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Anna K. Young
University of Connecticut - Storrs, anna.young@uconn.edu

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The Influence of Workaholism on Work-Life Issues through Boundary Management: Moderating Effects of Telecommuting

Anna K. Young

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The Influence of Workaholism on Work-Life Issues through Boundary Management: Moderating Effects of Telecommuting

Presented by

Anna K. Young, B.A.

Major Advisor_____
Janet Barnes-Farrell

Associate Advisor_____
Dev Dalal

Associate Advisor_____
Colin Leach

University of Connecticut

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Abstract

There are many personality and contextual variables that can contribute to negative home-domain functioning. The current study examined the effect of two specific variables, workaholism and telecommuting, on work-life issues. A moderated mediation model was tested, in which boundary flexibility mediated the relationship between workaholism and telecommuting and work-to-family conflict and family disengagement. Additionally, telecommuting was tested as a moderator of the indirect effect of workaholism on work-life issues through boundary flexibility willingness. I recruited 494 full-time, salaried, working adults through Amazon's Mechanical Turk. Though there were many significant direct effects, the data only suggested partial support for the indirect relationship of workaholism on family disengagement through boundary flexibility willingness. Theoretical and practical implications of the findings are discussed.

The Influence of Workaholism on Work-Life Issues through Boundary Management: Moderating Effects of Telecommuting

In 2012, the average employed American reported working 7.7 hours a day, an average of 8 hours per day on weekdays and 5.7 hours per day on weekend days (for a total of over 50 hours spent on work per week with 34% reporting working on weekends) (Bureau of Labor Statistics, American Time Use Survey). The steady increase in working hours in the past few decades (from around 35 hours per week in 1970) and the resulting spillover of work into personal life has many implications for home life and family relations. This increase in work facilitates the blurring of boundaries around domains that are treated as ostensibly separable: the home domain and the work domain. Although the boundaries around both domains have the potential to be breached, the boundary around the home domain appears to be particularly vulnerable. Weak home boundaries allow work thoughts and activities to spill over into the home domain; thus, spillover of work into the home is associated with more negative outcomes such as increased work-to-family conflict (WFC) (Chesley, 2005).

Although changing work demands and economic pressures individually contribute to increased time devoted to work activities, there are certain personality characteristics that predispose employees to engage in excessive work behaviors. Furthermore, these personality variables may foster weak home boundaries and thus contribute to some of the negative outcomes associated with work spillover into the home domain. For example, an individual's reluctance to disengage from work may interfere with the development and maintenance of the boundary around the home domain. Additionally, prevalence of working arrangements that place an employee in the home during the work day can make it tempting to intermix work activities with family activities. With this in mind, there is a need for more research that examines

individual differences that contribute to work-life management and conflict and contextual variables that affect these relationships (e.g. Chesley, 2005).

I conducted a study designed to examine two such variables, workaholism and telecommuting, and their association with WFC and family disengagement. I further examined evidence that boundary flexibility mediates the relationships of workaholism and telecommuting work arrangement with negative outcomes in the home domain. In the following sections, I will first focus on workaholism, a personality variable, followed by telecommuting, a contextual variable, and their associations with negative outcomes in both the work and home domains. I will then discuss boundary flexibility, a central feature of boundaries, as a mechanism linking workaholism and telecommuting with negative outcomes in the home domain. Last, I will explore the possibility for telecommuting to not only lead to negative outcomes but also to exacerbate negative outcomes for workaholics.

Workaholism

The term workaholism was first coined by Oates (1971) who defined it as the "compulsion or uncontrollable need to work incessantly" (p. 11). Oates (1971) believed the need to work was so exaggerated for workaholics that it endangered their health, reduced their happiness, and caused deterioration in their interpersonal relations and social functioning. Numerous studies of workaholism have found the behavior to be associated with multiple negative health outcomes, including anxiety, negative affect, job stress, burnout, physical complaints, life dissatisfaction, exhaustion, and sleep complaints (Matuska, 2010; Piotrowski & Vodanovich, 2008; Van den Broeck, Schreurs, De Witte, Vansteenkiste, Germeys, & Schaufeli, 2011; Van Wijhe, Peeters, & Schaufeli, 2011). Workaholics have an uncontrollable preoccupation with work in which they have a tendency to work anytime in any place and cannot

disengage from work if they want to (Matuska, 2010; Van den Broeck et al., 2011). Two key components of workaholism include working excessively (i.e. more than 50 hours a week) and working compulsively (Machlowitz, 1980; Schaufeli, Bakker, Van der Heijden, & Prins, 2009).

Although it is clear that workaholic tendencies (hereby referred to as WT) are likely to have relevance for the workplace, they also have implications and consequences for other areas of life outside of the workplace. For example, workaholics experience poorer social relationships outside work than other employees (Van Beek et al., 2012). They also report more work-life imbalance, work-life conflict, and work-to-home interference, including marital estrangement, more marital discontentment for men, and withdrawal from family interactions (Aziz, Adkins, Waller, & Wuensch, 2010; Bonebright, Clay, & Ankenmann, 2000; Griffiths, 2001; Matuska, 2010; Shifron & Reyson, 2011; Van den Broeck et al., 2011). Workaholics have difficulty with intimate relationships, have little time for interpersonal relations and are less likely to enjoy leisure activities (Brady, Vodanovich, & Rotunda, 2008). They also experience increased health impairments and health symptoms, including communication difficulties, low life satisfaction, and lack of enjoyment of leisure time (Piotrowski & Vodanovich, 2008; Van den Broeck et al., 2011).

The excessive amount of time spent on work-related activities produces negative consequences for social and family activities (Andreassen et al., 2010). Because time is a limited resource, workaholics' excessive commitment to work and the work role frustrates participation in the home and family domain, so it is no surprise that workaholics report more work-to-home conflict than non-workaholics (Schaufeli et al., 2009; Van den Broeck et al., 2011). In replication of this prior work, I hypothesize that workaholism will be positively associated with WFC.

Furthermore, workaholics tend to have trouble disengaging from work even when they transition to the home domain. When employees reporting WT go home, they are less able to disengage from their work and should therefore be less able to engage with family members even if they want to. The compulsion to work excessively prevents those exhibiting WT from being able to fully engage with family members in the home setting. They may be physically present with family members but unable to mentally attend to the situation, which may be a consequence of the excessive and compulsive tendencies related to their work.

Hypothesis 1: Workaholic tendencies (WT) will be positively associated with levels of (a) work-to-family conflict (WFC) and (b) disengagement from family activities.

In the following section, I examine telecommuting, a contextual variable that also has implications for WFC and family disengagement.

