Family Structure and Role Transitions: Implications for the Psychological Well-being of Filipino Women in Middle and Later Years

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Extended Abstract for PAA 2014

Living arrangements of older adults, particularly in the context of extended family households, have been closely studied by demographers of aging in developing countries (Gierveld, Dykstra and Schenk 2012; Ruggles 2008; Silverstein, Cong and Li 2006). Much less is known of the influence of the extended family structure on individual well-being at earlier points in life. Nor do we know much of the impact of *changes* in family structure on well-being across the life course. Even in countries where extended family living is prevalent, individuals typically do not stay permanently in the same type of living arrangement, but rather experience multiple transitions in family structures throughout their life time, often in sync with transitions in their own life circumstances and those of their family members. Such changes in living arrangements could reflect a dramatic reconfiguration of family relationships and roles, which could consequently affect individual well-being both positively and negatively. For example, could coresidence with parents or parents-in-law earlier in married life become a source of stress and negatively affect well-being? Could an older adult experience improvement in psychological well-being later in life when living with married children and grandchildren?

Due to issues of data design and availability, researchers often have to limit their research to the experiences of older adults, despite the importance of early life experiences. In this study, we take a life course perspective and empirically examine the impact of transitions in family structure and family roles on women's psychological well being. We use data from a mother and child cohort study of the Cebu Longitudinal Health and Nutrition Study (CLHNS), which began in 1983 and were followed up in 1985, 1991, 1994, 1998, 2002, 2005, 2007, and 2012. The CLHNS is set in metro Cebu, Philippines, a transitional society where intergenerational ties are traditionally strong, but family nuclearization is under way. Normative expectation of filial support for older parents is high and coresidence between adult children and parents is common (Agree, Biddlecom and Valente 2005; Go 1992; Natividad and Cruz 1997). In 1983, the women in the CLHNS sample ranged in age from 14-45 years old. The heterogeneity in baseline ages provide us with a rare opportunity to study trajectories across different phases of their family life.

Research Hypotheses

Family structure is dynamic in nature. Family members move in and out of the household throughout the life course. Concurrent with moves, they may take on new roles and experience

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role transitions. The life course perspective emphasizes the timing of these transitions and how one person's transition entails transitions for other family members. The nature of these role transitions may determine whether they have positive or negative consequences for the well-being of the people experiencing them. Such transitions can occur both sequentially and concurrently. For example, in the context of extended family, a married woman with children can initially occupy the role of a daughter /daughter-in-law, living with her parents or parents-in-law. Later in her life, she may become a grandmother, and at the same time a mother-in-law/mother. Thus, the implications of family structure or family structure transitions for health and well-being, must be examined in the life course context.

We first test the hypothesis of whether living in an extended family household per se, compared with a nuclear family household, is associated with positive or negative psychological well being, and whether the effect changes as a woman moves from early life to mid life and to old age. Empirical research presents largely mixed evidence on this question. For example, a study of older adults using the Health and Retirement Study in the U.S. suggests women experience a clear negative effect of living in a complex household, which even overrides the consistently documented positive effects of marriage (i.e., married women living in a complex household fare no better than single women living alone) (Hughes and Waite 2002). At the same time, cultural contexts crucially matter for the relationship between household structure and psychological well being. In societies where coresidence with adult children is normative, living with adult children in an extended family household is often found to have a positive effect on well-being (Chen and Short 2008; Cui 2002). In the Philippines, traditional norms for family coresidence are strong, but with increased Westernization, household nuclearization is underway. Our research will help to illuminate the role of household structure in women's well-being in the context of this family transition.

Research to date has focused primarily on the living arrangements of women aged 60 and up. However, the CLHNS allows us to follow current older adult women at earlier points in their life course. The rapid decline of mortality in the Philippines means that many middle aged women may still live with the parental generation. They may experience advantages or disadvantages within such households. For example, existing studies in countries with a patrilocal extended family system, indicate that young daughters-in-law's health can be negatively impacted by this arrangement because they are at the bottom of the gender and generational hierarchies of the family (Das Gupta 1999; Santow 1995). However, the position of middle daughters and daughters-in-law may be less vulnerable when they are sharing the residence with aging mothers or mothers-in-law. Nonetheless, household power conflicts could lead to negative consequences for psychological well-being. Because of the unique design of the CLHNS data, it allows us to offer new insight into the health effects of co-residence with parents and parents-in-law for women at different points in their life.

