

APPENDICES

APPENDIX A

Location of the Study

Appendix A. Location of the Study



Note : **1** = The district of Wonogiri, The Central Java Province

2 = The district of Agam, The West Sumatera Province

APPENDIX B
Questionnaire Items

Appendix B.

Questionnaire Items²

I. Family Characteristics

A. Family Structure:

No	Full Name	Sex	Age	Relation to HH	Schooling	Religion	Occupation		Ability to		Note
							Main	Add	Read	Write	
1											
2											
3											
4											
5											

This table will generate such variables as:

1. Father's/Mother's age
2. Father's/Mother's education
3. Father's/Mother's occupation
4. Father's/Mother's ability to read/write
5. Child's (sample) age
6. Family size
7. Number of children in the family
8. Number of children still in school
9. Order of child
10. Number of older brothers/sisters
11. Number of younger brothers/sisters
12. Extended/nuclear family

B. Marital status/history

A set of questions to gather information about marital status and history including the age at first marriage and divorce experience.

² Only selected questionnaire items were used in this study

C. Mobility of head household (migration history)

A set of questions to gather information about migration history including place of birth, year of migration to current place, and reasons to migrate.

II. Socio-Cultural Characteristics

A. Participation in community

A set of questions to determine the father's and mother's participation in societal organizations or activities:

Participation of fathers in such organizations or activities as: recitation of the Koran, social gatherings, farmer groups, neighborhood committees, and other community groups.

Participation of mothers in such organizations or activities as: recitation of the Koran, social gatherings, family welfare education, integrated health service center, farmer groups, neighborhood committees, and other community groups.

B. Societal togetherness

A set of questions to determine the father/mother involvement in societal togetherness: providing others with child care, helping neighbours, making donations, tithe, and other religious donations.

C. Family values

The questions in this section cover: the family objectives, the expectations of children, the family satisfaction with the place where they live, family income, occupation, children's educational attainment, family health, food supply, interaction within the family, religious action, security, and neighborhood.

D. Family behavior/culture

A set of questions to gather information about family habits in: eating, watching TV, praying, giving gifts, taking vacations, visiting relatives, and solving family problems

III. Family Economic

A. Father/Mother Occupation

1. How does the father earn income from his main job: daily/weekly/monthly/seasonally?
2. How does the father earn income from a secondary job: daily/weekly/monthly/seasonally?
3. How far is the father's workplace?

4. How does the mother earn income from her main job: daily/weekly/monthly/seasonally?
5. How does the mother earn income from a secondary job: daily/weekly/monthly/seasonally?
6. How far is the mother's workplace ?
7. How does the family solve financial problems (i.e., lack of income)?

B. Family Income by source

1. Agricultural (farm) sector?

The total amount of money which the family gets from agricultural (farming) activities

2. Non-agricultural sector?

The total amount of money which the family gets from non-agricultural (farming) activities.

C. Family Expenditures

Expenses	Daily	Weekly	Monthly	Annually
A. Consumption				
1. Food				
2.				
3.				
B. Donation				
C. Taxes				
D. Savings				
E. Give loans				
F. Pay Loans				
G. Other services				
H. Housing				
I. Others				
TOTAL				

D. Family Assets

The questions cover the possession of several assets, such as: house (type, width, building structure), farmland, livestock, household appliances, and other assets.

IV. Childrearing

A. Child care tasks

The questions cover who is the primary and supportive caretaker of the child, father's involvement in child care, and the preferred way of child care.

B. Inside and Outside Playing Environment

The questions cover the situation of the playing environment inside and outside the home: availability, cleanliness, and safeness of playground, friends, and the way a child plays.

C. Disciplinary and eating training

The questions cover who teaches children: toilet training, taking a bath, wearing clothes, and eating; the way parents react when their children do not perform well in those trainings; and the way parents teach their children in disciplinary actions.

