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# Finding Time over Time: Longitudinal Links between Employed Mothers' Work-Family Conflict and Time Profiles

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#### **Abstract**

Drawing upon the Work-Home Resources model (ten Brummelhuis & Bakker, 2012), this study examined the links between work-family conflict and employed mothers' profiles of time resources for work and parenting roles. Using a person-centered latent profile approach, we identified three profiles of time use and perceived time adequacy in a sample of mothers employed in the extended-care industry (N = 440): a Work-Oriented profile, characterized by spending relatively more time at work, perceiving lower time adequacy for work, spending less time with children, and perceiving lower time adequacy for children; a Parenting-Oriented profile, characterized by the opposite pattern; and a Role-Balanced profile, characterized by average levels across the four dimensions. Mothers in the Work-Oriented profile reported greater work-to-family conflict and family-to-work conflict than those in the Role-Balanced and Parenting-Oriented profiles. Greater work-to-family conflict was linked to membership in the Work-Oriented profile, net of personal, family, and work characteristics. Longitudinal latent profile transition analysis showed that increases in work-to-family conflict across 12 months were linked to greater odds of moving toward the Work-Oriented profile (relative to staying in the same profile), whereas decreases in work-to-family conflict were linked to greater odds of moving toward the Parenting-Oriented profile. Results illuminate the heterogeneity in how employed mothers perceive and allocate time in work and parenting roles and suggest that decreasing work-to-family conflict may preserve time resources for parenting. Intervention efforts should address ways of increasing employees' family time resources and decreasing work-family conflict.

#### **Keywords**

Latent profile analysis; maternal employment; time use; time adequacy; work-family conflict

Time resources are vulnerable to competing demands between work and family roles. Having a lack of time is particularly salient for employed mothers. More than half of

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employed mothers report that they have too little time for combining work and family roles (Bianchi, 2009; Milkie, Raley, & Bianchi, 2009). Having too little time in a particular role can be reflected in two ways: either *spending* too little time or *perceiving* a less than adequate amount of time (i.e., low perceived time adequacy). For example, employed mothers tend to perceive low time adequacy with children even when they spend more time with their children than their parents did several decades ago (Bianchi, Robinson, & Milkie, 2006; Milkie, Mattingly, Nomaguchi, Bianchi, & Robinson, 2004). Scholars generally interpret this discrepancy in terms of mothers' orientation toward the parenting role due to social influences that have pushed mothers to be ideal mothers as well as ideal workers (Hays, 1996; Kelly, Ammons, Chermack, & Moen, 2010). However, we know little about how mothers perceive the adequacy of their time for a role *relative to their time spent* in that role, because most studies have compared perceived to actual time at the sample level pooled across individuals, not within individuals. To better understand how employed mothers spend and perceive time in their work and family contexts, the first goal of this study was to identify profiles of time use and perceived time adequacy for work and parenting roles.

We adopted a person-centered, latent profile approach to identify and compare patterns of time use and perceived time adequacy (Lee et al., 2015). There are at least two advantages of this approach. First, most studies have used univariate models to examine individual differences in a single time resource, primarily time with children (Milkie et al, 2004, 2009). The latent profile approach enables moving to multivariate models that describe relative patterns across multiple time resources. Second, previous research has focused on comparing individual time resources as a function of predefined groups of parents (i.e., employed mothers vs. non-employed mothers, or employed mothers vs. employed fathers; Milkie et al, 2009). Using a person-centered latent profile approach, we can build on this work to illuminate differences among employed mothers in terms of relative of time resources across work and family domains. For example, mothers in one profile may be characterized by similar levels of time use and perceived time adequacy in paid work and with children, which may reflect role balance between the two domains. Other mothers may be characterized by spending and perceiving more time with their children relative to their time at paid work, a profile characterized by a family role orientation. In this personcentered, latent profile approach, each identified profile will be considered as a distinctive subgroup in terms of their time-related orientation toward work and family. In this study we assessed four dimensions of time resources—time spent at paid work, perceived time adequacy for paid work, time spent with children, and perceived time adequacy for children.

Grounded in the Work-Home Resources (W-HR) model (ten Brummelhuis & Bakker, 2012), the second goal of this study was to test whether work-family conflict was uniquely associated with mothers' membership in profiles of time resources, net of background characteristics. According to the W-HR model, work demands negatively influence families through individuals' loss of personal resources—in this study, time use and perceived time adequacy. The negative influences of work on family can be manifested in work-to-family conflict. The W-HR model also recognizes family-to-work processes: family demands negatively affect work, which can be manifested in family-to-work conflict. Extending the W-HR model, this study focused on the unique associations linking both work-to-family and

family-to-work conflict to the profiles of time resources, beyond the effects of background characteristics.

Moving beyond examination of cross-sectional associations, the third goal of this study was to test the longitudinal links between *changes* in work-family conflict and *changes* in the profiles of time resources. The W-HR model (ten Brummelhuis & Bakker, 2012) suggests that long-term work-family conflict may relate to changes in time resources. Although there may be mutually reinforcing effects of work-family conflict and time resources longitudinally, previous studies have shown evidence for work-family conflict as a predictor of time resources rather than the outcome, of time resources. For example, workplace interventions designed to decrease work-family conflict significantly increased perceived time adequacy for personal and family activities (Kelly, Moen, & Tranby, 2011; Kelly et al., 2014) and time spent with children (Davis et al., 2015). These findings suggest, for example, that mothers who exhibit decreases in work-to-family conflict across time may show a corresponding pattern of increases in time resources for parenting. Above all, a change in conflict between work and family roles may relate to a change in temporal flexibility (Greenhaus & Beutell, 1985) that affords mothers with opportunities to move between time profiles that show their balance or orientation of time across work and parenting roles. Using longitudinal data collected on two occasions one year apart, we tested whether changes in work-to-family and family-to-work conflict were linked to mothers' transitions across profiles characterized by time use and perceived time adequacy.

We drew upon a sample of employed mothers in a specific work context-the extended-care industry. Workers in this industry provide direct care to the patients in nursing homes, and most are women with children (Hughes & Stone, 2004). Examining mothers in this work context was of interest because mothers' roles as caregivers both at work and at home may make for unique patterns of time use and feelings of time adequacy in their work and parenting roles. For example, mothers in this gendered work context may be influenced by an intensive mothering ideology (Hays, 1996) that highlights the mother's role as a primary caregiver. Thus, many of them may be oriented towards the parenting role and feel higher time adequacy for their children instead of focusing on time adequacy and time spent in paid work. In contrast, some mothers in this work context may spend relatively less time with children than at work, because their emotional labor in the work domain limits their ability to invest time and energy in the family domain (Hochschild, 1983). Also, some of them may see themselves as their families' provider (e.g., single mothers) and thus their time and sense of time adequacy may be more equally distributed across work and family. As such, we may observe heterogeneity in the profiles of time resources among mothers in this work contextwhich may be of particular interest to work-family researchers given that less attention has been paid to working class mothers in the literature. Grounding our person-centered latent profile approach in the W-HR model, we sought to assess how the two forms of conflict between work and family have implications for the profiles of time resources among mothers working in the extended-care industry.