Next, we will examine the different mechanisms that influence women's health with respect to transitions in living arrangements and between different family roles. Role transitions may serve as both sources of stress and of empowerment as they can mean new power positions

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within the family, as well as the assumption of caregiving and other household responsibilities . For example, could an overburdened grandmother suffer from role strain? Could a woman's high power status in the family have a protective effect for her emotional health? Literature on intergenerational relationships points to the importance of older adult women's material resources and decision-making power for their status within the household, as well as the importance of their ability to contribute to childcare and household labor for their mental health (Cong and Silverstein 2008; Su and Ferraro 1997; Williams and Domingo 1993). Using data on decision making power and time use (caregiving time use in particular), we will identify different mechanisms that influence a woman's emotional health through household structure and role transitions.

Finally, we intend to examine the long-term effects of women's the history of family structure transitions. While longitudinal studies document the short term and long term effects of marital transitions on health trajectory, we know very little of the health consequences of the transition in and out of extended family. Instability in living arrangements and role shifts may affect various health pathways, including those that are psychosocial (e.g., social support, stress), behavioral (time constraints, health behavior), and socioeconomic (financial resources). The CLHNS data allow us to illuminate the role these components play in women's health over time.

Data

The CLHNS, established through collaboration between researchers at the Carolina Population Center at UNC Chapel Hill, and the Office of Population Studies Foundation (OPS) at the University of San Carlos in Cebu, follows a cohort of mothers and an index child born in 1983-84. Using a single stage cluster sampling procedure, 17 urban and 16 rural barangays (local administrative units) were randomly selected from the 255 barangays in Metropolitan Cebu in 1980. The 33 barangays, representing about 28,000 households, were surveyed to locate all pregnant women. Those who gave birth 5/1/83-4/30/84 were included in the sample (n=3,237) and interviewed in their 6-7th month of pregnancy, immediately after birth, then bimonthly for two years, with follow-up surveys in 1991, 1994, 1998, 2002, 2005 and (abbreviated) 2007. A new wave of data has been collected in 2012 and another round of data collection is planned in 2014. The 2012 data will be ready to use in the next few months and we will try to include it into the analyses if possible. In case that the data will not become available, our analyses will stop at 2007.

The following table shows the age distribution of the women across survey years. Starting as a group of women aged between 14-45 (mean age 26) in 1983, these women have started entering into near mid or later life in 2002. The over thirty year time span provides us with a rare opportunity to track changes in their family context and how it may shape their psychological well being accordingly. Because information on depressive symptoms (our dependent variable) was not collected till 2002, we use the 2002 sample as our baseline sample. We will address the issue of attrition and sample selection in detail in our analyses.

	1983-4	birth	1985-6	1991	1994	1998	2002	2005	2007	*2012*
N	3327	3122	2611	2395	2279	1989*	2122	2018	1977	*1875*
age(sd)	26.0±6.0		27.97±6.0	35.0±6.1	37.9±6.1	42.4±6.2	45.2±6.1	48.5±6.0	50.4±6.0	*55*

Psychological Well-being

We use CES-D (Center for Epidemiologic Studies Depression) depression scale to measure women's psychological well-being. Women were asked to rate how frequently in the fast four weeks they experienced certain feeling or problems that are concerned as symptoms of depression. These include the feelings of happiness, loneliness, worry or the problems of headaches, digestion, and sleep etc. The score for each of the 16 items are summed up to reflect the degree of depression symptoms. The question was added since 2002.

Family Structure and Role Transitions

The CLHNS data contains an original eight-category variable of family structure: 1)Single-person household (HH); 2)One Nuclear Family HH; 3)Horizontally Extended Nuclear Family HH; 4) Vertically Extended Nuclear Family HH; 5) Horizontally and Vertically Extended Nuclear family HH; 6) Multi-Nuclear Family HH; 7) HH of Unrelated Persons; 8)HH of related persons without a nuclear family. Obviously, it is a bit cumbersome and a few categories (e.g., category 1, 7, 8) have few cases. For the purposes of brevity in our preliminary descriptive statistics, we have tentatively reclassified the categories into three:

1) Nuclear family (married couple with children);

2) Extended Family I, which is an extended family with only one nucleus (i.e. married couple with children); the other family member could be a parent or a sibling,

3) Extended family II, which is an extended family with two or more nuclei; this could be a woman living with her husband, children, and her parents; or a woman and her husband, her child and her child's spouse, with grandchildren

In subsequent analysis, we will use this variable in conjunction with the relationship status and generational variables so that we can capture both structural and role shifts that a woman has experienced.