D. Mother's Activities

Hour	Activities
04:00-05:00	
05:00-06:00	
06:00-07:00	
07:00-08:00	
08:00-09:00	
09:00-10:00	
10:00-11:00	
11:00-12:00	
12:00-01:00	
01:00-02:00	
02:00-03:00	
03:00-04:00	
04:00-05:00	
05:00-06:00	
06:00-07:00	
07:00-08:00	
08:00-09:00	
09:00-10:00	
10:00-11:00	
11:00-12:00	
12:00-01:00	
01:00-02:00	
02:00-03:00	
03:00-04:00	

These activities, then, are summarized, as follows:

1. Time spent outside home
2. Time spent outside home with child
3. Time spent for household work
4. Time spent for household work and child care
5. Time spent to feed child
6. Time spent for playing with child
7. Time spent for sleeping accompanied by child
8. Time spent for sleeping without child
9. Time spent for other activities (personal care, etc.)

V. Social/family support in child care

A. Support for household tasks

The questions gather information about the involvement of family members (helping mother) in such household works as: shopping, cooking, washing, cleaning, taking care of the backyard, taking care of children, and other housework.

B. Emotional supports

The questions gather information about emotional support for the mother in dealing with personal/family problems and sadness.

C. Social isolation/network

The questions in this section cover how often the mother meets her relatives, friends, and neighbors.

VI. Health and Environment

A. Health and nutritional status

This section covers questions concerning the observed child's age, weight, and height; and also immunization (whether the observed child has already got immunization shots).

B. Morbidity (sickness) of children

This section covers questions concerning the observed child's sickness in the last two weeks prior the interview.

C. Mother's health status and fertility

This section covers questions concerning fertility history (pregnancy, abortions, children ever born), mother's sickness in the last two weeks, and participation in family planning.

D. Health status of other family members

This section covers questions concerning health status and sickness of other family members in the last two weeks.

E. Sanitation

This sections covers questions concerning cleanliness of the house (inside and outside), air circulation, water quality for drinking and cooking, cleanliness of toilet, garbage disposal, and others.

VII. **Child's food consumption**

A. Food habits

This section covers questions concerning food habits (type of liked and disliked foods), type of street and snack food often consumed, and where food is purchased.

B. Recall for food consumption

This section covers questions concerning all food consumed in the last two days.

VIII. **HOME Stimulant Environment Scale**

This section covers questions concerning the home environments in terms of its potential for stimulating the child's cognitive advances. The questions were basically adapted from HOME (Home Observation for Measurement of the Environment) developed by Bradley and Caldwell (1977).

IX. **STANFORD-Binet IQ scale (test)**

APPENDIX C

F-ratios for the Change in the R-squared for Full and Reduced Models

Appendix C

F-ratios for the Change in the R-squared for Full and Reduced Models

Dependent Variable	R-squared		F-ratio	df	Decision concerning Ho
	Full Model	Reduced Model			
Mother's time feeding the child (TIME5)	.183	.178	.307	5; 251	fail to reject
Mother's time playing with the child (TIME6)	.252	.235	.951	6; 251	fail to reject
Parental time investment (TIME56)	.231	.223	.870	3; 251	fail to reject
Expenditure for food (FOOD)	.769	.768	.311	4; 287	fail to reject
Expenditure for education (EDUC)	.287	.278	.604	6; 287	fail to reject
Expenditure for health care (HEALTH)	.166	.158	.551	5; 287	fail to reject
Parental monetary investment (HUMAN)	.799	.797	.714	4; 287	fail to reject
Child's Nutritional status (WAM)	.099	.073	.713	10; 247	fail to reject
Child IQ score (IQS)	.108	.090	.529	9; 236	fail to reject

Note: Ho : the difference in the R-squared between these two models is zero
H1 : the difference in the R-squared is greater is not zero

APPENDIX D

Summary Regression Analysis for Variables Predicting Expenditure Share

Appendix D-1.