Telecommuting

Telecommuting as a working arrangement has become more popular in recent years, but it has also become more controversial in terms of negative outcomes associated with it. Though there are benefits to teleworking, (i.e. increased job satisfaction, increased flexibility, and improved job performance) it has also been documented to be associated with more hours spent working, strained relationships with coworkers, and more role overload (Ammons & Markham, 2004; Duxbury et al., 1996; Golden, 2006; Hill, Miller, Weiner, & Colihan, 1998; Peters & Van der Lippe, 2007). Telecommuters physically integrate the domains of work and family in the family physical space, which may result in interdomain conflict (Matthews & Barnes-Farrell, 2010). The integration of the two domains that telecommuters exhibit is expected to result in increased WFC and inter-role conflict (Matthews et al., 2010; Shumate & Fulk, 2004).

Telecommuters may also work outside of the normal business hours because of their new flexibility while working at home (Shumate & Fulk, 2004). In this case, there is little spatial separation between paid and unpaid work, which makes overworking more salient for telecommuters (Shumate & Fulk, 2004). Some telecommuters may lack the external cues that indicate the end of the work day, which also contributes to overworking (Shumate & Fulk, 2004). This, in turn, may contribute to greater WFC (Desrochers, Hilton, & Larwood, 2005).

Telecommuting could also impact family disengagement by having work in the same physical environment as the home. By bringing work into the home domain, telecommuters create more opportunities to be distracted by that work when spending time with family. Family members may feel ignored or ostracized by telecommuters who are physically present but not mentally or emotionally present to the needs of the family.

Hypothesis 2: Telecommuting work arrangement will be positively associated with levels of (a) work-to-family conflict (WFC) and (b) disengagement from family activities.

The following section discusses how workaholism and telecommuting relate to the willingness and ability components of home boundary flexibility, respectively, as well as how boundary flexibility functions as a mechanism to explain the relationship between both WT and telecommuting and negative outcomes in the home domain.

Boundary Flexibility

Boundaries are conceptualized as mental fences that are intended to simplify and organize the environment an individual inhabits (Ashforth, Fugate, & Kreiner, 2000; Michaelson & Johnson, 1997; Zerubavel, 1991). Individuals create boundaries to partition different domains; the work and home domains are examples of social domains individuals create cognitive boundaries around (Michaelson & Johnson, 1997; Nippert-Eng, 1996).

A key feature of boundaries that affects the likelihood of spillover from one domain to another and conflicts that arise from such spillover, is boundary flexibility. Boundary flexibility refers to the degree to which an individual can remove himself or herself from one domain to complete tasks in another opposing domain (Matthews & Barnes-Farrell, 2010). Highly flexible boundaries permit cognitions and activities from other domains to enter the focal domain; in other words, they are indicative of low boundary strength. In contrast, an inflexible boundary is one that keeps cognitions and activities from other domains out; thus, inflexible boundaries are protective of a domain. It is also notable that boundary flexibility includes both a situational (ability) component and a motivational (willingness) component; the two components are related but distinguishable (Matthews & Barnes-Farrell, 2010). Both components contribute to the overall strength of a boundary; specifically, a strong boundary is one in which both ability and willingness to flex the boundary are low.

Home boundary flexibility ability (HFA) refers to the *ability* of the individual to flex the boundary around the home domain, in effect the ability to allow intrusions from the work domain into the home domain (Hall & Richter, 1988; Matthews & Barnes-Farrell, 2010). This often reflects external constraints that are not always under the employee's control. For example, the ability to maintain the home boundary may be reduced if an employee is required by his or her employer to accept work-related phone calls during evenings and weekends after the work day ends. In contrast, home boundary flexibility willingness (HFW) refers to the individual's *willingness* to flex the home boundary which may be influenced by individual differences or context (Hall & Richter, 1998; Matthews & Barnes-Farrell, 2010). For example, an employee may be willing to flex the home boundary if he or she is working toward a promotion or pay raise. He or she may be more willing to bring work into the home to gain this reward. In contrast,

a strong, inflexible boundary around the home domain may exist when an employee refuses to accept work-related calls after the workday ends and on weekends. Individually and in combination, HFA and HFW contribute significantly to the overall strength of the boundary around the home domain. Notably, both HFA and HFW serve as mechanisms that promote or inhibit blurring of the boundaries around the home domain and allow or prevent spillover from the work domain into the home domain.

Workaholism is an individual personality characteristic that is relatively stable and provides the motivation for individuals to engage in excessive and compulsive work; thus, it is expected to negatively affect the *willingness* to maintain a strong home boundary. Furthermore, employees reporting WT tend to have trouble disengaging from work even when they transition to the home domain. One of the consequences of this inability to disengage may be the tendency to develop weak home-specific boundaries. Because WT individuals are compelled by an inner need to work all the time, they are motivated to let their work spill over into the home domain, and thus they increase the flexibility of the boundary around the home domain.

Hypothesis 3: Workaholic tendencies (WT) will be positively associated with home boundary flexibility willingness (HFW).

When boundaries around the home domain are weak, work responsibilities and emotions can spill over into the home domain, which creates conflicts with home responsibilities and leads to more WFC. This effect has already been demonstrated in multiple studies (Chesley, 2005; Desrochers, et al., 2005). With greater integration and boundary flexibility comes greater WFC (Desrochers et al., 2005). Furthermore, when work domain responsibilities invade the home domain, individuals attribute more attention and mental and emotional energy to those outer-domain, work-related tasks, which can create a situation in which the family is neglected and

made a second priority to work tasks. Thus, the spillover of work responsibilities and emotions that occur when boundaries around the home domain are weak are also expected to be associated with elevated levels of family disengagement.

Specifically, because of the compulsion to continue working, WT individuals will be motivated to flex the boundary around the home domain. This willingness to flex the home boundary may serve as an explanatory mechanism for the relationship between WT and negative home outcomes that have been noted in previous studies (Schaufeli et al., 2009; Van den Broeck et al., 2011). Thus, I expect that there will be an indirect relationship of WT on negative home outcomes; this relationship will be mediated by HFW.

Hypothesis 4: Home boundary flexibility willingness (HFW) will mediate the relationship between workaholic tendencies (WT) and (a) work-to-family conflict (WFC) and (b) family disengagement.

In addition to individual characteristics that may encourage the development of weak home boundaries, the specific working arrangement an employee is involved in may provide conditions that encourage blurring the boundaries around the home domain. Whether assigned by the organization or requested by an employee, a telecommuting assignment could provide opportunities to impact the strength of the home boundary. Telecommuting increases the likelihood of home boundary flexibility because it makes workers physically available to attend to work demands while they are at home (Matthews & Barnes-Farrell, 2010). Telecommuters take on multiple roles at once when they work from home, which could include work, parental, caregiver, and significant other responsibilities (Shumate & Fulk, 2004).