## **Work-Family Conflict and Profiles of Time Resources**

The core of our analyses tested whether work-family conflict distinguished among employed mothers' time profiles. According to the W-HR model (ten Brummelhuis & Bakker, 2012), work-family conflict represents *combined* influences that encompass work, family, and personal domains, which may have implications for relative patterns of time resources across work and parenting roles. Work-to-family conflict occurs when demands from work interfere with family life, whereas family-to-work conflict occurs when demands experienced at home interfere with work (Frone, Russell, & Cooper, 1992; Netemeyer, Boles, & McMurrian, 1996; Voydanoff, 2005). Figure 1 depicts our model linking workfamily conflict to time use and perceived time adequacy for work and parenting roles. Mothers' background characteristics across work, family, and personal domains may have implications for their time resources for work and parenting roles (a arrow in Figure 1). For example, mothers' educational levels or their children's ages, may be associated with their perceptions of how they should be involved in parenting, and thus, their time spent with children and perceived time adequacy for children (Milkie, Mattingly, Nomaguchi, Bianchi, & Robinson, 2004; Milkie et al., 2009). Likewise, mothers' work conditions, such as schedule control and supervisor support, may shape their psychological and time-related resources (Hammer, Kossek, Anger, Bodner, & Zimmerman, 2011; Kelly et al., 2014, 2011). These kinds of background characteristics, however, may also be related to mothers' experiences of work-family conflict (dotted arrows). For example, mothers with more job demands report higher work-to-family conflict (Bakker, Demerouti, & Dollard, 2008). Also, mothers with young children experience higher family-to-work conflict (Crouter, 1984). In this way, work-to-family conflict and family-to-work conflict represent combined influences stemming from the work-family interface, as the W-HR model posits (ten Brummelhuis & Bakker, 2012), and thus may be associated with profiles of time resources characterized by orientations toward work, parenting, or a balance between them. Therefore, this study posited that the two forms of conflict would distinguish mothers' membership in the profiles of time resources, net of their personal and family characteristics and work conditions (b and c arrows).

Given that work-to-family conflict negatively impacts family life, it may drain time resources in the parenting role. For example, employed mothers who experience higher work-to-family conflict may have less time for family activities (Barnett et al., 2012), and less family time may be linked to perceptions of low time adequacy for children. Further, higher work-to-family conflict may make them more preoccupied with work concerns while at home, and thus may be associated with perceiving lower time adequacy for work. In this way, we expected that work-to-family conflict would be linked to time profile(s) characterized by less time resources in the parenting role and less perceived time adequacy in general.

Family-to-work conflict may shape specific profiles of time resources for work and parenting roles, especially draining time resources in the worker role. For example, mothers who experience more family-to-work conflict may perceive lower time adequacy for work due to family issues interfering with their ability to concentrate on job tasks. Although time demands at work in the context of the extended-care industry are formalized and thus may

imply adequate time at work, when family-to-work conflict is severe, as in the case of those caring for a family member with special needs, mothers may need to make accommodations in their work schedule (Brockwood, Hammer, Neal, & Colton, 2001). Moreover, family-to-work conflict may act as a psychological stressor, preventing mothers from perceiving high time adequacy, in general (Lee et al., 2015). As such, we expected that family-to-work conflict would be linked to time profile(s) characterized by less time resources in the work role and less perceived time adequacy for work and parenting roles.

# Changes in Work-Family Conflict and Membership Transitions in Time Profiles

The W-HR model (ten Brummelhuis & Bakker, 2012) also suggests that long-term *changes* in work-family conflict may be linked to *changes* in time resources. In this study we assessed whether within-person longitudinal changes in mothers' work-to-family conflict and family-to-work conflict were associated with transitions in their membership in profiles of time resources across the same one-year period. If profiles are replicated at Time 1 and Time 2, but mothers move in and out of the profiles from Time 1 to Time 2, this would allow for examining the correlates of such membership transitions—in this study, changes in work-family conflict. An example of an earlier application of this approach is a study conducted by Quadlin (2015) that examined gender differences in time use profile transitions among college students.

Building on previous intervention studies linking decreases in work-family conflict to increases in time resources in the family domain (Davis et al., 2015; Kelly et al., 2011, 2014), we expected that decreases in work-to-family conflict would be linked to movement to a profile characterized by increases in time resources for parenting; in contrast, decreases in family-to-work conflict would be linked to transitioning to a profile involving increases in time resources for work. In these analyses, to achieve higher confidence in interpreting the longitudinal associations by ruling out third variable explanations, we considered mothers' personal and family backgrounds as covariates (Dwyer, 1983). We also took into account changes in work characteristics, given prior research showing that changes in job demands, schedule control, and supervisor support for family were significant predictors of changes in employees' psychological resources (Hammer et al., 2011; Kelly et al., 2011, 2014).

In sum, this study had three aims: (1) To identify profiles of time use and perceived time adequacy for work and parenting roles among a sample of employed mothers; (2) To test whether work-to-family and family-to-work conflict were linked to profile membership, net of other personal and family characteristics and work conditions; (3) To test whether changes in the two forms of work-family conflict were linked to membership transitions in the profiles of time resources.

#### Method

#### **Participants**

Data came from the Work, Family, and Health Study (WFHS), a study of the effects of workplace practices on employee, family, and organizational well-being (Bray et al., 2013;

King et al., 2013). Participants were drawn from 1,708 nurses, nurse managers, and certified nursing assistants from 30 worksites who completed a Time 1 interview (85.5% and 87.2% response rates, respectively). These employees were asked to provide their responses on the same set of interview questions at Time 2–12 months after the Time 1 assessment. Of the employees who provided data both at Time 1 and Time 2 (71.9% retention rate), 688 were parents who had at least one child. After excluding fathers (less than 10% were fathers), there were 648 mothers. However, only mothers who had at least one child between the ages of 3–17 were able to respond to the time spent with children questions, which were specific to this age broad group, and thus 454 mothers were eligible for this study. Because full data were required for inclusion in the Latent Profile Analysis (LPA) and Latent Profile Transition Analysis (LPTA), mothers who did not provide responses on all the four time resource variables at two time points were excluded; this resulted in a sample to 440 mothers for this study.

The mean age of mothers was 36.09 years (SD = 7.62). More than half were White (63.18%), followed by Hispanic (15.91%) and African American (13.86%). Half (50.11%) had had some college (1–3 years) or were technical school graduates, followed by high school graduates or less (38.50%), and college graduates (11.39%). Nearly half (47.27%) were married, and 19.77% were living with a romantic partner. In the case of those married or living with a partner, 83.39% of the partners had a full-time or part-time job. The mean number of children was 2 (SD = 1.01), and the mean age of the youngest child was 7.82 years (SD = 4.78). The mean annual household income was in the range of \$40,000 \$49,999. Most (61%) worked standard (daytime) shifts, 21% worked evening shifts, and the rest worked variable work schedules, including rotating shifts.

#### **Procedures**

The 30 extended-care facilities owned by a single organization were recruited (Bray et al., 2013). Direct-care workers, such as licensed practical nurses, registered nurses, certified nursing assistants, and senior-level nurse managers in each of the recruited worksites were invited to participate. Employees who had no direct patient-care duties and worked only night shifts were excluded from this study because they had a different set of policies, regulations, and work schedules. Trained interviewers conducted computer-assisted personal interviews with employees at the workplace. Data collection began with informed consent procedures, and then interviewers read questions to employees about their work experiences and time resources. The same interview protocol was maintained for the follow-up assessment 12 months later. The interview averaged 60 minutes per each assessment. Employees received \$20 for their time for the Time 1 workplace survey as well as for the Time 2 assessment. Between Time 1 and Time 2, a workplace intervention was implemented. This intervention aimed to decrease employees' work-family conflict through increasing supervisor support and schedule control (for additional details on the intervention procedures see Kelly et al., 2014; Kossek, Hammer, Kelly, & Moen, 2014). We tested intervention participation as a potential moderator of changes in work-to-family and familyto-work conflict, but no significant effects emerged, and thus this variable was excluded from the analyses. This research was approved by the data collection center's Institutional Review Board.