Summary of Regression Analysis for Variable Predicting Expenditure Share for Food
(N = 299)

Variable	Model			
	Full		Reduced	
	B	β	B	β
Intercept	71.981 (4.910)		69.318 (1.819)	
Family expenditure (EXPEND)	-.032 (.009)	-.273***	.034 (.007)	-.282***
Mother's work time (TIME1)	-.182 (.240)	-.045		
Parental time investment (TIME56)	-.046 (.323)	-.008		
Mother's education (MEDUC)	-.009 (.288)	-.003		
Father's education (FEDUC)	-.306 (.277)	-.084		
Non-Agricultural job or unemployed (MOCCUP1)	-2.360 (2.087)	-.095		
Agricultural job or unemployed (MOCCUP2)	5.383 (2.240)	.239**	7.182 (1.643)	.319***
Family size (SIZE)	.503 (.652)	.073		
Type of family (FAMTYPE)	-1.248 (1.663)	-.057		
Number of school-age children (SAGE)	-.494 (.870)	-.052		
Ethnic group (ETHNIC)	-9.886 (1.765)	-.448***	-9.656 (1.622)	-.438***
R-squared	.420		.395	
F ratio	5.592***		18.159***	

Note. Standard error is in parentheses; * significant at the .10 level; ** significant at the .05 level; and *** significant at the .01 level; B is unstandardized regression coefficient; β is standardized regression coefficient.

Appendix D-2.

Summary of Regression Analysis for Variables Predicting Expenditure Share for
Education (N = 299)

Variable	Model			
	Full		Reduced	
	B	β	B	β
Intercept	1.035 (1.667)		-2.036 (.565)	
Family expenditure (EXPEND)	.009 (.003)	.207***	.008 (.003)	.180***
Mother's work time (TIME1)	-.022 (.081)	-.015		
Parental time investment (TIME56)	-.120 (.081)	-.059		
Mother's education (MEDUC)	-.108 (.098)	-.086		
Father's education (FEDUC)	.006 (.094)	.004		
Non-Agricultural job or unemployed (MOCCUP1)	-.251 (.708)	-.027		
Agricultural job or unemployed (MOCCUP2)	-.812 (.760)	-.097		
Family size (SIZE)	-.297 (.221)	-.116		
Type of family (FAMTYPE)	-.618 (.565)	-.076		
Number of school-age children (SAGE)	1.959 (.296)	.557***	1.737 (.191)	.492***
Ethnic group (ETHNIC)	1.548 (.559)	.189***	1.389 (.452)	.170***
R-squared	.310		.297	
F ratio	11.741***		41.603***	

Note. Standard error is in parentheses; * significant at the .10 level; ** significant at the .05 level; and *** significant at the .01 level; B is unstandardized regression coefficient; β is standardized regression coefficient.

Appendix D-3

Summary of Regression Analysis for Variables Predicting Expenditure Share for Health Care (N = 299)

Variable	Model			
	Full		Reduced	
	B	β	B	β
Intercept	.502 (.791)		1.253 (.323)	
Family expenditure (EXPEND)	.0003 (.001)	.015		
Mother's work time (TIME1)	-.109 (.039)	-.181***	-.103 (.037)	-.172***
Parental time investment (TIME56)	-.099 (.052)	-.121	-.100 (.050)	-.121**
Mother's education (MEDUC)	.048 (.046)	.094	.059 (.033)	.115*
Father's education (FEDUC)	.028 (.045)	.051		
Non-Agricultural job or unemployed (MOCCUP1)	.013 (.336)	.003		
Agricultural job or unemployed (MOCCUP2)	.180 (.361)	.053		
Family size (SIZE)	.093 (.105)	.090		
Type of family (FAMTYPE)	.143 (.268)	.043		
Number of school-age children (SAGE)	-.084 (.140)	-.059		
Ethnic group (ETHNIC)	.669 (.284)	.202**	.678 (.227)	.205***
R-squared	.227		.215	
F ratio	1.420		3.572***	

Note. Standard error is in parentheses; * significant at the .10 level; ** significant at the .05 level; and *** significant at the .01 level; B is unstandardized regression coefficient; β is standardized regression coefficient.

Appendix D-4.