It is widely understood that telecommuting arrangements provide more flexibility for employers and employees, which is often touted as a benefit of this kind of arrangement (Hill et

al., 1998). However, there are also problematic implications for boundaries around the home domain because the arrangement co-locates work in the home environment. In particular, telecommuting is expected to be associated with increased home boundary flexibility because it threatens the ability of workers to maintain an inflexible home boundary (Matthews & Barnes-Farrell, 2010). By taking work into the home, telecommuters automatically increase flexibility of the home domain; the home domain boundary is already less rigidly constructed than the work domain boundary, which makes it more acceptable for telecommuters to bring work into the home domain but not bring home into the work domain (Matthews & Barnes-Farrell, 2010; Matthews et al., 2010). The increase in time spent at home due to the working arrangement of telecommuting compared to typical office-based full-time employees also contributes to the potential for blurred boundaries between work and home life (Hill et al., 1998).

As described here, level of exposure to telecommuting can be viewed as a risk factor for a variety of outcomes, because it increases boundary flexibility and leads to spillover of work into the home domain. However, in contrast to WT, which is expected to primarily impact the *willingness* to flex the home domain boundary, telecommuting should impact the *ability* to build and maintain the home domain boundary. Employees have more opportunity to work longer hours and work past their prescribed work day because they are physically in the home domain and do not have the same physical delineation between work and home as an office-based employee. Thus, telecommuting as a feature of job design should affect an individual's ability to protect the home boundary.

Hypothesis 5: Telecommuting work arrangement will be positively associated with home boundary flexibility ability (HFA).

The ability telecommuters have to weaken the home domain boundary is a product of their working arrangement, and it is hypothesized to be the mechanism which explains why telecommuters experience more WFC and family disengagement. Individuals who telecommute more frequently are expected to report more WFC and family disengagement, because they have a greater ability to flex the boundary around the home domain. I hypothesize that there will be an indirect effect of telecommuting work arrangement on WFC and family disengagement; this relationship will be mediated by HFA.

Hypothesis 6: Home boundary flexibility ability (HFA) will mediate the relationship between telecommuting work arrangement and (a) work-to-family conflict (WFC) and (b) family disengagement.

It is also important to consider how different working arrangements may impact individuals who exhibit WT differently in terms of their work-to-family boundary flexibility. The addition of an increased potential for blurring the home boundary for those with telecommuting work arrangements should exacerbate the problems already found by workaholics. I hypothesize that given the opportunity, workaholics will take advantage of their work-from-home arrangement to further blur the boundary around the home domain and engage in more work activities beyond their prescribed work day. Telecommuting work arrangement is expected to moderate the mediated relationship, specifically the relationship between WT and the willingness component of home domain boundary flexibility.

Hypothesis 7: Telecommuting work arrangement will moderate the relationship between workaholic tendencies (WT) and (a) work-to-family conflict (WFC) and (b) family disengagement through home boundary flexibility willingness (HFW).

Given the previous discussion of relationships among WT, home domain boundary flexibility and telecommuting, I propose a series of mediated relationships of an individual difference variable, WT, and a work arrangement variable, telecommuting, with WFC and family disengagement. These relationships are summarized in Figure 1. I also propose that telecommuting work arrangement moderates the relationship of WT on WFC and family disengagement through HFW. This additional relationship is summarized in Figure 2.

Method

Participants

A total of 888 full-time working adults were recruited from the Amazon Mechanical Turk labor market (Mason & Suri, 2012) to complete an online survey; 254 were removed for not meeting the criteria for inclusion in the study or for failing quality checks, leaving a final sample of 634 respondents. Respondents participated online in exchange for a flat cash payment of $0.50 for a completed survey. Participation lasted between 10 and 15 minutes. Restrictions on the sample included only allowing full-time (defined as a minimum of 30 hours per week), salaried working adults to complete the survey (Automatic Data Processing, Inc., 2012).

Among the 634 target participants, 57% were male, 76% were Caucasian, 10% were Asian, 47% had graduated from college, and 17% had completed a graduate or professional degree. Participants were employed in a variety of jobs ranging from management and sales to computer and mathematical and healthcare support. The mean number of years of tenure was 5.5. Forty percent of participants had at least one child under the age of 18 living in the household. A total of 215 individuals, or 34% of the total sample, reported being involved in a telecommuting arrangement. Of these 215 participants, 55 individuals telecommuted 1 day per

week, 45 individuals telecommuted 2 days per week, 40 individuals telecommuted 3 days per week, 18 individuals telecommuted 4 days per week, and 57 individuals telecommuted five or more days per week. Sixty-nine percent of telecommuters indicated telecommuting because they chose the arrangement; the remaining 31% were assigned to the arrangement. Over 54% of the total sample reported working more than 40 hours a week with 29% of the total sample indicating working 50 or more hours a week.

In addition to the target sample, I recruited a secondary sample of 75 cohabitators of participants to complete an abbreviated survey that provided secondary measures of several key variables. Unique codes linked survey responses of participants and those of cohabitators they nominated to complete a survey. Cohabitators were adults over the age of 18 living in the same household as the participants. To recruit cohabitators, I provided an option for participants to enter the e-mail address of their cohabitator. I then contacted the cohabitators via e-mail with a link to the abbreviated survey. A total of 208 participants opted to provide an e-mail address for a cohabitator; 75 cohabitators (36% response rate) completed the secondary survey. All cohabitators were provided with the incentive of having the opportunity to enter a drawing for 1 of 5 $25 Amazon gift cards at the end of the abbreviated survey. Of the 75 cohabitators who completed the abbreviated survey, 49% were female, 80% were Caucasian, 44% telecommuted at least one day per week, and 73% were employed full-time.

Procedure

Participants were provided a link to the survey through MTurk; those who did not indicate being full-time, salaried, working adults were not permitted to complete the survey. Hourly and contract workers, and individuals who worked less than 30 hours per week, were advised that they did not qualify for the survey and were rerouted to the thank you message at the

end of the survey. For those who qualified, the survey took between 10 and 15 minutes to complete. Once participants completed the survey, they entered a unique code, provided to them at the end of the survey, into the MTurk interface to receive compensation. Participants who completed the survey were also given the option to provide an e-mail address of a cohabitator who later received an abbreviated survey. The abbreviated survey included critical outcome variables and cohabitator perceptions of boundary flexibility and WFC of the initial participant. These responses provided an external source of information that served as a methodological component to evaluate potentially biased outcomes as a function of self-reported measures.