#### **Measures**

**Perceived time adequacy**—Perceived time adequacy for work in general was measured with one item from the psychological job demands subscale (Karasek et al., 1998). Perceived time adequacy for children overall was measured via an item from the Family Resource Scale-revised (Van Horn, Bellis, & Snyder, 2001). The two items were: "To what extent is there enough time (1) to get your job done and (2) to be with your children?" Responses were coded as 1 (*never*), 2 (*rarely*), 3 (*some of the time*), 4 (*most of the time*), and 5 (*all of the time*).

**Time use**—Employees reported the average time spent per week in paid work and with children over the past month. The item asking time spent at work was, "How many hours do you usually work per week on average?" With regard to time spent with children, we asked: "How many hours did you spend with all your children (aged 3–17) (1) on an average weekday or school day, (2) on an average Saturday, and (3) on an average Sunday?" Responses were initially coded as hours per day, and average weekday hours were multiplied by 5 to obtain a value for the number of hours spent with children across all five weekdays. Time spent with children was the sum of the responses on the three items, to represent average weekly time spent with children.

Work-to-family and family-to-work-conflict—We used the work-family conflict scale (Netemeyer et al., 1996) that assesses work-to-family conflict (5 items) and family-to-work conflict (5 items). An example item for work-to-family conflict is, "The demands of your work interfere with your family or personal time." An example item for family-to-work conflict is, "Your home life interferes with your responsibilities at work, such as getting to work on time, accomplishing daily tasks, and working overtime." The response scale ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The means of each of the five items were calculated such that higher scores indicated greater conflict. Cronbach's alpha for work-to-family conflict was .86 at Time 1 and .91 at Time 2, and the α for family-to-work conflict was .82 at Time 1 and .82 at Time 2.

**Work characteristics**—First, two items that asked about *job demands* were taken from the Job Content Questionnaire (JCQ; Karasek et al., 1998): "Your job requires very fast work," and "Your job requires very hard work." Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The mean was calculated such that higher scores reflected greater job demands ( $\alpha = .62$  at Time 1 and .77 at Time 2). Second, we assessed the extent of control over work hours using Thomas and Ganster's (1995) *schedule control* scale (8 items). A sample item is, "How much choice do you have over when you begin and end each work day?" Response options ranged from 1 (*very little*) to 5 (*very much*). The mean of the eight items was calculated such that higher scores reflected greater control over work schedule ( $\alpha = .65$  at Time 1 and .72 at Time 2). Lastly, *supervisor support* was evaluated by four items from the Family-Supportive Supervisor Behaviors—Short Form (FSSB—SF; Hammer, Kossek, Bodner, & Crain, 2013), e.g., "Your supervisor makes you feel comfortable talking to him/her about your conflicts between work and non-work." Items were rated on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The mean was

calculated such that higher scores indicated greater supervisor support for family ( $\alpha$  = .88 at Time 1 and .89 at Time 2).

**Personal and family characteristics**—Because prior research has shown that sociodemographic characteristics are associated with time use and perceptions of time adequacy (Milkie et al., 2004, 2009), we included mother's age, race (0 = non-white, 1 = white), and education (0 = college graduate or more, 1 = some college or technical school, 2 = high school or less) as covariates. Moreover, to account for family structure, marital status (0 = single, 1 = married/partnered), number of children living in the household, youngest child's age, and household income were included. Given that many employees in the long-term care industry work non-standard hours (Hughes & Stone, 2004) and 39% of our sample fell into this category, mother's work schedule (0 = nonstandard shifts, 1 = standard/daytime shifts) was also treated as a covariate. All continuous variables were centered at the sample mean.

#### **Analytic Strategy**

First, to identify subgroups of mothers who differed in time use and perceived time adequacy for work and parenting roles, we conducted a Latent Profile Analysis (LPA) in *MPlus* 7.0. LPA is a technique for identifying subgroups in a sample that are characterized by different mean scores on the observed variables (Muthén, 2001). Before executing LPA, the raw scores of time use and perceived time adequacy for work and parenting roles were transformed into T-scores (M= 50, SD= 10) to adjust for different ranges and variances in order to compare levels across the four indicators.

Second, to examine characteristics of identified profiles in terms of personal, family, and work characteristics, and work-family conflict, we used Chi-squared tests and ANOVA. A series of multinomial logistic regression models also tested whether work-family conflict predicted mothers' membership in the time profiles, beyond personal, family, and work characteristics. In Model 1, personal and family background covariates were included. In Model 2, work characteristics (job demands, schedule control, and supervisor support for family) were added. In Model 3, work-to-family and family-to-work conflict were added.

Third, to examine longitudinal transitions in the identified profiles from Time 1 to Time 2, Latent Profile Transition Analysis (LPTA) in *MPlus* 7.0 was conducted. The highest probability of being included in identified transition patterns was saved. Multinomial logistic regression models examined whether changes (i.e., difference scores calculated by subtracting Time 1 scores from Time 2 scores) in work-to-family and family-to-work conflict predicted each transition pattern, beyond covariates and changes in work characteristics. In Model 1, only covariates were included. In Model 2, changes in the three work characteristics were added. In Model 3, changes in work-to-family and family-to-work conflict were added.

#### Results

#### **Descriptive Results**

Descriptive statistics showed that mothers spent 37.66 hours at work and 42.68 hours with children per week, on average. They perceived slightly less than adequate amounts of time for work and more than adequate amounts of time to be with their children. At Time 1, perceived time adequacy for children was negatively related to time spent at work and positively related to perceived time adequacy for work as well as time spent with children. Further, mothers who spent more time at work reported higher work-to-family conflict. In addition, perceived time adequacy for work and for children were negatively correlated with work-to-family conflict and family-to-work conflict. Although there were no significant correlations between changes in the four indicators of time resources, increased perceived time adequacy for work and for children were associated with decreases in work-to-family conflict (Appendix 1).

#### Latent Profiles of Time Use and Perceived Time Adequacy

Figure 2 illustrates the profiles of time use and perceived time adequacy across work and parenting roles, derived from the LPA. The LPA provides model fit criteria, including the Akaike Information Criterion (AIC; with lower scores signifying better fit), Bayesian Information Criterion (BIC; lower scores imply better fit), Entropy, and the Vuong-Lo-Mendell-Rubin Likelihood Ratio Test (VLMR-LRT). Entropy is a measure of how clearly distinguishable the profiles are based on each individual's estimated profile probability, and it ranges from 0 to 1, with 1 indicating greater precision in membership classification. The VLMR-LRT compares models; significant p-values suggest that the estimated model fits the data better than a model with one less profile. The model fit criteria for both Time 1 and Time 2 suggested a 3-profile solution, such that the Entropy was close to 1 and the VLMR-LRT p-value was significant. The three-profile solution was consistent over time. At Time 1, 46% of mothers were characterized by an average level of time use and perceived time adequacy for work and parenting roles and labeled as Role-Balanced; 42% of mothers were characterized by spending more time at work, perceiving less time adequacy for work, spending less time with children, and perceiving low time adequacy for children and labeled as Work-Oriented; and 12% spent less time at work but perceived relatively higher time adequacy for work, spent more time with children, and perceived relatively higher time adequacy for children and were labeled, Parenting-Oriented (Figure 2).