Summary of Regression Analysis for Variables Predicting Expenditure Share for Food,
Education and Health Care (N = 299)

Variable	Model			
	Full		Reduced	
	B	β	B	β
Intercept	73.517 (4.874)		68.732 (1.817)	
Family expenditure (EXPEND)	-.023 (.009)	.198***	-.024 (.008)	-.210***
Mother's work time (TIME1)	-.313 (.238)	-.080		
Parental time investment (TIME56)	-.266 (.320)	-.049		
Mother's education (MEDUC)	-.069 (.286)	-.021		
Father's education (FEDUC)	-.272 (.275)	-.076		
Non-Agricultural job or unemployed (MOCCUP1)	-2.598 (2.071)	-.107		
Agricultural job or unemployed (MOCCUP2)	4.751 (2.223)	.215**	6.639 (1.677)	.301***
Family size (SIZE)	.299 (.647)	.044		
Type of family (FAMTYPE)	-1.722 (1.651)	-.080		
Number of school-age children (SAGE)	1.382 (.864)	.148	1.568 (.577)	.168***
Ethnic group (ETHNIC)	-7.669 (1.752)	-.354***	-7.675 (1.675)	-.354***
R-squared	.158		.133	
F ratio	4.913***		11.236***	

Note. Standard error is in parentheses; * significant at the .10 level; ** significant at the .05 level; and *** significant at the .01 level; B is unstandardized regression coefficient; β is standardized regression coefficient.

APPENDIX E
Correlation Matrix

Appendix E

Correlation Matrix

	FOOD	EDUC	HEALTH	HUMAN	TIME1	TIME5	TIME6	TIME56	WAM	IQS	AGE	GENDER	EXPEND	FEDUC	MEDUC	MOCCUP1	MOCCUP2	SIZE	SAGE	FAMTYPE	ETHNIC
FOOD	1.000	.082	.344	.979	-.161	.205	-.126	-.017	.019	.092	-.079	-.113	.685	.293	.397	.298	-.295	-.158	-.014	.118	-.346
EDUC	.082	1.000	.022	.272	-.047	-.013	-.071	-.070	-.002	-.029	-.040	-.064	.397	.029	.019	.115	-.090	.258	.432	.030	-.081
HEALTH	.344	.022	1.000	.396	-.158	.107	-.115	-.053	-.047	-.018	-.024	-.095	.259	.150	.210	.101	-.084	-.095	-.053	.053	-.062
HUMAN	.979	.272	.396	1.000	-.171	.198	-.140	-.033	.015	.081	.066	-.125	.739	.291	.391	.309	-.300	-.105	.066	.120	-.345
TIME1	-.161	-.047	-.158	-.171	1.000	-.254	-.108	-.217	.022	.022	.065	.066	-.135	-.095	-.156	-.160	.284	.041	.012	-.103	.258
TIME5	.205	-.013	.107	.198	-.254	1.000	-.032	.442	.109	.027	-.272	-.018	.174	.160	.229	.187	-.209	-.016	.031	.056	-.300
TIME6	-.126	-.071	-.115	-.140	-.108	-.032	1.000	.882	.120	.083	-.124	.048	-.136	-.127	-.121	-.230	.291	-.152	-.214	-.168	.395
TIME56	-.017	-.070	-.053	-.033	-.217	.442	.882	1.000	.156	.086	-.235	.035	-.040	-.039	-.001	-.119	.163	-.144	-.177	-.125	.213
WAM	.019	-.002	-.047	.015	.022	.109	.120	.156	1.000	.051	-.217	-.114	.018	.087	.103	.007	.023	-.084	-.025	-.015	.009
IQS	.092	-.029	-.018	.081	.022	.027	.083	.086	.051	1.000	-.170	-.007	.076	.210	.114	.076	-.107	-.060	-.076	-.116	-.015
AGE	.079	-.040	-.024	.066	.065	-.272	-.124	-.235	-.217	-.170	1.000	-.041	.080	-.041	-.095	-.009	.002	.085	.098	.047	-.019
GENDER	-.113	-.064	-.095	-.125	.066	-.018	.048	.035	-.114	-.007	-.041	1.000	-.063	-.089	-.075	.018	.035	.060	.009	-.009	.012
EXPEND	.685	.397	.259	.739	-.135	.174	-.136	-.040	.018	.076	.080	-.063	1.000	.354	.440	.427	-.429	.440	.412	-.113	-.442
FEDUC	.293	.029	.150	.291	-.095	.160	-.127	-.039	.087	.210	-.041	-.089	.354	1.000	.703	.359	-.464	.085	.016	-.051	-.385
MEDUC	.397	.019	.210	.391	-.156	.229	-.121	-.001	.103	.114	-.095	-.075	.440	.703	1.000	.460	-.529	.035	-.037	-.064	-.461
MOCCUP1	.298	.115	.101	.309	-.160	.187	-.230	-.119	.007	.076	-.009	.018	.427	.359	.460	1.000	-.752	.128	.113	-.060	-.504
MOCCUP2	-.295	-.090	-.084	-.300	.284	-.209	.291	.163	.023	-.107	.002	.035	-.429	-.464	-.529	-.752	1.000	-.183	-.118	.008	.661
SIZE	-.158	.258	-.095	-.105	.041	-.016	-.152	-.144	-.084	-.060	.085	.060	.440	.085	.035	.128	-.183	1.000	.629	-.348	-.297
SAGE	-.014	.432	-.053	.066	.012	.031	-.214	-.177	-.025	-.076	.098	.009	.412	.016	-.037	.113	-.118	.629	1.000	.227	-.321
FAMTYPE	.118	.030	.053	.120	-.103	.056	-.168	-.125	-.015	-.116	.047	-.009	-.113	-.051	-.064	-.060	.008	-.348	.227	1.000	-.098
ETHNIC	-.346	-.081	-.062	-.345	.258	-.300	.395	.213	.009	-.015	-.019	.012	-.442	-.385	-.461	-.504	.661	-.297	-.321	-.098	1.000

