86)	(2.89)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	11.15	2.34	3.20	3.62	1.99	7.88
Dependent variable (s.d.)	5.32	2.04	2.07	2.58	1.60	2.37
N	452	452	452	452	452	452

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depressed in 2013 is a dummy variable that takes the value 1 if the mother is depressed at the SB 2013 study and 0 if she is not depressed. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSSrefer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score, Pro-social score of the index child. High scores indicate worse outcomes for the index child except the pro-social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 60: Child outcomes at 7-year follow-up as a function of mother being depressed at 7-year follow-up(IV)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Depressed in 2013	-15.70	-5.77	-4.22	2.28	1.94	-7.00*	-2.94
	(19.23)	(4.74)	(4.51)	(4.47)	(3.78)	(4.19)	(4.75)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	21.56	1.79	6.19	6.20	2.27	1.43	3.68
Dependent variable (s.d.)	13.69	3.02	4.21	3.68	2.91	2.30	3.28
N	452	452	452	452	452	452	452

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depressed in 2013 is a dummy variable that takes the value 1 if the mother is depressed at the SB 2013 study and 0 if she is not depressed. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 61: Child outcomes at 7-year follow-up as a function of mother being depressed at 7-year follow-up(IV)

	ch_edu	ch_yrs_prep	ch_grade	expec_chedu
Depressed in 2013	-0.16	1.38	0.47	-5.99
	(0.12)	(1.25)	(0.77)	(4.07)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	1.87	1.87	14.32
Dependent variable (s.d.)	0.10	0.87	0.70	2.53
N	452	447	447	450

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_edu, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 62: Child outcomes at 7-year follow-up as a function of mother being depressed at 7-year follow-up(IV)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Depressed in 2013	-2.96	21.37	-4.14
	(17.36)	(17.91)	(12.21)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	86.66	86.84	82.55
Dependent variable (s.d.)	14.23	13.93	11.37
N	451	452	452

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth, the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 63: Child outcomes at 7-year follow-up as a function of mother having loss of interest at 7-year follow-up(IV)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS
Loss of interest in 2013	-5.07	-1.13	-1.99	-1.07	-0.88	1.57
	(6.38)	(2.26)	(2.46)	(2.58)	(1.66)	(2.50)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	11.15	2.34	3.20	3.62	1.99	7.88
Dependent variable (s.d.)	5.32	2.04	2.07	2.58	1.60	2.37
N	452	452	452	452	452	452

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depressed in 2013 is a dummy variable that takes the value 1 if the mother is depressed at the SB 2013 study and 0 if she is not depressed. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score, Pro-social score of the index child. High scores indicate worse outcomes for the index child except the pro-social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 64: Child outcomes at 7-year follow-up as a function of mother having loss of interest at 7-year follow-up(IV)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Loss of interest in 2013	-13.85	-5.09	-3.72	2.01	1.72	-6.17	-2.59
	(17.74)	(3.95)	(4.24)	(3.83)	(3.22)	(3.92)	(4.36)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	21.56	1.79	6.19	6.20	2.27	1.43	3.68
Dependent variable (s.d.)	13.69	3.02	4.21	3.68	2.91	2.30	3.28
N	452	452	452	452	452	452	452

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Loss of interest in 2013 is a dummy variable that takes the value 1 if the mother reports loss of interest at the SB 2013 study and 0 if she does not. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 65: Child outcomes at 7-year follow-up as a function of mother having loss of interest at 7-year follow-up(IV)

	ch_edu	ch_yrs_prep	ch_grade	expec_chedu
Loss of interest in 2013	-0.14	1.14	0.39	-5.06*
	(0.11)	(0.91)	(0.61)	(2.86)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	1.87	1.87	14.32
Dependent variable (s.d.)	0.10	0.87	0.70	2.53
N	452	447	447	450

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. Our dependent variables ch_edu, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 66: Child outcomes at 7-year follow-up as a function of mother having loss of interest at 7-year follow-up(IV)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Loss of interest in 2013	-2.61	18.86	-3.66
	(15.49)	(14.41)	(11.02)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	86.66	86.84	82.55
Dependent variable (s.d.)	14.23	13.93	11.37
N	451	452	452

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Depression status is a dummy variable that takes the value 1 if the mother is depressed at the 1 year follow up study and 0 if she is not depressed. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, socio-economic rating by the health worker, household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