#### **Characteristics of Employed Mothers in Each Time Profile**

The results of profile comparisons, shown in Table 1, revealed first, that mothers in the Work-Oriented profile spent more time at work but perceived lower time adequacy for work than those in the Role-Balanced and Parenting-Oriented time profiles. In contrast, mothers in the Parenting-Oriented and Role-Balanced profiles spent more time with children than those in the Work-Oriented time profile. The three profiles were also distinctive in the level of perceived time adequacy for children, in that mothers in the Parenting-Oriented time profile reported the highest level, followed by the Role-Balanced and the Work-Oriented time profiles.

In terms of *personal and family characteristics*, mothers in the three time profiles differed only in education: mothers in the Work-Oriented profile had less education compared to mothers in the Parenting-Oriented profile. Turning to *work characteristics*, mothers in the three time profiles differed in work schedule, schedule control, and supervisor support for family, but not in job demands. Further, the percentage working in standard shifts was lower for mothers in the Work-Oriented profile than for mothers in the Role-Balanced and Parenting-Oriented profiles. Finally, mothers in the Parenting-Oriented profile reported higher levels of schedule control and supervisor support for family than those in the Role-Balanced and the Work-Oriented time profiles, but there were no differences on these measures between those in the Role-Balanced and Work-Oriented profiles.

The three profiles differed with regard to *work-family conflict*. Mothers in the Work-Oriented time profile reported the highest work-to-family conflict followed mothers in by the Role-Balanced and the Parenting-Oriented profiles. Mothers in the Work-Oriented time profile also reported the highest *family-to-work conflict* followed mothers in by the Role-Balanced and the Parenting-Oriented time profiles.

Lastly, controlling for background characteristics we tested the links between work-family conflict and mothers' membership in the Work-Oriented or Parenting-Oriented profiles, relative to the Role-Balanced profile (Table 2). Higher work-to-family conflict was associated with greater odds of membership in the Work-Oriented profile, beyond personal and family backgrounds and work characteristics. There was no significant effect of work-to-family conflict on membership in the Parenting-Oriented profile. Nor was family-to-work conflict linked to profile membership net of controls. In sum, these results partially supported our expectation in that work-to-family conflict, but not family-to-work conflict, was linked to a profile characterized by less time resources in the parenting role and less perceived time adequacy in general (i.e., Work-Oriented profile), beyond personal, family, and work characteristics.

Results of supplementary analyses aimed at illuminating how mothers' profile membership was related to their overall well-being are shown in Appendix 2. Mothers in the Work-Oriented profile reported poorer well-being than those in the Role-Balanced and/or Parenting-Oriented profiles, in terms of greater burnout, lower job satisfaction, and greater psychological distress.

#### **Predictors for Longitudinal Transitions of Membership in the Time Profiles**

Next, we examined longitudinal transitions in the latent profile membership and whether changes in work-family conflict were associated with these transitions. Table 3 presents latent transition probabilities from the LPTA. Cells on the bold diagonal represent stability in profile from Time 1 to Time 2. Mothers in these cells were termed "Stayers" (n = 274). Cells above the diagonal include movers (1) from the Work-Oriented to the Role-Balanced, (2) from the Work-Oriented to the Parenting-Oriented, and (3) from the Role-Balanced to the Parenting-Oriented. These mothers were classified into "Movers toward Parenting" (n = 79). Cells below the diagonal include movers (1) from the Role-Balanced to the Work-Oriented, (2) from the Parenting-Oriented to the Work-Oriented, and (3) from the Parenting-Oriented to the Role-Balanced. They were classified into "Movers toward Work" (n = 87).

Table 4 shows results of multinomial logistic regression models predicting inclusion in either "Movers toward Work" or "Movers toward Parenting," with "Stayers" as the reference group. Model 1 included only covariates, and education and work schedule were significant covariates: Mothers with high school or less education and who worked nonstandard shifts were more likely to move toward the Work-Oriented profile than be "Stayers". There were no significant effects of covariates on moving toward the Parenting-Oriented profile. Model 2 included changes (Time 2-Time 1, positive scores indicated an increase) in work characteristics in addition to covariates. However, none of the variables significantly predicted the profile transition patterns. Lastly, Model 3 included changes in work-to-family and family-to-work conflict. Changes in work-to-family conflict significantly predicted the likelihood of being included in the "Movers toward Work" or "Movers toward Parenting" relative to "Stayers". Increases in work-to-family conflict were linked to 1.8 times greater odds of moving toward the Work-Oriented time profile and 0.6 times lower odds of moving toward the Parenting-Oriented time profile. Changes in family-to-work conflict did not significantly predict the profile transition patterns. In sum, the longitudinal results partially supported our expectation in that changes in work-to-family conflict (but not changes in family-to-work conflict) predicted longitudinal transition patterns in the profiles of time resources, beyond covariates and changes in work characteristics.

#### **Discussion**

Using a person-centered, latent profile approach, this study identified three profiles of time resources among employed mothers – Work-Oriented, Parenting-Oriented, and Role-Balanced – that were distinguished by their relative patterns of time use and perceived time adequacy for work and parenting roles. Consistent with the W-HR model (ten Brummelhuis & Bakker, 2012), our findings suggest that high levels of work-family conflict likely drain time resources, especially perceived time for the parenting role. Moreover, across time, changes in mothers' reports of their work-to-family conflict were linked to transitions in membership in the profiles of time resources. Below, we discuss three important implications of these results and corresponding future research directions and practical considerations.

First, in our fairly homogeneous sample of mothers employed in the extended-care industry, we found three profiles of time resources. At each time of measurement, these profiles exhibited the same patterns across multiple dimensions of time resources for work and parenting roles--patterns that reflected a time-related orientation toward work, parenting or a balance between work and family. Mothers in the three profiles significantly differed in each of the time resources. For example, mothers in the Work-Oriented profile spent more time at work, perceived lower time adequacy for work, spent less time with children, and perceived lower time adequacy for children compared to mothers in the Parenting-Oriented or Role-Balanced profiles. By incorporating a person-centered approach, this study was able to capture nuanced patterns across multiple dimensions of time resources. In this way our study advances understanding of the ways in which a sample of employed mothers, working in the same industry, are nonetheless distinctive in their patterns of time use and time adequacy for work and parenting roles.

Second, mothers in the three profiles differed in their levels of work and family conflict. Mothers in the Work-Oriented profile reported the most work-to-family conflict and familyto-work conflict, followed by those in the Role-Balanced and Parenting-Oriented time profiles. Mothers in the Work-Oriented time profile, characterized by fewer time resources for parenting, had lower education and reported less control over their work schedules. This pattern seems consistent with Hochschild's (1983) discussion of the implications of emotional labor at work; mothers who work as a nurse assistant with extensive direct care of residents may need to exert more emotional labor in the extended-care work context and thus they may lack time and energy for the family domain. Furthermore, in these positions that involve constant direct care, it may be harder to set boundaries between work and family domains, giving rise to work-family conflict. Our findings also demonstrate that higher levels of work-to-family conflict are linked to a greater likelihood of belonging to the Work-Oriented profile, beyond personal and family background characteristics and work conditions. Work-to-family conflict occurs when demands stemming from work interrupt family and personal life (Frone, Russell, & Cooper, 1992; Voydanoff, 2005) and the primary source of the conflict is time (Greenhaus & Beutell, 1985). Given that work time is more obligatory and less flexible than parenting time, mothers who experienced higher levels of work-to-family conflict may have adjusted by spending less time with their children and thus perceived less time adequacy for children. Note also that, although mothers in the three profiles differed in levels of family-to-work conflict, family-to-work conflict did not significantly predict mothers' membership in the profiles of time resources after controlling for their personal and family characteristics. This may suggest that higher family-to-work conflict reflects a greater extent of family responsibilities.