Note : FOOD = per capita expenditure for food
 EDUC = per capita expenditure for education
 HEALTH = per capita expenditure for health care
 HUMAN = per capita expenditure for food, education, and health care
 WAM = the child's nutritional status
 AGE = the child's age
 EXPEND = total family expenditure
 MEDUC = mother's education
 MOCCUP1=dummy variable of mother's occupation (non-agriculture or other)
 MOCCUP2=dummy variable of mother's occupation (agriculture or other)
 FAMTYPE=dummy variable of family type (nuclear or extended family)

TIME1 = mother's time working outside the home
 TIME5 = mother's time feeding the child
 TIME6 = mother's time playing with the child
 TIME56 = mother's time feeding and playing with the child
 IQS = the child's IQ score
 GENDER= the child's gender (dummy)
 FEDUC = father's education
 SIZE = family size
 SAGE = number of school-age children
 ETHNIC = dummy variable of ethnic group

VITA

HARTOYO

Personal Data : Born in Indramayu, West Java, Indonesia, on July 14, 1963; the eldest son of Wanijah and Harsono Berman Siswopranoto.

Education: Graduated from Public High School (Sekolah Menengah Atas Negeri) in Indramayu in 1981; received Bachelor of Science in Agribusiness from Bogor Agricultural University (IPB) in March 1986; received Master of Science degree in Housing, Interior Design, and Resource Management in December 1991; completed the requirements for Doctor of Philosophy degree in Housing, Interior Design, and Resource Management at Virginia Polytechnic Institute and State University in February 1998.

Professional Experience: Research assistant at the Department of Agricultural Social Economics, Bogor Agricultural University, 1986-87; faculty member of the Department of Community Nutrition and Family Resources, Bogor Agricultural University, 1987-present; Researcher at the Center for Food and Nutrition Policy Study, Bogor Agricultural University, 1994-present.

Honor and Awards: Member of Beta Zeta Chapter of Kappa Omicron Nu, National Home Economics Honor Society; received Research Grant for Young Researcher in 1989 from Toyota Foundation, Japan; received scholarship to pursue a master's degree (in relation to the Second Nutrition and Community Health Project) in 1989-1991; received scholarship to pursue doctoral degree (in relation to the IPB-OECF Japan Project) in 1995-1998.

Hartoyo