Measures

Workaholism. Workaholism was measured with the short version of the Dutch Work Addiction Scale (DUWAS) which includes 10 items (Del Libano et al., 2010). The scale is composed of two subscales: six items represent working excessively (WkE) and four items represent working compulsively (WkC). According to the authors, the combination of both subscales has higher predictive power than treating both dimensions separately; thus, I created a composite score using all 10 items (Schaufeli, Taris, & Bakker, 2008). Responses were measured on a 4-point frequency scale ranging from *1-almost never* to *4-almost always*. Sample items include: “It is hard for me to relax when I’m not working” and “I feel obliged to work hard, even when it’s not enjoyable.”

Telecommuting. Telecommuting was measured with a frequency scale. Participants were first asked if they had a telecommuting arrangement. If they answered yes, they were asked how many days a week they telecommuted on average. Response options included one day through seven days per week. Telecommuters were also asked whether their telecommuting arrangement was employee requested or employer assigned and were asked their preferred

telecommuting arrangement. Preferred telecommuting arrangement was assessed with a 7-point scale including "working 100% at home," "working 50% at home and 50% at an office," "working 75% at home and 25% at an office," "working 25% at home and 75% at an office," "working 100% at an office," "flexible and changeable schedule for working at home," and "other." These subsequent telecommuting-related questions were only asked of the participants who indicated being involved in a telecommuting arrangement.

Domain Boundary Flexibility. Boundary flexibility was assessed using two subscales from a boundary flexibility measure developed by Matthews & Barnes-Farrell (2010) and later revised by Matthews, Barnes-Farrell, and Bulger (2010). Responses were measured on a 7-point Likert-type scale ranging from *1-strongly disagree* to *7-strongly agree*. The full boundary flexibility measure (19 items) is composed of 4 subscales: family flexibility ability (5 items), family flexibility willingness (6 items), work flexibility ability (4 items), and work flexibility willingness (4 items). Because my interest was in the family boundary, I used the family flexibility ability and family flexibility willingness subscales. An example item of family flexibility willingness is, "While at home, I do not mind stopping what I am working on to complete a work related responsibility." An example item of family flexibility ability is, "My family and personal life responsibilities would not prevent me from going into work early if the need arose."

Work-to-Family Conflict. WFC was measured with the 8-item WFC subscale from Kopelman, Greenhaus, and Connolly's 16-item measure of conflict between work and family (1983). Responses were measured on a 5-point Likert-type scale ranging from *1-strongly disagree* to *5-strongly agree.* Sample items include: "My work schedule often conflicts with my family life" and "On the job, I have so much work that it takes away from my other interests."

Family Disengagement. Family disengagement was measured with a 3-item measure created for the purposes of this study. Responses were measured on a 7-point Likert-type scale ranging from *1 –strongly disagree* to *7- strongly agree*. An example item is, "When I am with my family, I have a hard time forgetting about work."

Demographics. I collected demographic data including self-reported gender, highest level of education, hours worked per week, job title, race, tenure, and number of children living in the household.

Control Variables. The following two variables were assessed as potential statistical controls: work overload pressures and segmentation preference. The rationale for their inclusion is explained below.

Work Overload Pressures. This construct identifies the external pressures put on employees by the organization to take on more work than they can handle and the expectation of employees to work past prescribed working hours. Many organizations promote productivity by encouraging work overload behaviors from their employees. The encouraged behaviors can range from overworking (i.e. engaging in work tasks beyond the typical work day) to coming in on days off to catch up. Employees can also feel a pressure to overwork from coworkers by feeling guilty for not engaging in work overload behaviors like everyone else. Because my intention was to assess the influence of WT, an internally generated propensity to engage in overwork, independent of pressures felt by the organization, I included a measure of perceived work overload pressures as a statistical control in my analyses.

Work Overload Pressures was measured with a three-item scale, developed for the purposes of this study, which measures pressures from the organization to work excessively. Responses were measured on a 7-point Likert-type scale ranging from *1-strongly disagree* to *7-*

strongly agree. Sample items include: "I feel pressured to work excessively" and "the culture of my organization is centered around working excessively."

Segmentation Preference. Segmentation preference is believed to be associated with WT, HFW, and the outcome variables. Segmentation preference could significantly affect HFW and thus was included as a control to identify unique effects of WT on HFW and mediation of WT on WFC and family disengagement through HFW. This was done to ensure that relationships observed between WT and WFC and family disengagement are not products of segmentation preference.

Segmentation preference was measured with Kreiner's (2006) four item, 7-point segmentation preference scale (*1-strongly disagree*; *7-strongly agree*). Sample items include: "I prefer to keep work life at work," and "I like to be able to leave work behind when I go home." Higher scores indicated a stronger preference for segmenting work and home domains.

Results

Data were cleaned prior to running the analyses using the following procedures. Participants who did not complete at least 50% of the questions were excluded from the analyses. One hundred and fifteen participants were excluded from the analysis for not completing at least half of the survey. One hundred and thirty-nine participants were excluded for not meeting the criteria for inclusion of being a salaried full-time employee. Additionally, two check questions were embedded into the survey to assess the quality of participant responses. Participants who failed either one of the check questions were also excluded from the analyses since these questions were included to distinguish careless responders. Eight participants were eliminated from the analysis due to failed check questions, resulting in a sample size of 634 participants after data cleaning.

Initially, telecommuting work arrangement was measured on a daily frequency scale with possible frequencies ranging from 0 days per week (I do not have a telecommuting arrangement) to 5 or more days per week. After examination of the distribution of responses and consideration of the theorized role of telecommuting arrangements in this study[1], I elected to operationalize telecommuting status as a dichotomous variable. Individuals who reported work arrangements in which work was primarily completed via telecommuting (operationalized as telecommuting frequency of 4 or more days per week) were classified as telecommuters (n = 75); individuals who reported work arrangements in which work was completed exclusively at an employer location were classified as non-telecommuters (n=419). To clarify interpretation of hypothesis tests regarding the impact of telecommuting work arrangements, the subset of individuals who reported that they telecommuted one, two, or three days per week (n=140) was excluded from the analyses because there was considerable ambiguity about the primary characterization of their work arrangements as telecommuting or employer-based. Thus, the final sample size used for the analyses was 494 participants.