Third, our longitudinal findings showed that employed mothers' time resources for work and parenting roles changed over time. Importantly, Time 1 profiles were replicated one year later. While staying in the same group was the modal pattern, we identified groups of mothers who moved more toward work or more toward parenting over time. Changes in mothers' membership were mostly explained by changes in their work-to-family conflict. Specifically, increases in work-to-family conflict were linked to moving toward the Work-Oriented time profile, whereas decreases in work-to-family conflict were linked to moving toward the Parenting-Oriented time profile. Mothers who were able to decrease work-tofamily conflict might have experienced increased time resources for parenting. It is important to note that there were no effects of changes in work characteristics on membership transitions in the time profiles. This means that the levels of demand, control, or support mothers have at their work may not be as critical as their experience of work-tofamily conflict for changing mothers' patterns of time resources. Taken together, our findings lend support to the W-HR model (ten Brummelhuis & Bakker, 2012) in that reducing work-to-family conflict can free up time resources for mothers to spend on parenting (Voydanoff, 2004).

#### **Practical Implications**

Our findings imply that workplaces and practitioners should consider ways to promote employed parents' temporal resources. Given that mothers in the Parenting-Oriented profile reported higher well-being than those in other profiles (Appendix 1), future work should

focus on increasing employees' time resources in the family domain. Previous workplace interventions, such as the ROWE (Results-Only-Work-Environment) and STAR (Support-Transform-Achieve-Results), have mostly focused on decreasing work-family conflict by promoting flexible work arrangements and increasing supervisor support for family and personal life. There are some positive effects of these interventions on time resources for family and personal life (Davis et al., 2015; Kelly et al., 2011, 2014). Thus far, however, there are few work-family interventions that have targeted employees' temporal resources and been effectively evaluated in well-designed studies (Hammer, Demsky, Kossek, & Bray, 2016), and thus, much work is needed in this area. Based on our finding that mothers in the three profiles were very distinctive in their levels of perceived time adequacy for children (Figure 2), future interventions could target how employed mothers effectively use their time with child, by providing coaching on the quality of the time and the quality of interactions. It may help mothers feel that they are better handling the role and have adequate time. Intervention programs should also include effective co-parenting strategies for two-parent households (That & Mills, 2012). Moreover, structural changes in the workplace are needed to promote perceived time adequacy of employees in disadvantaged contexts, such as single parents and those with multiple caregiving responsibilities (Kossek et al., 2014). In this study sample, all employees were working mothers, and most were hourly workers on nonstandard shifts who provided caregiving both at work and home, which likely had implications for their work-family conflict and time resources. For these employees, investigations into ways of changing workplace policies and systems such as implementing greater flexibility in work time and work schedules, on-site child care, and paid time off for sick children may prove to be most effective and can lead to a move from a Work-Oriented time profile to a Parenting-Oriented time profile. In sum, future efforts should consider how to intervene in employed mothers' perceived time for parenting and family life as another means of decreasing work-family conflict, which will promote their well-being and also work productivity.

#### **Limitations and Directions for Future Research**

Limitations of this study suggest directions for future research. First, our measures of time use and time adequacy are limited in several aspects. We used single items of perceived time adequacy so we were unable to capture specific aspects of time adequacy within a role, such as feelings of having enough time to attend children's school activities or eating meals together. Moreover, this study assessed the amount of time use based on self-reports, which poses potential risks for common-method (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and recall bias (Juster, Ono, & Stafford, 2003). The focus of this study was to assess the average time use that reflects mothers' typical time spent for their work and parenting roles and also can be compared to the overall perceived time adequacy for the roles. Future studies would benefit from incorporating greater precision in the measure of perceived time adequacy and utilizing other methods (e.g., ecological momentary assessment) to improve the validity in the measure of time use. Second, to test whether changes in work-to-family conflict were linked with profile membership transitions, we used the same time frame (Time 1 to Time 2) for both predictors and outcomes, and thus were not able to draw inferences about the direction of effect: Profile changes may be both cause and consequence of changes in work-to-family conflict. To make a stronger case for direction of effect, future

studies, incorporating additional time points, could test lagged models. Further, to determine the causal link between work-to-family conflict and employees' time resources, experimental studies testing workplace interventions should be conducted. Third, we focused on employed mothers given the lack of fathers in the extended-care facilities we studied. Future research could examine how fathers' time profiles differ from mothers' and what factors are associated with fathers' time profiles. Lastly, because the sample of employed mothers was selected from the long-term care industry, findings from this study are not generalizable to mothers employed in other industries. Future research should study time resources of mothers employed in a range of settings.

#### Conclusion

This study contributes to the literature by identifying patterns of temporal resources—time use and perceived time adequacy for work and parenting roles—among employed mothers. Our person-oriented approach allowed us to document how experiencing greater tensions between work and family contexts was linked to the Work-Oriented profile marked by a lack of time resources for parenting. The Parenting-Oriented profile, marked by more time resources for parenting than the Work-Oriented profile, was characterized by less tensions between work and family roles. Moreover, longitudinal analyses illuminated the potential importance of reducing work-to-family conflict as a means of helping employed mothers reserve time resources for parenting. Although it may not be easy to alter the trend toward increasing work-to-family conflict (Nomaguchi, 2009), doing so promises to free up time for family interactions for employed mothers and their families, with likely returns on investment for children—the next generation of the labor force.

## **Supplementary Material**

Refer to Web version on PubMed Central for supplementary material.

# **Acknowledgments**

The findings were presented at the 3<sup>rd</sup> Work and Family Researchers Network (WFRN) Conference at Washington D.C., U.S., in June 2016. The paper presentation was a part of a symposium, titled, "The importance of the time as a resource for working parents and caregivers (Chair: David M. Almeida)." We appreciate helpful comments and suggestions from Dr. D. Wayne Osgood on the earlier version of this manuscript.

#### References

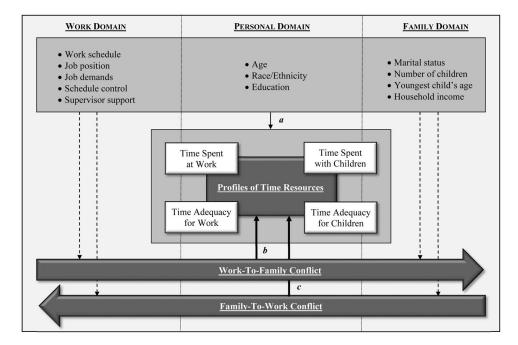
- Bakker AB, Demerouti E, Dollard MF. How job demands affect partners' experience of exhaustion: integrating work-family conflict and crossover theory. The Journal of Applied Psychology. 2008; 93(4):901–911. DOI: 10.1037/0021-9010.93.4.901 [PubMed: 18642992]
- Barnett RC, Brennan RT, Gareis KC, Ertel KA, Berkman LF, Almeida DM. Conservation of Resources theory in the context of multiple roles: an analysis of within- and cross-role mediational pathways. Community, Work & Family. 2012; 15(2):131–148. DOI: 10.1080/13668803.2010.539066
- Bianchi, SM., Robinson, JP., Milkie, MA. Changing rhythms of American family life. New York: Russell Sage Foundation; 2006.
- Bianchi, SM. What gives when mothers are employed? Parental time allocation in dual-earner and single-earner two-parent families. In: Crane, DR., Hill, EJ., editors. Handbook of Families and Work: Interdisciplinary Perspectives. University Press of America; 2009. p. 305-330.