11 Appendix

Thus reduced form equation we estimate is as follows

$$Outcome_{2013} = Treatment + Baselinecontrols_{2005} + e \tag{3}$$

where $Outcome_{2013}$ denotes the mother, household and child outcomes in the 2013 survey, $Treatment$ is a dummy variable that equals 1 of mother is treated and 0 if she is in the control group. $Baselinecontrols_{2005}$ denote a number of mother and household characteristics at baseline and include mother age, mother schooling, mother work status, mother weight, mother height, mother BMI, no. of children, no. of children died, no. of miscarriage or stillbirth, father schooling, father work status, grandmother living with family status, family structure, the ownership of durable assets by the household, log(household income), ownership of well with pump, availability of piped drinking water, flush toilet, household debt status and the financial status to buy food and cover basic needs. It also includes the Hamilton score, disability score and social support score of mothers at baseline.

Table 67: Mother and household outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Mother work status	Father work status	Mother Empowered	log(HH Income)	Family Structure	Grandmother lives with family
Specification 1 (No Controls)						
Treated	0.04	-0.00	0.10*	-0.58*	0.09**	0.11**
	(0.03)	(0.03)	(0.06)	(0.32)	(0.04)	(0.05)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Treated	0.03	-0.00	0.06	-0.50*	0.04	0.06
	(0.03)	(0.03)	(0.04)	(0.29)	(0.04)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.11	0.87	0.57	7.81	0.52	0.37
Dependent variable (s.d.)	0.32	0.34	0.50	3.34	0.50	0.48
N	584	568	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treatment and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Mother and father work status are dummies that equal 1 of they work and 0 otherwise. Mother empowered is a dummy that equals 1 if the father gives money to mother and the mother is free to decide on the use of money. Family structure equals 1 if joint and 0 if nuclear. Grandmother living with family equals 1 if grandmother lives with the family and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 68: Mother outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Special person in need	Special person share feelings	Family helps	Family gives emotional support	Special person to comfort	Friends help
Specification 1 (No Controls)						
Treated	-0.15***	-0.07*	-0.10**	-0.07	-0.08**	-0.09*
	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Treated	-0.12***	-0.07*	-0.07*	-0.04	-0.05	-0.08**
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.32	0.26	0.30	0.32	0.22	0.57
Dependent variable (s.d.)	0.47	0.44	0.46	0.47	0.41	0.50
N	584	584	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treatment and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group.Perceived social support variables equal 1 if the mother disagrees or strongly disagrees with the respective question and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 69: Mother outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Count on friends	Talk to family about problems	Friends to share feelings	Special person who cares	Family helps in decisions	Talk to friend about problems
Specification 1 (No Controls)						
Treated	-0.05	-0.06	-0.08	-0.07	-0.12***	-0.09
	(0.05)	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Treated	-0.04	-0.03	-0.07	-0.06	-0.11**	-0.09*
	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.56	0.30	0.51	0.31	0.28	0.52
Dependent variable (s.d.)	0.50	0.46	0.50	0.46	0.45	0.50
N	584	584	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treatment and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Perceived social support variables equal 1 if the mother disagrees or strongly disagrees with the respective question and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 70: Mother outcomes at 7-year follow-up as a function of treatment (Relation with husband) (Reduced Form)

	Looks at basic needs	Helps with doctor visit	Stops from doctor visit	Gives pocket money	Understand feelings	Supports in difficulty	Happy with behaviour	Physical violence
Specification 1 (No Controls)								
Treated	0.03	0.02	0.00	0.08	0.05	0.02	0.05	-0.00
	(0.03)	(0.02)	(0.02)	(0.06)	(0.04)	(0.03)	(0.03)	(0.04)
Household demographic and and asset controls baseline	No	No	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No	No	No
Specification 2 (All controls)								
Treated	0.01	0.01	0.01	0.05	0.04	0.02	0.04	0.00
	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.83	0.89	0.06	0.62	0.81	0.86	0.85	0.26
Dependent variable (s.d.)	0.38	0.32	0.24	0.49	0.39	0.35	0.36	0.44
N	567	567	567	567	567	567	567	567

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treatment and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Relationship with husband variables are dummies that equal 1 if the woman says yes to the respective question and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 71: Mother outcomes at 7-year follow-up as a function treatment (Reduced form)