For the two scales developed for the purpose of this study, family disengagement and WOP, exploratory factor analyses for each scale were conducted to determine dimensionality. A single factor solution was identified for each scale according to the usual criteria assessing the scree plots and eigenvalues greater than 1.0. For both scales, interitem correlations were at or

[1] Including telecommuters who work from home one to three days per week in the analyses created [unclear] comparisons when the continuous measure was used. Additionally, a trichotomized variable was created to explore the differences between non-telecommuters, 1-day telecommuters, and more than 1-day telecommuters. The infrequent telecommuters created additional noise in the analyses and did not allow me to clearly distinguish differences between participants who worked full-time at the office and those who worked mostly from home (four or five days). Participants who only worked one to three days from home did not share the same experiences as participants who worked mostly from home; since the interest of this study was to identify differences for telecommuters, the infrequent telecommuters were excluded.

above .40 (Kim & Mueller, 1978), all items had factor loadings of at least .40 and at least 60% of the total item variance was explained by a single factor solution. Factor loadings for both scales ranged from .77 to .92, and the coefficient alpha for both scales met the conventional criterion of .70 for acceptable internal consistency. Thus, the three items for each construct were treated as scales.

For all other measures, confirmatory factor analyses were conducted to confirm the factor structure reported in previously published work. (See Appendix B for fit information). Each measure was specified as a single factor with the exception of the DUWAS, which was specified as a two factor measure. In addition to fit of the proposed CFA models, inter-item correlations and corrected item-total correlations for each measure were examined and were at least .40 (Cortina, 1993; Kim & Mueller, 1978). For all scales, scale items loaded on one factor (with the exception of DUWAS), and factor loadings ranged from .40 to .86. All scales met the conventional criteria for acceptable internal consistency; Cronbach's alpha ranged from .78 to .89. For the DUWAS, the CFA revealed support for a two-factor solution. A χ^2difference test indicated the fit of the two-factor solution was significantly better than the fit of the one factor solution, though the fit of both solutions was adequate and highly similar. I continued with the recommended practice of combining both subscales and creating one composite score for WT (Schaufeli et al., 2008). Table 1 includes correlations, descriptive statistics and internal consistency estimates for all variables used in the analyses.

As expected, WT was significantly correlated with WFC, family disengagement, and HFW in the appropriate directions. WT was also significantly correlated with the control variables. Telecommuting status was likewise positively correlated with family disengagement; telecommuters (M=4.50, SD=1.37) reported significantly higher levels of family disengagement

than non-telecommuters (*M*=3.93, *SD*=1.54) (*t*(492)=-3.21, *p*<.01, *d*=-.40). However, it was not associated with WFC; telecommuters (*M*=3.01, *SD*=.86) did not report significantly different levels of WFC (*t*(492)=-.83, *p*=.41, *d*=-.10) than non-telecommuters (*M*=2.92, *SD*=.84). Furthermore, contrary to expectations, telecommuting status was not significantly correlated with HFA, but it was positively correlated with HFW. Telecommuters (*M*=5.01, *SD*=1.11) did not report significantly different levels of HFA (*t*(492)=-1.53, *p*=.13, *d*=-.19) than non-telecommuter (*M*=4.77,*SD*=1.29); however, they reported significantly higher levels of HFW (*M*=4.41,*SD*=1.15) than non-telecommuters (*M*=3.68,*SD*=1.29) (*t*(492)=-4.61, *p*<.001, *d*=-.58). HFA and HFW were both correlated with WFC but in opposite directions, which further justifies examining them as separate constructs. HFW was correlated with both of the control variables (segmentation preference and work overload pressures), while HFA was only correlated with segmentation preference. Finally, consistent with the definition of workaholism as an individual propensity to engage in work to excess, WT was correlated significantly and positively with hours worked per week (*r*=.28, *p*<.05). However, because excessive hours worked is part of the theoretical WT construct, hours worked per week was not considered as a control variable in the analyses.

I planned to use the data collected from cohabitators as a second indicator of WFC and family disengagement to reduce potential self-report bias. However, the response rate of the cohabitator group was less than ideal. If included in the model, the reduced sample size available for hypothesis testing (n = 75) would effectively preclude an effective test of the proposed model. Instead, the cohabitators' data were used for the purpose of establishing agreement between participants and cohabitators on the outcomes variables. Thus, I assessed the relationship of the cohabitator data with the participant data as a way of corroborating the self-

report measures.

Table 2 includes correlations, descriptive statistics and internal consistency estimates of the outcome variables for both participants and their cohabitators. As demonstrated by Table 2, there are significant and strong correlations between participants and cohabitators for both WFC and family disengagement, indicating agreement between both sources. This agreement corroborates the credibility of the self-report outcome measures from participants.

Path Analysis

Following procedures recommended by Kenny & Milan (2012), path analysis was performed with observed variables on the model shown in Figure 1, using SEM in AMOS version 20. The first step in testing the path model was to include any deleted paths that were not hypothesized to see if any of these omitted paths were significant and should be retained to improve model fit. Deleted paths from telecommuting status to HFW and WT to HFA were included. Since there was no clear theoretically-based direction for a path between WFC and family disengagement, a correlation was added between the disturbances as recommended by Kenny & Milan (2012) to make the model just-identified.

The second step in testing the path model was to evaluate the fit of a model that retains any significant deleted paths identified from step 1. Since step one suggested both of the deleted paths, WT to HFA (β=.13, p<.05) and telecommuting status to HFW (β =.16, p<.05) as well as the correlation between disturbances for WFC and family disengagement (r=.32, p<.05) should be retained and no deleted paths should be trimmed, this produced a saturated model which by definition had perfect fit. Figure 3 presents the standardized path coefficients for the path analysis. Because part of this process alluded to deleted paths being relevant, I will return to them later in the ancillary analyses section. In particular, the deleted path from telecommuting

status to HFW helps in model development once the fit of the hypothesized model is established. In the next section, the hypothesized main effects are explained using the proposed structural model.

Hypothesis Testing

For hypothesis testing, I tested the proposed structural model for overall model fit and path significance as well as hypothesized indirect effects proposed. The viability of the conceptual model as a whole was assessed as well as the individual paths contributing to the mediations and moderated mediations. A correlation between the errors for HFA and HFW was included since there is a high likelihood of them sharing a common omitted cause due to the shared concept of boundary flexibility and similar item content. The exclusion of the correlation could result in biased estimates of direct effects (Kline, 2012). I included an interaction term to assess the moderating effects of telecommuting. Figure 1 demonstrates the hypothesized direction of each pathway.