Bray J, Kelly E, Hammer L, Almeida D, Dearing J, King R, Buxton O. An integrative, multilevel, and transdisciplinary research approach to challenges of Work, Family, and Health. 2013; :1–38. DOI: 10.3768/rtipress.2013.mr.0024.1303

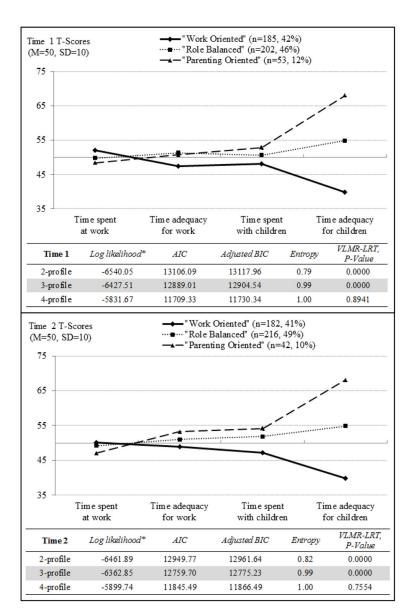
- Brockwood KJ, Hammer LB, Neal MB, Colton CL. Effects of accommodations made at home and at work on wives' and husbands' family and job satisfaction. Journal of Feminist Family Therapy. 2001; 13(2–3):41–63. DOI: 10.1300/J086v13n02\_04
- Crouter AC. Spillover from family to work: The neglected side of the work-family interface. Human Relations. 1984; 37(6):425–442. DOI: 10.1177/001872678403700601
- Davis KD, Lawson KM, Almeida DM, Kelly EL, King RB, Hammer L, ...McHale SM. Parents' daily time with their children: a workplace intervention. Pediatrics. 2015; 135(5):875–82. DOI: 10.1542/peds.2014-2057 [PubMed: 25869371]
- Dwyer, JE. Statistical models for the social and behavioral sciences. New York: Oxford University Press; 1983.
- Frone MR, Russell M, Cooper ML. Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. Journal of Applied Psychology. 1992; 77(1):65–78. [PubMed: 1556042]
- Greenhaus JH, Beutell NJ. Sources of conflict between work and family roles. Academy of Management Review. 1985; 10(1):76–88. DOI: 10.5465/AMR.1985.4277352
- Hammer LB, Kossek EE, Anger WK, Bodner T, Zimmerman KL. Clarifying work-family intervention processes: the roles of work-family conflict and family-supportive supervisor behaviors. The Journal of Applied Psychology. 2011; 96(1):134–50. DOI: 10.1037/a0020927 [PubMed: 20853943]
- Hammer LB, Kossek EE, Bodner T, Crain T. Measurement development and validation of the Family Supportive Supervisor Behavior Short-Form (FSSB-SF). Journal of Occupational Health Psychology. 2013; 18(3):285–296. DOI: 10.1037/a0032612 [PubMed: 23730803]
- Hammer, LB., Demsky, CA., Kossek, EE., Bray, JW. Work-family intervention research. In: Allen, TD., Eby, LT., editors. The Oxford Handbook of Work and Family. New York: Oxford University Press; 2016. p. 349-361.
- Hays, S. The cultural contradictions of motherhood. New Haven: Yale University Press; 1996.
- Hochschild, AR. The managed heart: Commercialization of human feeling. Berkeley, CA: University of California Press; 1983.
- Hughes R, Stone P. The Perils of shift work: Evening shift, night shift, and rotating shifts: are they for you? AJN The American Journal of Nursing. 2004; 104(9):60–63.
- Juster FT, Ono H, Stafford FP. An assessment of alternative measures of time use. Sociological Methodology. 2003; 33:19–54. DOI: 10.1111/j.0081-1750.2003.t01-1-00126.x
- Karasek R, Brisson C, Kawakami N, Houtman I, Bongers P, Amick B. The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. Journal of Occupational Health Psychology. 1998; 3(4):322–355. DOI: 10.1037/1076-8998.3.4.322 [PubMed: 9805280]
- Kelly EL, Ammons SK, Chermack K, Moen P. Gendered challenge, gendered response confronting the ideal worker norm in a white-collar organization. Gender & Society. 2010; 24(3):281–303. DOI: 10.1177/0891243210372073 [PubMed: 20625518]
- Kelly EL, Moen P, Tranby E. Changing workplaces to reduce work-family conflict: Schedule control in a white-collar organization. American Sociological Review. 2011; 76(2):265–290. DOI: 10.1177/0003122411400056 [PubMed: 21580799]
- Kelly EL, Moen P, Oakes JM, Fan W, Okechukwu C, Davis KD, ... Casper LM. Changing work and work-family conflict: Evidence from the Work, Family, and Health Network. American Sociological Review. 2014; 79(3):485–516. DOI: 10.1177/0003122414531435 [PubMed: 25349460]
- King, RB., Karuntzos, G., Casper, LM., Moen, P., Davis, K., Berkman, L., ... Kossek. Work-family balance issues and work-leave policies. In: Gatchel, RJ., Schultz, IZ., editors. Handbook of occupational health and wellness. New York, NY: Springer; 2013. p. 323-340.

Kossek EE, Hammer LB, Kelly EL, Moen P. Designing work, family & health organizational change initiatives. Organizational Dynamics. 2014; 43:53–63. DOI: 10.1016/j.orgdyn.2013.10.007 [PubMed: 24683279]

- Lee S, Almeida DM, Davis KD, King RB, Hammer LB, Kelly EL. Latent profiles of perceived time adequacy for paid work, parenting, and partner roles. Journal of Family Psychology. 2015; 29(5): 788–798. DOI: 10.1037/a0039433 [PubMed: 26075739]
- Milkie MA, Mattingly MJ, Nomaguchi KM, Bianchi SM, Robinson JP. The time squeeze: Parental statuses and feelings about time with children. Journal of Marriage and Family. 2004; 66(3):739–761. DOI: 10.1111/j.0022-2445.2004.00050.x
- Milkie MA, Raley SB, Bianchi SM. Taking on the second shift: Time allocations and time pressures of U.S. parents with preschoolers. Social Forces. 2009; 88(2):487–517. DOI: 10.1353/sof.0.0268
- Muthén, BO. Latent variable mixture modeling. In: Marcoulides, GA., Schumacker, RE., editors. New developments and techniques in structural equation modeling. Mahwah, NJ: Erlbaum; 2001. p. 1-33.
- Netemeyer RG, Boles JS, McMurrian R. Development and validation of work–family conflict and family–work conflict scales. Journal of Applied Psychology. 1996; 81(4):400–410. DOI: 10.1037/0021-9010.81.4.400
- Nomaguchi KM. Change in work-family conflict among employed parents between 1977 and 1997. Journal of Marriage and Family. 2009; 71(1):15–32. DOI: 10.1111/j.1741-3737.2008.00577.x
- Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method variance in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology. 2003; 88(5):879–903. DOI: 10.1037/0021-9010.88.5.879 [PubMed: 14516251]
- Quadlin NY. Gender and time use in college: Converging or diverging pathways? Gender & Society. 2015; Advance online publication. doi: 10.1177/0891243215599648
- ten Brummelhuis LL, Bakker AB. A resource perspective on the work-home interface: the work-home resources model. The American Psychologist. 2012; 67(7):545–56. DOI: 10.1037/a0027974 [PubMed: 22506688]
- Thomas LT, Ganster DC. Impact of family-supportive work variables on work-family conflict and strain: A control perspective. Journal of Applied Psychology. 1995; 80(1):6–15. DOI: 10.1037/0021-9010.80.1.6
- Van Horn ML, Bellis JM, Snyder SW. Family resource scale-revised: Psychometrics and validation of a measure of family resources in a sample of low-income families. Journal of Psychoeducational Assessment. 2001; 19(1):54–68. DOI: 10.1177/073428290101900104
- Voydanoff P. The effects of work demands and resources on work-to-family conflict and facilitation. Journal of Marriage and Family. 2004; 66(2):398–412.
- Voydanoff P. Work demands and work-to-family and family-to-work conflict: Direct and indirect relationships. Journal of Family Issues. 2005; 26(6):707–726. DOI: 10.1177/0192513X05277516