	No. of children	No. of children after index child	Birth Interval 1	Birth Interval 2	Birth Interval 3
Specification 1 (No Controls)					
Treated	-0.17*	0.07	0.33**	-0.01	-0.63**
	(0.10)	(0.08)	(0.15)	(0.18)	(0.28)
Household demographic and and asset controls baseline	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No
Specification 2 (All controls)					
Treated	-0.06	0.03	0.34**	0.13	-1.23**
	(0.10)	(0.06)	(0.15)	(0.19)	(0.60)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	4.25	1.04	3.19	2.44	2.39
Dependent variable (s.d.)	1.41	0.98	1.59	1.86	1.32
N	584	584	373	184	47

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Birth Interval 1 is no. of years between the index child and the next born sibling. Birth Interval 2 is no. of years between the first and second birth after the index child. Birth Interval 2 is no. of years between the second and third birth after the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 72: Household outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Enough money basic	Enough money food	Monthly exp food	Monthly exp health	Monthly exp education	HH debt status
Specification 1 (No Controls)						
Treated	0.07	0.09*	62.13	-258.90	414.90	0.03
	(0.05)	(0.05)	(653.63)	(204.05)	(296.55)	(0.05)
Household demographic and and asset controls baseline	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No
Specification 2 (All controls)						
Treated	0.04	0.06	249.67	-241.08	652.39***	0.04
	(0.04)	(0.04)	(523.53)	(169.69)	(229.61)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.61	0.69	6846.66	2059.86	2386.08	0.63
Dependent variable (s.d.)	0.49	0.46	6492.99	4286.61	2970.59	0.48
N	582	576	583	583	583	583

multicolumn6p6.2in *Notes:* Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Enough money (basic needs, food) and household debt status are dummies that equal 1 if the response is yes and 0 if no. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(Household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 73: Child outcomes at 7-year follow-up as a function of treatment (Reduced Form)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS	ch_ImpScore
Specification 1 (No Controls)							
Treated	0.43	0.14	-0.03	0.20	0.11	0.20	-0.13
	(0.59)	(0.24)	(0.20)	(0.27)	(0.15)	(0.29)	(1.20)
Household demographic and and asset controls baseline	No	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No	No
Specification 2 (All controls)							
Treated	0.34	0.12	0.02	0.19	0.01	0.04	-3.17*
	(0.47)	(0.17)	(0.18)	(0.21)	(0.14)	(0.19)	(1.63)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	11.34	2.42	3.31	3.62	1.99	7.59	7.64
Dependent variable (s.d.)	5.27	2.06	2.06	2.54	1.60	2.49	3.75
N	584	584	584	584	584	584	55

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS,ch_ImpScore refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score, Pro-social score and the Impact score of the index child. High scores indicate worse outcomes for the index child except the Pro-Social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 74: Child outcomes at 7-year follow-up as a function of treatment (Reduced Form)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Specification 1 (No Controls)							
Treated	1.95	0.53*	0.38	0.20	-0.05	0.43*	0.45
	(1.33)	(0.31)	(0.48)	(0.35)	(0.27)	(0.23)	(0.31)
Household demographic and and asset controls baseline	No	No	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No	No	No
Specification 2 (All controls)							
Treated	1.55	0.43*	0.32	-0.02	-0.04	0.57***	0.27
	(1.11)	(0.25)	(0.34)	(0.30)	(0.23)	(0.18)	(0.29)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	21.33	1.75	6.10	6.11	2.38	1.40	3.59
Dependent variable (s.d.)	13.77	3.05	4.17	3.69	2.90	2.26	3.29
N	584	584	584	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 75: Child outcomes at 7-year follow-up as a function of treatment (Reduced Form)

	ch_edu	ch_edu_type	ch_yrs_prep	ch_grade	expec_chedu
Specification 1 (No Controls)					
Treated	0.01	0.12**	-0.01	-0.08	0.46
	(0.01)	(0.06)	(0.14)	(0.09)	(0.29)
Household demographic and and asset controls baseline	No	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No	No
Interviewer fixed effect	No	No	No	No	No
Specification 2 (All controls)					
Treated	0.01	0.12**	-0.06	-0.12	0.32*
	(0.01)	(0.05)	(0.06)	(0.08)	(0.18)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	0.45	1.79	1.89	14.30
Dependent variable (s.d.)	0.08	0.50	0.74	0.86	2.55
N	583	578	578	578	582