Before testing hypotheses, the fit of the structural model presented in Figure 1 was assessed. Fit indices for the proposed model were: $\chi^2(3)=77.283$, $p<.05$, SRMR = .0472 CFI=.912, TLI=.182, GFI=.964, RMSEA=.224 with a 90% confidence interval of .183 to .269. Based on recommendations for interpreting model fit by (e.g. Hu & Bentler, 1999; MacCallum, Browne, & Sugawara, 1996), the hypothesized structural model indicates some indices were adequate while others were not, indicating room for improved model fit. To assess hypotheses 1, 2, 4, and 5, I examined the path coefficients for the specified (hypothesized) mediation path model. WT significantly and positively predicted both WFC ($\beta=.17$, $p<.05$) and family disengagement ($\beta=.26$, $p<.05$), supporting hypothesis 1. WT significantly and positively predicted HFW ($\beta=.21$, $p<.05$), supporting hypothesis 3. Telecommuting status did not predict

WFC (β=.02, p>.05); thus, hypothesis 2a was not supported. Telecommuting status significantly predicted family disengagement (β=.08, p<.05) supporting hypothesis 2b. Telecommuting status did not predict HFA (β=.01, p>.05); thus, hypothesis 5 was not supported. Figure 4 presents the standardized path coefficients for the hypothesized mediator model.

To test the mediations (hypotheses 4 and 6), direct and indirect paths were tested including bootstrapping using SEM (see Appendix C for bootstrapping results and bias-corrected confidence intervals). First, direct paths were tested without the mediators in the model. Then direct paths were tested with the mediators in the model and standardized direct and indirect paths were analyzed. Table 3 includes the unstandardized betas, standard errors, and critical ratios for the paths tested in the mediation hypotheses. Table 4 includes the unstandardized direct and indirect betas for the paths tested for hypotheses 4 and 6. Hypothesis 4a was not supported since the indirect effect of WT on WFC was not significant. The results for hypothesis 4b indicated partial support for the indirect relationship of WT on family disengagement through HFW, which was corroborated by a Sobel test, z' = 2.33, p<0.05. Hypotheses 6a and 6b were not supported since the indirect effects of telecommuting status on WFC and family disengagement were not significant.

For the moderated mediation (hypothesis 7), an interaction term of Workaholic tendencies*Telecommuting status was created using mean-centered variables; the interaction term was then included in the model with a path to HFA to test the moderating effects of telecommuting status on the hypothesized mediations of HFW on the relationship of WT with WFC and family disengagement. The interaction was specifically assessed at the first leg of the mediation. Telecommuters were expected to have a stronger relationship between WT and HFW than non-telecommuters.

A χ^2 difference test between this model and the hypothesized mediation model was not significant, preferring the mediation model with more fixed parameters $\chi^2(6)=78.644$, $p<.05$. SRMR=.0421 CFI=.920, TLI=.522. GFI=.967, RMSEA=.157 (.127-.188). The interaction between WT and telecommuting status on HFW was not significant ($\beta=.05$, $p>.05$). Thus, hypothesis 7 was not supported. Table 5 includes the unstandardized betas, standard errors and critical ratios for the paths tested in the moderated mediation hypotheses for hypothesis 7. Figure 5 present the standardized path coefficients for the hypothesized structural model including the proposed moderator.

Ancillary Analyses

In light of the hypothesized mediation and moderated mediation models not exhibiting good model fit, I explored model modifications that were more parsimonious and more representative of how the variables relate to one another. A logical modification to the model was to HFA from the moderated mediation model, since telecommuting status did not predict HFA. HFA did not relate to the variables in the hypothesized models as planned. Upon further inspection, the item content did not fully represent the conceptual idea I had of the construct, particularly as it relates to telecommuters.

Thus, I thought it was reasonable to remove HFA from the model. Since telecommuting status was associated with HFW as seen in the results from the path model, the next logical modification was to add a path from telecommuting status to HFW. The fit of this simplified model was significantly better than the hypothesized moderated mediation model, $\chi^2(5)=60.492$, $p>.05$ SRMR=.0355 CFI=.936 TLI=.643 GFI=.972 RMSEA=.150 with a 90% confidence interval of .118 to .185.

Table 6 presents unstandardized betas, standard errors, and critical ratios for the paths in

the post hoc model. A χ^2 difference test between the two models was significant, preferring the modified model with more freely estimated parameters. Figure 6 presents the modified post-hoc model with standardized coefficients.

Discussion

Consistent with previous literature, WT significantly and positively predicted negative home domain outcomes (e.g. Brady et al., 2008; Griffiths, 2001; Schaufeli et al., 2009). The current study corroborates the idea that WT contribute to more negative consequences in the family and life domains (e.g. Matuska, 2010; Van den Broeck et al., 2011). The results were not consistent with previous literature examining the effects of telecommuting on negative or positive outcomes (e.g. Ammons & Markham, 2004; Fonner & Roloff, 2010). The findings do not support the claims of telecommuting increasing conflict (Duxbury et al., 1996) or decreasing conflict (Fonner & Roloff, 2010; Gajendren & Harrison, 2007) since telecommuting status was not correlated with and did not significantly predict WFC.

The outcomes were also not consistent with previous literature that reported telecommuting being positively associated with longer working hours (Peters & Van der Lippe, 2007). There was no significant correlation in the current study between telecommuting status and hours worked per week (r=.035, p=.435) and frequent telecommuters (M=45.85, SD=9.46) did not work significantly more hours per week than non-telecommuters (M=45.08, SD=7.59; $t(492)$=-.671, p=.50, d=-.08).

The positive correlation between HFW and WFC corroborates previous research that indicated flexible boundaries lead to increased WFC due to the spillover of work responsibilities and issues into the home domain, though it contradicts previous research that reported non-significant correlations between HFW and WFC (Chesley, 2005; Desrochers et al., 2005;

Matthews & Barnes-Farrell, 2010; Matthews et al., 2010). However, HFW did not significantly predict WFC in the hypothesized model once other variables including WT and segmentation preference were taken into account. The negative correlation between HFA and WFC contradicts the previous findings that show flexible boundaries predicting WFC by suggesting that higher levels of reported ability to flex the home domain boundary is associated with less WFC. Previous research looking specifically at the relationship between HFA and WFC reported inconsistent findings. Matthews et al. (2010) found no significant correlation between HFA and WFC; however, Matthews & Barnes-Farrell (2010) found a significant negative correlation between HFA and WFC. The current results corroborate the later finding and provide further evidence for a negative relationship between these variables in this sample.

The results showed support for the hypothesized direct paths from WT to WFC and family disengagement. As WT increased, WFC and family disengagement also increased. Participants who reported higher WT were more likely to report experiencing more WFC, which corroborates previous research suggesting that the excessive commitments to work spill over into the home domain thus impeding on home and family responsibilities (Van den Broech et al., 2011). Participants who reported higher WT were also more likely to report more feelings of disengagement from their families. WT was also found to positively predict HFW; those who reported higher WT reported more willingness to flex the boundary around the home domain. Though WT was positively correlated with both HFA and HFW, it was more strongly correlated with HFW, as expected. The compulsion to engage in excessive amounts of work is positively associated with the willingness one feels to flex the home domain boundary. However, the hypothesized role of boundary flexibility as a mediator of the relationship between WT and telecommuting status on the outcomes was largely unsubstantiated.