**Figure 1.** A Model Linking Work-Family Conflict to Time Use and Perceived Time Adequacy for Work and Parenting Roles.



**Figure 2.**Latent Profiles of Time Use and Perceived Time Adequacy for Work and Parenting at Time 1 and Time 2.

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Table 1

Baseline Characteristics of Employed Mothers in Each Time Profile

	Total Sample $N = 440$	ample 440	Work-Oriented $n = 185$	riented .85	Role-Balanced $n = 202$	lanced 202	Parenting-Oriented $n = 53$	Oriented 53	$F/x^2$
	M or %	(QS)	M or %	(as)	M or %	(as)	M or %	(SD)	
Time Resources									
Time spent at work	37.66	(8.54)	$38.92_{\rm a}$	(9.95)	36.99 <sub>ab</sub>	(6.81)	$35.82_{\rm b}$	(8.70)	3.93*
Time adequacy for work	2.87	(1.18)	$2.62_{\rm b}$	(1.17)	$3.07_{\rm a}$	(1.10)	$3.00_{\rm a}$	(1.33)	7.55
Time spent with children	42.68 (24.39)	24.39)	$38.46_{\rm b}$	(24.15)	$44.66_a$	(22.75)	$49.83_{a}$	(28.77)	5.83 **
Time adequacy for children	3.64	(0.77)	$2.86_{\rm c}$	(0.36)	$4.00_{\rm b}$	(0.00)	$5.00_{\rm a}$	(0.00)	2177.06 ***
Personal and Family Characteristics	<u>ics</u>								
Age	36.09	(7.62)	36.42	(8.25)	35.92	(7.08)	35.58	(7.40)	0.34
Race (White, %)	63.18		00.09		67.33		58.49		2.80
Education (%)									
College graduate	11.39		$8.65_{\rm b}$		$13.43_{\mathrm{a}}$		$13.21_{\mathrm{a}}$		14.73 **
Some college or $\operatorname{tech}^I$	50.11		$52.97_{\rm a}$		$53.23_{\rm a}$		$28.30_{\rm b}$		
High school or less Ref	38.50		38.38		33.33		58.49		
Married/Partnered (%)	67.05		62.70		70.79		67.92		2.88
Number of children	2.09	(1.01)	2.10	(1.06)	2.06	(0.94)	2.19	(1.13)	0.32
Youngest child's age	7.82	(4.78)	7.66	(5.04)	7.90	(4.47)	8.08	(5.08)	0.20
Household income <sup>2</sup>	9.62	(3.35)	9.31	(3.36)	9.90	(3.30)	9.64	(3.51)	1.37
Work Characteristics									
Work schedule (%)									23.17 ***
Standard shifts	89.09		$49.19_{c}$		$65.35_{\rm a}$		$83.02_{\rm a}$		
Nonstandard shifts Ref	39.32		50.81		34.65		16.98		
Job demands	4.22	(0.72)	4.19	(0.74)	4.23	(0.69)	4.30	(0.80)	0.48
Schedule control	2.71	(0.77)	$2.61_{\rm b}$	(0.73)	$2.72_{\rm b}$	(0.77)	$3.00_{\rm a}$	(0.82)	5.75 **
Supervisor support for family	3.76	(0.85)	$3.60_{\rm b}$	(0.91)	$3.84_{\rm a}$	(0.77)	$4.04_{\rm a}$	(0.84)	7.03 **
Work-Family Conflict									

Lee et al.

	Total Samp $N = 440$	Fotal Sample $N = 440$	Work-Orien $n = 185$	Work-Oriented $n = 185$	Role-Balanc $n = 202$	lanced 202	Role-Balanced Parenting-Oriented $n = 202$ $n = 53$	Oriented 53	$F/x^2$
	M or %	(SD)	M or %	(SD)	M or %	(SD)	Mor% (SD) Mor% (SD) Mor% (SD) Mor% (SD)	(SD)	
Work-to-family conflict	2.84	(0.90)	$3.32_{\rm a}$	(0.88)	$2.55_{\rm b}$	(0.67)	$2.84$ (0.90) $3.32_a$ (0.88) $2.55_b$ (0.67) $2.24_c$ (0.89)	(0.89)	63.54 ***
Family-to-work conflict	2.10	(0.59)	$2.26_{a}$	(0.61)	$2.10  (0.59)  2.26_a  (0.61)  2.04_b$	(0.51)	$(0.51)$ $1.82_{\rm c}$ $(0.68)$	(0.68)	14.23 ***

Moto

 $^{I}$ Some college or technical school;

Household income was a range variable where 9 signifies \$40,000-44,999 and 10 signifies \$45,000-49,999; Subscripts of a, b, c indicate the results of post-hoc analyses where a is higher than b and b is higher than c (ab is not significantly different from a or b). Means and percentages with no subscripts do not significantly differ; Ref The reference category.

p < .05,

p < .01, p < .01, p < .001.

Page 20

Lee et al.

Table 2

		Model 1	11	Model 2	12	Model 3	13
		B (SE)	Exp(B)	B (SE)	Exp(B)	B (SE)	Exp(B)
	Covariates						
	Age	0.03 (0.02)	1.03	0.03 (0.02)	1.03	0.05 (0.02)	1.05*
	White (vs. non-white)	-0.29 (0.23)	0.75	-0.26 (0.23)	0.77	-0.41 (0.27)	0.67
	Edu. (vs. high school or less)						
	College graduate or more	-0.61 (0.42)	0.54	-0.62 (0.43)	0.54	-0.96 (0.48)	$0.38^{*}$
	Some college or tech school	-0.18 (0.25)	0.84	-0.17 (0.25)	0.84	-0.20 (0.28)	0.82
	Married/partnered (vs. not)	-0.22 (0.27)	0.80	-0.24 (0.28)	0.79	-0.48 (0.31)	0.62
	Number of children	0.05 (0.12)	1.05	0.07 (0.12)	1.07	0.09 (0.13)	1.09
	Youngest child's age	-0.01 (0.03)	0.99	-0.01 (0.03)	0.99	-0.03 (0.03)	0.97
<b>Work-Oriented</b> $(n=185)$	Household income range	-0.05 (0.04)	0.95	-0.04 (0.04)	0.94	-0.05(0.05)	0.95
	Standard work shift (vs. not)	0.88 (0.23)	2.42 ***	0.82 (0.23)	2.27 ***	0.96 (0.27)	2.60 ***
	Work Characteristics						
	Job demands			-0.06 (0.16)	0.94	-0.25 (0.18)	0.78
	Schedule control			0.01 (0.16)	1.01	0.19 (0.18)	1.21
	Supervisor support for family			-0.20 (0.14)	0.82	-0.05(0.16)	0.95
	Work-Family Conflict						
	Work-to-family conflict					1.38 (0.19)	3.96 ***
	Family-to-work conflict					0.08 (0.22)	1.08
	Covariates						
	Age	-0.01 (0.03)	0.99	0.01 (0.03)	1.01	-0.01 (0.03)	0.99
	White (vs. non-white)	-0.34 (0.36)	0.72	-0.49 (0.37)	0.61	-0.45 (0.37)	0.64
	Edu. (vs. high school or less)						
Parenting-Oriented $(n = 53)$	College graduate or more	-0.40(0.57)	0.67	(09:0) 69:0-	0.50	-0.64(0.61)	0.53
	Some college or tech school	-1.27 (0.41)	0.28 **	-1.29 (0.42)	0.28 **	-1.29 (0.42)	0.28 **
	Married/partnered (vs. not)	0.26 (0.44)	1.29	0.16 (0.46)	1.17	0.15 (0.47)	1.16
	Number of children	0.11 (0.18)	1.11	0.09 (0.18)	1.09	0.08 (0.19)	1.09