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_edu, ch_edu_type, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, whether the child goes to private/public school (1=private, 0=public) the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 76: Child outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Urdu alphabet score	Urdu word score	Urdu easy reading score
Specification 1 (No Controls)			
Treated	-0.01	-0.10	0.18
	(0.10)	(0.19)	(0.13)
Household demographic and and asset controls baseline	No	No	No
Baseline depression, disability and social support controls	No	No	No
Interviewer fixed effect	No	No	No
Specification 2 (All controls)			
Treated	-0.05	-0.26*	0.07
	(0.09)	(0.15)	(0.10)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	3.54	1.95	0.94
Dependent variable (s.d.)	1.05	1.85	1.54
N	579	579	579

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. High scores indicate better literacy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 77: Child outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Number recognition score (single digit)	Number recognition score (double digit)	Addition score (single digit)	Addition score (double digit answer)
Specification 1 (No Controls)				
Treated	0.02	-0.00	0.07	0.06
	(0.07)	(0.20)	(0.10)	(0.10)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Treated	-0.02	-0.17	0.03	-0.02
	(0.07)	(0.16)	(0.08)	(0.09)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.78	2.66	1.49	1.24
Dependent variable (s.d.)	0.83	1.80	0.85	0.90
N	579	579	579	578

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 78: Child outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Specification 1 (No Controls)			
Treated	1.02	-1.62	0.40
	(2.00)	(1.32)	(1.35)
Household demographic and and asset controls baseline	No	No	No
Baseline depression, disability and social support controls	No	No	No
Interviewer fixed effect	No	No	No
Specification 2 (All controls)			
Treated	-0.42	-2.16**	-0.42
	(1.37)	(1.04)	(0.98)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	85.77	86.74	82.34
Dependent variable (s.d.)	13.87	14.14	11.36
N	583	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 79: Child outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Risk taken	Risk taken
Treated	-0.02	0.01
	(0.15)	(0.10)
Times intervened		-0.02
		(0.05)
Number of people intervening		0.02
		(0.07)
Child influenced		-0.04
		(0.09)
Decision time		-0.03
		(0.06)
Household demographic and and asset controls baseline	No	Yes
Baseline depression, disability and social support controls	No	Yes
Interviewer fixed effect	No	Yes
Dependent variable (mean)	2.49	
Dependent variable (s.d.)	1.31	
N	584	583

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group.The dependent variable in this risk taking game are no. of tokens placed by the child in the risky bowl. In column 2 we control for the number of times the child was intervened in the game, number of people who intervened in the game, whether the child was influenced by any intervention in the game and the decision time in minutes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 80: Child outcomes at 7-year follow-up as a function of treatment (Reduced form)

	Child Weight	Child Height	Complete Immunization	Severe Illness
Specification 1 (No Controls)				
Treated	-0.16	-0.48	-0.00	-0.02
	(0.37)	(0.44)	(0.01)	(0.06)
Household demographic and and asset controls baseline	No	No	No	No
Baseline depression, disability and social support controls	No	No	No	No
Interviewer fixed effect	No	No	No	No
Specification 2 (All controls)				
Treated	-0.21	-0.56	-0.00	-0.03
	(0.31)	(0.42)	(0.01)	(0.03)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	20.78	47.18	0.98	0.29
Dependent variable (s.d.)	3.87	5.21	0.15	0.46
N	584	584	584	584

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Child weight is in kg and Child length is in cm. Completed immunization is a dummy variable that takes the value 1 if the child completed immunization and 0 if immunization is incomplete. Diagnosed with severe illness is a dummy variable that takes the value 1 if the child was diagnosed with severe illness and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 81: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS
Treated	-0.51	-0.11	-0.53**	0.15	-0.02	0.16
	(0.69)	(0.27)	(0.22)	(0.33)	(0.18)	(0.22)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	10.55	2.48	2.95	3.08	2.03	8.05
Dependent variable (s.d.)	4.84	2.09	1.93	2.31	1.62	2.25
N	296	296	296	296	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score and Pro-social score of the index child. High scores indicate worse outcomes for the index child except the Pro-Social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 82: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Treated	-0.51	0.19	-0.31	-0.17	-0.71**	0.72***	-0.23
	(1.63)	(0.38)	(0.53)	(0.43)	(0.35)	(0.19)	(0.40)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	23.24	1.83	6.46	7.16	2.49	1.52	3.78
Dependent variable (s.d.)	13.67	2.93	4.09	3.62	2.91	2.45	3.34
N	296	296	296	296	296	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 83: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	ch_edu	ch_edu_type	ch_yrs_prep	ch_grade	expec_chedu
Treated	0.01	0.18***	-0.04	-0.26**	0.80***
	(0.01)	(0.05)	(0.07)	(0.10)	(0.23)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	0.38	1.76	1.96	14.01
Dependent variable (s.d.)	0.06	0.48	0.75	0.85	2.70
N	295	293	293	293	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_edu, ch_edu_type, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, whether the child goes to private/public school (1=private, 0=public) the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 84: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	Urdu alphabet score	Urdu word score	Urdu easy reading score
Treated	-0.00	-0.42**	-0.07
	(0.10)	(0.20)	(0.16)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	3.66	2.11	1.10
Dependent variable (s.d.)	0.92	1.85	1.63
N	294	294	294