Though the direct effects of WT on WFC and HFW were significant, HFW did not mediate the relationships between WT and WFC. The willingness to flex the home boundary does not explain why those with WT experience more WFC. There may be other variables which could account for the relationship between WT and WFC that are not represented in the current hypothesized model. On the other hand, HFW partially mediated the relationship between WT and family disengagement. This is consistent with the theoretical position that willingness to flex their home domain boundary provides a partial explanation for why WT is positively associated with family disengagement.

Telecommuting status did not significantly predict HFA or WFC. Contrary to my hypotheses, telecommuting status was correlated with HFW but not HFA. This could be explained by individuals engaging in a telecommuting arrangement self-selecting into the program. Most of the telecommuting participants in the current study (61%) selected into their telecommuting arrangement. The preference to engage in this type of flexible working arrangement may be a product of their willingness to flex the boundary around the home domain. Telecommuting status was not associated with WFC which was suggested in previous research (Shumate & Fulk, 2004).

However, post-hoc analyses of those who reported a work arrangement primarily characterized by telecommuting indicated that those who were assigned to a telecommuting arrangement (M=3.37, SD=.71) experienced higher levels of WFC than those who requested a telecommuting arrangement (M=2.85, SD=.89; $F(2,72)=3.869$, $p<.05$, $\eta_p^2=.097$). Those participants who select into their working arrangement are most likely motivated to do so because they prefer to have the flexibility of working at home (80% of our telecommuting participants indicated preferring working at home at least 50% of the time). They are prepared to

work at home and create stronger temporal boundaries between work and home life because they are bringing work into their home domain, thus leading to less WFC. It would be valuable to parse out these groups in the future when considering WFC as an outcome.

Telecommuting status was only weakly correlated with family disengagement, though it significantly predicted family disengagement in the hypothesized model. Frequent telecommuters may not see the arrangement as a hindrance in terms of increasing WFC. They may delineate their work and family responsibilities in a way that they have more physical time for their families. They may be physically available to be with their family, but they still experience distractions from work when with their family. Looking at telecommuters who do not select into their arrangements and do not prefer a telecommuting arrangement may provide a more nuanced look at the effects of telecommuting status on negative outcomes in the future. Post-hoc analyses indicated no significant differences in levels of WFC ($F(5,69=1.339$, $p=.258$, $\eta_p^2=.088$) and family disengagement ($F(5,69)=.911$, $p=479$, $\eta_p^2=.062$) for the different telecommuting preferences.

One limitation of the current study is the item content of the ability measure of flexibility. The unexpected findings that telecommuting status did not predict HFA and that HFA did not predict family disengagement may have been a result of the item content not reflecting the ideal construct for the hypothesized model. The items of HFA are framed in such a way that suggests the ability to flex the home domain boundary is a product of family responsibilities not impeding on work related issues and being able to spend more time at work or on work-related tasks. It does not specifically assess the home domain boundary as the boundary that is being affected. An ideal measure would be framed in a different way that would suggest the ability to flex the home domain boundary comes from both family responsibilities not always put before work

responsibilities and work circumstances that foster the ability for an employee to allow work to spill over into the home domain, such as providing telecommuting arrangements for employees.

Boundary permeability (Clark, 2002) captures more of the spillover of work into the home and less of the family generating the ability of someone to flex the boundary between work and home. A sample item is, "I take care of work related business while I am at home." Boundary permeability would be a good feature of boundary strength to examine in the future, since permeability, and the kinds of items that tap this construct, are likely to relate more strongly to telecommuting status and family disengagement. The construct of permeability may be the missing link that would make the initial hypothesized model concerning boundaries as a mechanism work and something I plan to explore more fully in the future.

Given the limited significance of the hypotheses proposed, there remain many unanswered questions; another limitation of the current study is the exclusion of variables that could adequately explain the relationships between the variables of interest. The results indicated that there may be other constructs unavailable in the current study responsible for explaining the relationships between WT and WFC and telecommuting status and WFC and family disengagement. HFW and HFA are correlated but remain distinct measures that comprise boundary flexibility; these could easily be influenced by different variables than were hypothesized and lead to significant mediations, including the permeability measure mentioned above. The flexibility measures could also serve different roles in the model than where they were included for this study, which was the basis of the ancillary analyses exploring HFW as a sole mediator of the relationship between both telecommuting status and WT and the outcomes. This model fit significantly better than the original hypothesized structural model and provided evidence that the HFA measure is not adequate for testing the hypothesized relationships. Future

research could focus on the role of HFA and HFW in the model and different mediations suggested by the final trimmed path model beyond the ancillary analyses that I described.

A final important limitation of the current study is the limited responses from cohabitators. Cohabitators can provide relevant insight into the family domain that are as accurate or in some cases more accurate than participant perceptions. In the future, I would like to dedicate more resources to collecting cohabitator data so that I can include their responses in the analyses.

Because there have been conflicting accounts in the literature as to the directionality and significance of the effects of telecommuting on negative outcomes, the implications of the effects of telecommuting status in this sample should be carefully considered (Golden, 2006; Peters & Van der Lippe, 2007). There are significant correlations of telecommuting work arrangement with family disengagement and HFW; however, all of the correlations are weak (< 0.2). Telecommuting status in this study does not have a large impact on the outcomes; this suggests that other constructs are contributing to the negative outcomes over and above the telecommuting arrangement. Telecommuting has been demonstrated to be associated with negative consequences such as role overload and longer working hours, though telecommuting was not significantly correlated with hours worked in the current sample (r=.035) (Ammons & Markham, 2004; Duxbury et al., 1996). It may be these consequences of telecommuting that end up affecting WFC and family disengagement. Telecommuting status may only indirectly affect the outcomes in the present model. Other mediators could be examined in the future to demonstrate a more distinct path from telecommuting status to negative outcomes.

The results show that there are significant direct effects of WT on the outcomes. These significant effects are still significant when controlling for both work overload pressures and

segmentation preference, and after including the boundary flexibility mediators in the model. Telecommuting status does not moderate the first leg of the mediation of WT on WFC and family disengagement through HFA. It is possible that sample size contributed to this insignificant result. Though, it is also possible that the interaction term belongs on the direct path from WT to WFC and from WT to family disengagement or on the second leg of the mediations between HFA and the outcomes. Given the limited size of the telecommuting sample, it was not feasible to test any further interactions with the given data. Future efforts would focus on collecting more telecommuters who work from home four or more days per week so that there is a large enough group to test interactions on.