Preliminary analysis of the 2002-2007 data shows a striking level of family structure transitions (see below). In 2002, the nuclear family was the prevalent family structure, with 1,182 women living in nuclear families. The number of extended family structures substantially increased from 2002 to 2007 such that the nuclear family was no longer the modal category. Among those who lived in a nuclear family in 2002, only half of those remained so in 2007. Among those living in Extended Family II in 2002, half of those transitioned to simpler family structure (nuclear or Extended Family I).

Table 1. Changes in Family Structure from 2002 to 2007 (N=1896)

Family Structure in 2002		Family Structure in 2007 (Row %)				
		Nuclear Family	Extended Family I	Extended Family II	Total	N
		(1)	(2)	(3)		
Nuclear Family	(1)	56.26	12.01	31.73	100.00	1,182
Extended Family I	(2)	24.83	41.28	33.89	100.00	298
Extended Family II	(3)	23.32	26.44	50.24	100.00	416
Total		44.09	19.78	36.13	100.00	1,896

Source: CLHNS 2002, 2007

Decision Making Power and Time Use

We are interested in how women's power position and their household responsibilities (e.g. caregiving) could mediate and moderate the effect of family structure/role transitions. Women were asked about household decision making related to major purchases, buying or selling land, working outside the home, traveling outside Cebu, use of family planning, and method choice for family planning. Women report whom they consult, and whose will prevails in the decision.

Detailed time use questions can be used to gauge a woman's caregiving burden. The survey report activities such as bathing/cleaning, dressing, putting to a child to sleep,bringing to and from school, helping with homework, taking for a walk. Women may also be engaged in elder care if their own parents are living in the same or a nearby household

Control Variables

We will include control variables such as age, socioeconomic status, employment, perceived health status, urban/rural residence in the analysis.

Research Strategy

With existing data, we will use fixed effects models to estimate the effect of changes in family structure and family role, on changes in CES-D scores over the three-year interval (2002, 2005, 2007). If the 2012 data becomes available, we propose to analyze the data using latent growth curve models to capture the dynamic aspect of family structures/roles on mental health trajectories. The strategy assumes that women differ in initial CES-D score and that variance in subsequent change of health trajectories also vary by changes in family structures/roles. The level 1 model represents within-individual (i) change in CES-D scores over time (t):

$$y_{ti} = \alpha_i + \beta_i t + \varepsilon_{ti} \qquad (1)$$

In order to incorporate the time-varying covariates representing changes in family structure into the model, Equation 1 is modified as follows:

$$y_{ti} = \alpha_i + \beta_i t + \gamma_t F_{it} + \varepsilon_{ti} \quad (2)$$

F_{it} represents family structure for individual *(i)* at time *(t, t=2002, 2005, 2007, 2012)*. γ_t represents the time varying effect, with each γ standing for a perturbation from the latent CES-D trajectory caused by a change in family structure/role at a specific time, therefore, allowing for the assessment of the effect of time specific transitions at multiple time points. We will also introduce the decision making and caregiving variables to test for mediating effects.

The second level of the analysis is to detect heterogeneity in change across individuals and to determine the association between predictors and the shape of each person's CESD growth trajectory. Each of the parameters of age trajectories, α_i, (the intercept or mean level) and β_i (linear rate of change), are further modeled as functions of person-level attributes.

$$\alpha_i = \alpha_0 + \alpha_1 X_{i1} + \alpha_2 X_{i2} + ... + \alpha_k X_{ik} + u_i \quad (3)$$

$$\beta_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + ... + \beta_k X_{ik} + v_i \quad (4)$$

The X's are the controls and the time-invariant family structure variables that summarize the history of family relations. Unlike the level-1 family relations variables, which are measured from 2002 and on, the family structure history variables are constructed using information starting from 1983. For example, we include family structure history variable during a 29 year period (1983-2012) (e.g., stable extended family, stable nuclear family, transition to nuclear family, transition to extended family, multiple transitions and etc.) It will help to address the cumulative effect of the family structure transitions on CES-D.