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. High scores indicate better literacy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 85: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	Number recognition score (single digit)	Number recognition score (double digit)	Addition score (single digit)	Addition score (double digit answer)
Treated	0.09	-0.08	-0.03	-0.01
	(0.08)	(0.20)	(0.12)	(0.13)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.80	2.71	1.53	1.28
Dependent variable (s.d.)	0.78	1.77	0.83	0.90
N	294	294	294	293

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 86: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Treated	0.10	-1.95	0.49
	(1.68)	(1.53)	(1.23)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	85.75	86.56	82.83
Dependent variable (s.d.)	14.16	14.82	11.77
N	295	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 87: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	Child Weight	Child Height	Complete Immunization	Severe Illness
Treated	0.58	-0.92*	-0.01	0.00
	(0.39)	(0.51)	(0.02)	(0.05)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	20.75	46.99	0.97	0.29
Dependent variable (s.d.)	3.98	5.15	0.16	0.45
N	296	296	296	296

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Child weight is in kg and Child length is in cm. Completed immunization is a dummy variable that takes the value 1 if the child completed immunization and 0 if immunization is incomplete. Diagnosed with severe illness is a dummy variable that takes the value 1 if the child was diagnosed with severe illness and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 88: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (female child)

	Risk taken
Treated	0.18
	(0.15)
Times intervened	-0.10
	(0.06)
Number of people intervening	0.12*
	(0.06)
Child influenced	0.09
	(0.14)
Decision time	-0.07
	(0.12)
Household demographic and and asset controls baseline	Yes
Baseline depression, disability and social support controls	Yes
Interviewer fixed effect	Yes
Dependent variable (mean)	2.50
Dependent variable (s.d.)	1.31
N	295

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. The dependent variable in this risk taking game are no. of tokens placed by the child in the risky bowl. In column 2 we control for the number of times the child was intervened in the game, number of people who intervened in the game, whether the child was influenced by any intervention in the game and the decision time in minutes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 89: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	ch_SDQTDS	ch_EMSS	ch_CPSS	ch_HSS	ch_PPS	ch_PSS
Treated	1.54**	0.36	0.69**	0.39	0.10	-0.15
	(0.64)	(0.24)	(0.27)	(0.29)	(0.17)	(0.29)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	12.14	2.36	3.67	4.17	1.95	7.12
Dependent variable (s.d.)	5.58	2.04	2.13	2.65	1.58	2.64
N	288	288	288	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_SDQTDS, ch_EMSS, ch_CPSS, ch_HSS, ch_PPS, ch_PSS refer to the SDQ total score, Emotional symptoms score, Conduct problem score, Hyperactivity score, Peer-Problem score and Pro-social score of the index child. High scores indicate worse outcomes for the index child except the Pro-Social score for which high score is good. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 90: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	ch_Totalscore	ch_SPAA	ch_SSA	ch_SPIF	ch_SSP	ch_SOCD	ch_SGAD
Treated	2.47	0.48	0.77	-0.18	0.56	0.31	0.52
	(1.52)	(0.32)	(0.50)	(0.37)	(0.37)	(0.29)	(0.38)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	19.37	1.66	5.72	5.03	2.26	1.28	3.40
Dependent variable (s.d.)	13.61	3.16	4.21	3.46	2.89	2.05	3.23
N	288	288	288	288	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_Totalscore, ch_SPAA, ch_SSA, ch_SPIF, ch_SSP, ch_SOCD and ch_SGAD refer to the Spence scale total score, scores of panic attack and agoraphobia, scores of separation anxiety, scores of physical injury fears, scores of social phobia, scores of obsessive compulsive disorder and scores of generalized anxiety disorder. High scores indicate worse outcomes for the index child. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 91: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	ch_edu	ch_edu_type	ch_yrs_prep	ch_grade	expec_chedu
Treated	-0.00	0.09	-0.09	-0.02	0.01
	(0.01)	(0.06)	(0.07)	(0.11)	(0.24)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes	Yes
Dependent variable (mean)	0.99	0.52	1.81	1.81	14.58
Dependent variable (s.d.)	0.10	0.50	0.74	0.86	2.36
N	288	285	285	285	286