Page 21

		Model 1	11	Model 2	12	Model 3	el 3
		B (SE)	Exp(B)	B (SE)	Exp(B)	B (SE)	Exp(B)
	Youngest child's age	0.03 (0.05)	1.03	0.02 (0.05)	1.02	0.03 (0.05)	1.03
	Household income range	0.02 (0.07)	1.02	-0.00 (0.07)	1.00	-0.01 (0.07)	1.00
	Standard work shift (vs. not)	-0.70 (0.42)	$0.50$ $^{7}$	-0.58 (0.43)	0.56	-0.61 (0.43)	0.54
	Work Characteristics						
	Job demands			0.32 (0.27)	1.37	0.22 (0.27)	1.24
	Schedule control			0.51 (0.24)	1.67*	0.39 (0.25)	1.47
	Supervisor support for family			0.14 (0.23)	1.15	0.08 (0.22)	1.08
	Work-Family Conflict						
	Work-to-family conflict					-0.24 (0.29)	0.79
	Family-to-work conflict					-0.41 (0.36)	0.67
Fit Statistics							
-2 Log Likelihood			725.94		712.81		613.12
Chi-square test for B=0			47.09 ***		56.96 ***		156.66 ***
df			18		24		28

Note: "Role Balanced" is the reference group (n = 202); 400, 398, and 398 observations were used from Model 1 through Model 3, respectively, due to missing responses in predictors.

p < .05,\*\* p < .01,\*\* p < .01,\*\*\* p < .001.

 Table 3

 Latent Transition Probabilities of the Profiles of Time Use and Perceived Time Adequacy

			Time 2	
		Work-Oriented	Role-Balanced	Parenting-Oriented
	Work-Oriented	0.643	0.319 <sup>a</sup>	0.038 <sup>a</sup>
Time 1	Role-Balanced	0.277 b	0.659	0.064 <sup>a</sup>
	Parenting-Oriented	0.132 b	0.453 b	0.415

*Note.* N = 440.

Bold diagonal represents Stayers who remained in the same latent profile at Time 2 (n = 274);

a indicates Movers toward Parenting (n = 79);

 $b_{\text{indicates Movers toward Work } (n = 87).$ 

Lee et al.

Table 4

Results of Multinomial Logistic Regression Models Predicting Latent Profile Transition Patterns

		Model 1	1	Model 2	2	Model 3	13
		B (SE)	Exp(B)	B (SE)	Exp(B)	B (SE)	Exp(B)
	Covariates						
	Age	-0.02 (0.02)	0.98	-0.01 (0.02)	0.99	-0.01 (0.02)	0.99
	White (vs. non-white)	0.05 (0.29)	1.06	0.07 (0.29)	1.07	0.13 (0.30)	1.14
	Edu. (vs. high school or less)						
	College graduate or more	-0.66 (0.49)	0.52	-0.67 (0.50)	0.51	-0.69(0.51)	0.50
	Some college or tech school	-0.70 (0.30)	$0.50^{*}$	-0.71 (0.30)	0.49	-0.78 (0.31)	0.46
	Married/partnered (vs. not)	0.04 (0.33)	1.04	0.01 (0.34)	1.01	0.11 (0.36)	1.12
	Number of children	0.01 (0.14)	1.01	0.01 (0.14)	1.01	-0.01 (0.15)	0.99
	Youngest child's age	0.02 (0.04)	1.02	0.02 (0.04)	1.02	0.02 (0.04)	1.02
"Movers toward Work" $(n=87)$	Household income range	0.04 (0.05)	1.04	0.05 (0.05)	1.05	0.05 (0.05)	1.05
	Standard work shift (vs. not)	-0.77 (0.29)	0.46	-0.75 (0.30)	0.47	-0.74 (0.31)	0.48
	Changes in Work Characteristics						
	Job demands			-0.12 (0.18)	0.89	-0.12 (0.19)	0.89
	Schedule control			0.02 (0.19)	1.02	0.05 (0.20)	1.05
	Supervisor support for family			-0.01 (0.15)	0.99	0.05 (0.15)	1.05
	Changes in Work-Family Conflict						
	Work-to-family conflict					0.59 (0.18)	1.81
	Family-to-work conflict					0.38 (0.24)	1.46
	Covariates						
	Age	0.02 (0.02)	1.02	0.02 (0.02)	1.02	0.03 (0.02)	1.03
	White (vs. non-white)	-0.36 (0.28)	0.70	-0.35 (0.28)	0.71	-0.38 (0.29)	89.0
	Edu. (vs. high school or less)						
"Movers toward Parenting" $(n=79)$	College graduate or more	-0.43 (0.55)	0.65	-0.46 (0.55)	0.63	-0.42 (0.55)	99.0
	Some college or tech school	0.19 (0.31)	1.21	0.18 (0.31)	1.19	0.21 (0.31)	1.23
	Married/partnered (vs. not)	0.14 (0.34)	1.15	0.16 (0.34)	1.17	0.07 (0.34)	1.07
	Number of children	0.04 (0.14)	1.04	0.03 (0.14)	1.03	0.02 (0.14)	1.02

Page 24

	Model 1	1	Model 2	7	Model 3	13
	B (SE)	Exp(B)	B (SE)	Exp(B)	B (SE)	Exp(B)
Youngest child's age	0.00 (0.04)	1.01	0.00 (0.04)	1.00	-0.00 (0.04)	1.00
Household income range	-0.03(0.05)	0.97	-0.03 (0.05)	0.98	-0.02 (0.05)	0.98
Standard work shift (vs. not)	-0.20 (0.28)	0.82	-0.23 (0.29)	0.80	-0.25 (0.29)	0.78
Changes in Work Characteristics						
Job demands			0.04 (0.19)	1.04	0.07 (0.19)	1.07
Schedule control			-0.00(0.19)	1.00	-0.05 (0.19)	0.95
Supervisor support for family			0.17 (0.16)	1.19	0.16 (0.17)	1.17
Changes in Work-Family Conflict						
Work-to-family conflict					-0.50 (0.18)	0.61 **
Family-to-work conflict					0.24 (0.23)	1.27
Fit Statistics						
-2 Log Likelihood		712.34		708.63		675.03
Chi-square test for B=0		22.11		23.95		57.55 ***
Jp		18		24		28

Note. "Stayers" is the reference group (n = 274); 400, 398, and 398 observations were used from Model 1 through Model 3, respectively, due to missing responses in predictors.