Preliminary Results

As mentioned earlier, we are still in the process of optimizing our classification of family structure/role transitions. We show two graphs that depict the relationship between family structure, family structure transitions, and CES-D scores, from the result of preliminary analyses (see next page, controlling for age and age square). Figure 1 clearly shows that women living in nuclear family are better off in terms of psychological well being, while those who live in extended family have higher levels of depressive symptoms. The complexity of the extended family does not seem to matter. Figure 2 shows that those who remain in Extended Family II from 2002 to 2007 have the highest level of depressive symptoms. In contrast, those who remain in a nuclear family from 2002 and 2007 have the lowest level of CES-D. Among those who experienced a family transition from 2002 to 2007, those who transitioned into nuclear family haved the best psychological well being. The worst-off group is those who transitioned from one type of extended family to the other. Overall, the initial results seem to suggest an advantage of nuclear family structure and a hazard of living in complex household. However, the extended family is incredibly heterogeneous in our current classification scheme and does not take into account of family roles, generational status or socioeconomic resources, so we refrain from making any premature conclusion.

Figure 1. Mean CESD Score by Family Structure 2007 (N=1896)
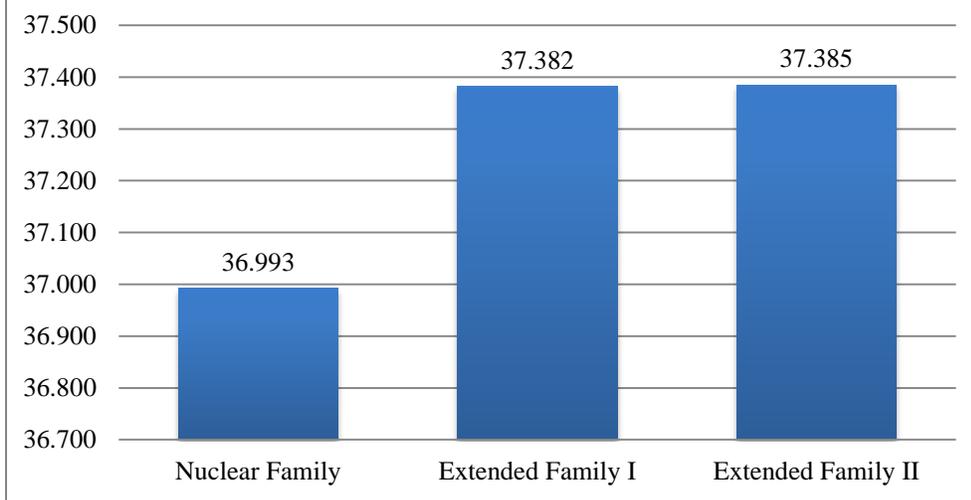
Figure 2. Mean CESD Score in 2007 by Family Structure Transition from 2002 to 2007 (N=1896)
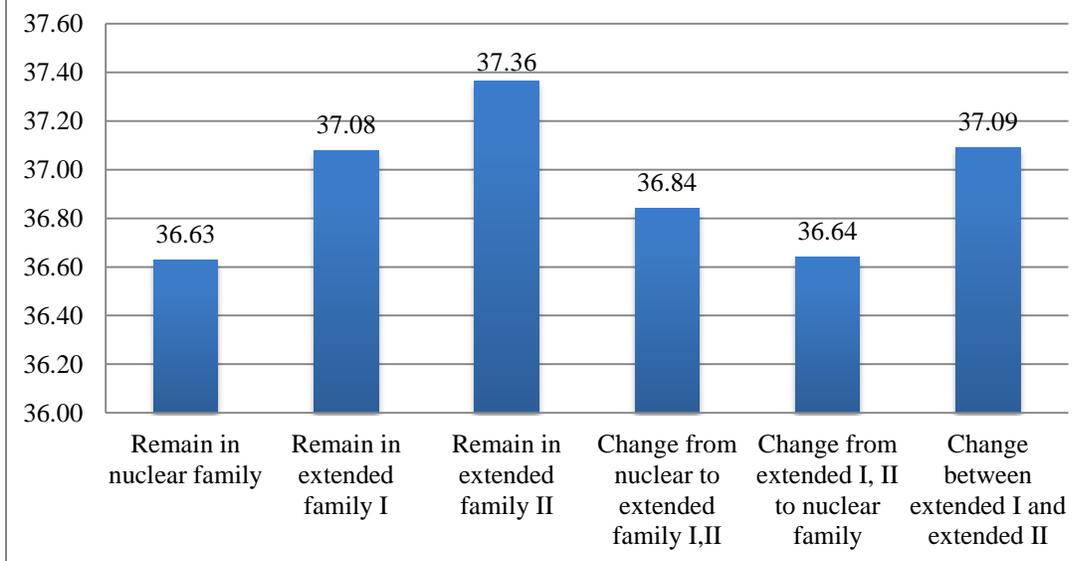
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