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Our dependent variables ch_edu, ch_edu_type, ch_yrs_prep, ch_grade, expec_chedu indicate whether the child goes to a school, whether the child goes to private/public school (1=private, 0=public) the number of years in preparatory school, current grade and the number of years of schooling the mother expects her child to complete. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 92: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	Urdu alphabet score	Urdu word score	Urdu easy reading score
Treated	-0.20	-0.23	0.18
	(0.17)	(0.28)	(0.17)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	3.42	1.79	0.77
Dependent variable (s.d.)	1.16	1.83	1.43
N	285	285	285

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. High scores indicate better literacy outcomes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 93: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	Number recognition score (single digit)	Number recognition score (double digit)	Addition score (single digit)	Addition score (double digit answer)
Treated	-0.14	-0.37	0.08	-0.07
	(0.11)	(0.24)	(0.10)	(0.12)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	3.75	2.60	1.45	1.19
Dependent variable (s.d.)	0.88	1.83	0.86	0.91
N	285	285	285	285

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. High scores indicate better numeracy outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 94: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	Verbal Comprehension Index	Visual Spatial Index	Full Scale IQ
Treated	-1.49	-2.68	-1.41
	(1.67)	(1.78)	(1.47)
Household demographic and and asset controls baseline	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes
Dependent variable (mean)	85.79	86.92	81.83
Dependent variable (s.d.)	13.61	13.45	10.92
N	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. The major composite scores related to cognitive outcomes consist of the Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), and the Full Scale IQ (FSIQ). The VCI reflects abilities related to comprehension, reasoning and expression, while the VSI assesses non-verbal skills related to pattern discrimination and object manipulation (Block Design). High scores indicate better cognitive outcomes. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 95: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	Child Weight	Child Height	Complete Immunization	Severe Illness
three_groups	-0.69	-0.16	0.00	-0.02
	(0.43)	(0.48)	(0.01)	(0.04)
Household demographic and and asset controls baseline	Yes	Yes	Yes	Yes
Baseline depression, disability and social support controls	Yes	Yes	Yes	Yes
Interviewer fixed effect	Yes	Yes	Yes	Yes
Dependent variable (mean)	20.82	47.39	0.98	0.30
Dependent variable (s.d.)	3.76	5.27	0.13	0.46
N	288	288	288	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study.Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group. Child weight is in kg and Child length is in cm. Completed immunization is a dummy variable that takes the value 1 if the child completed immunization and 0 if immunization is incomplete. Diagnosed with severe illness is a dummy variable that takes the value 1 if the child was diagnosed with severe illness and 0 otherwise. Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.

Table 96: Child outcomes at 7-year follow-up as a function of treatment (Reduced form) (male child)

	Risk taken
Treated	-0.11
	(0.14)
Times intervened	0.18
	(0.11)
Number of people intervening	-0.13
	(0.13)
Child influenced	-0.18
	(0.11)
Decision time	0.05
	(0.08)
Household demographic and and asset controls baseline	Yes
Baseline depression, disability and social support controls	Yes
Interviewer fixed effect	Yes
Dependent variable (mean)	2.48
Dependent variable (s.d.)	1.30
N	288

Notes: Robust standard errors clustered by Union Council are in parentheses. The sample comprises mothers from the treated and control group in the THP study. Treated is a dummy that equals 1 if mother is treated and 0 if she is in the control group.The dependent variable in this risk taking game are no. of tokens placed by the child in the risky bowl. In column 2 we control for the number of times the child was intervened in the game, number of people who intervened in the game, whether the child was influenced by any intervention in the game and the decision time in minutes.Household demographic and asset controls include mother age, mother schooling, mother work status, mother height, mother weight, mother BMI, father schooling, father work status, grandmother living with family status, family structure, no. of children, no. of children died, no. of miscarriage or stillbirth , the ownership of durable assets by the household, ownership of well with pump, piped water in residence, availability of flush toilet, log(household income), household debt status and the financial status to buy food and cover basic needs. Baseline depression, disability and social support controls include Hamilton score, disability score and social support score of mothers. *, **, and *** refer to the 10 percent, 5 percent, and 1 percent significance levels, respectively.