The lack of a moderated mediation for telecommuters may be a good sign. The results suggest that some of the negative effects found in previous research are not corroborated for this sample. Even though I expected there to be higher levels of HFA ultimately leading to more negative outcomes for telecommuting employees exhibiting WT, this effect was not demonstrated using the current sample. There are so many benefits of telecommuting that they may outweigh the potential negative consequences that telecommuting poses for workaholics. The trade-off for the ability to cope with work and family obligations by spending more time on work is not always worth the potential consequences. Going forward, it will be important to re-conceptualize the role of boundary flexibility in my model and consider other mediating variables that could account for the relationship between WT and WFC and family disengagement.

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Table 1.

Inter-correlations, Descriptive Statistics and Internal Consistency Estimates for Full Participant Sample

Variable	*M (SD)*	1	2	3	4	5	6	7	8
1. Workaholic Tendencies	2.5 (0.5)	.82							
2. Telecommuting Status	0.2 (0.4)	.09*	--						
3. Work-to-Family Conflict (WFC)	2.9 (0.8)	.39**	.04	.89					
4. Family Disengagement	4.0 (1.5)	.47**	.13**	.55**	.89				
5. Home Boundary Flexibility Ability (HFA)	4.8 (1.3)	.11*	.07	-.14**	.03	.87			
6. Home Boundary Flexibility Willingness (HFW)	3.8 (1.3)	.31**	.20**	.11*	.29**	.36**	.88		
Control Variables									
7.Work Overload Pressures (WOP)	4.2 (1.4)	.43**	.02	.62**	.51**	-.03	.16**	.78	
8. Segmentation Preference	5.2 (1.2)	-.06*	-.09*	.07	-.16**	-.14**	-.34**	.01	.79

Note. $N = 494$. Cronbach alpha internal consistency reliability estimates are presented along the diagonal. * $p < .05$. ** $p < .01$

Table 2.

Inter-correlations, Descriptive Statistics, and Internal Consistency Estimates for Full Participant Sample and Cohabitator Sample on Outcome Measures

Variable	*M (SD)*	1	2	3	4
1. Work-to-Family Conflict	2.9 (.8)	.89			
2. Cohabitator Perceptions of Participant Work-to-Family Conflict	2.9 (1.9)	.72**	.94		
3. Family Disengagement	4.1 (1.5)	.54**	.45**	.89	
4. Cohabitator Perceptions of Participant Family Disengagement	3.8 (1.6)	.43**	.68**	.53**	.90

Note. N = 75. Cronbach alpha internal consistency reliability estimates are presented along the diagonal. * $p < .05$. ** $p < .01$

Table 3.

Unstandardized Betas, Standard Errors, and Critical Ratios for Paths in the Mediation Model

Path	**B**	**SE**	**Critical Ratio**
Workaholism → Flexibility Willingness	.214*	.044	4.895
Workaholism → Work-to-Family Conflict	.173*	.039	4.393
Workaholism → Family Disengagement	.263*	.041	6.441
Telecommuting → Flexibility Ability	.005	.118	.047
Telecommuting → Work-to-Family Conflict	.053	.096	.551
Telecommuting → Family Disengagement	.212*	.100	2.131
Flexibility Ability → Work-to-Family Conflict	-.154*	.037	-4.195
Flexibility Ability → Family Disengagement	-.048	.038	-1.269
Flexibility Willingness → Work-to-Family Conflict	.053	.040	1.332
Flexibility Willingness → Family Disengagement	.109*	.041	2.674

Note. * indicates *p* values less than .05. Model fit: $\chi^2(3)=77.283$, $p<.05$ SRMR = .0472 CFI=.912 TLI=.182 GFI=.964 RMSEA=.224 (.183-.269).

Table 4.

Standardized Direct and Indirect Betas for Mediation Analyses

Hypotheses	**Direct β without Mediator**	**Direct β with Mediator**	**Indirect β**	**Mediation Type Observed**
(4a) *Full Mediation* Workaholism→Flexibility Willingness →Work-to-Family Conflict	.163*	.170*	.011	None
(4b) *Full Mediation* Workaholism→Flexibility Willingness →Family Disengagement	.281*	.263*	.023*	Partial Mediation
(6a) *Full Mediation* Telecommuting → Flexibility Ability →Work-to-Family Conflict	.020	.019	-.001	None
(6b) *Full Mediation* Telecommuting→Flexibility Willingness →Family Disengagement	.092*	.076*	.001	None

Note. * indicates *p* values less than .05.

Table 5.

Unstandardized Betas, Standard Errors, and Critical Ratios for Paths in the Moderated Mediation Model

Path	**B**	**SE**	**Critical Ratio**
Workaholism → Flexibility Willingness	.219*	.044	4.992
Workaholism → Work-to-Family Conflict	.173*	.039	4.392
Workaholism → Family Disengagement	.263*	.041	6.440
Telecommuting → Flexibility Ability	-.002	.118	-.019
Telecommuting → Work-to-Family Conflict	.053	.096	.551
Telecommuting → Family Disengagement	.212*	.100	2.131
Flexibility Ability → Work-to-Family Conflict	-.154*	.037	-4.195
Flexibility Ability → Family Disengagement	-.048	.038	-1.269
Flexibility Willingness → Work-to-Family Conflict	.053	.096	.551
Flexibility Willingness → Family Disengagement	.109*	.041	2.676
*Workaholism * Telecommuting → Flexibility Ability*	.128	.109	1.174

Note. Model fit: $\chi^2(6)=78.644$, $p<.05$ SRMR=.0421 CFI=.920 TLI=.522 GFI=.967 RMSEA=.157 (.127-.188).

Table 6.

Unstandardized Betas, Standard Errors, and Critical Ratios for Paths in the Post-hoc Model

Path	**B**	**SE**	**Critical Ratio**
Workaholism → Flexibility Willingness	.227*	.049	4.626
Workaholism → Work-to-Family Conflict	.167*	.040	4.160
Workaholism → Family Disengagement	.264*	.041	6.428
Telecommuting →Flexibility Willingness	.448*	.116	3.843
Flexibility Willingness → Work-to-Family Conflict	.003	.038	.071
Flexibility Willingness → Family Disengagement	.107*	.039	2.759
*Workaholism * Telecommuting →Flexibility Willingness*	.012	.020	.587

Note. * indicates *p* values less than .05. Model fit: $\chi^2(5)=60.492$, $p>.05$ SRMR=.0355 CFI=.936 TLI=.643 GFI=.972 RMSEA=.150 (.118 to .185).

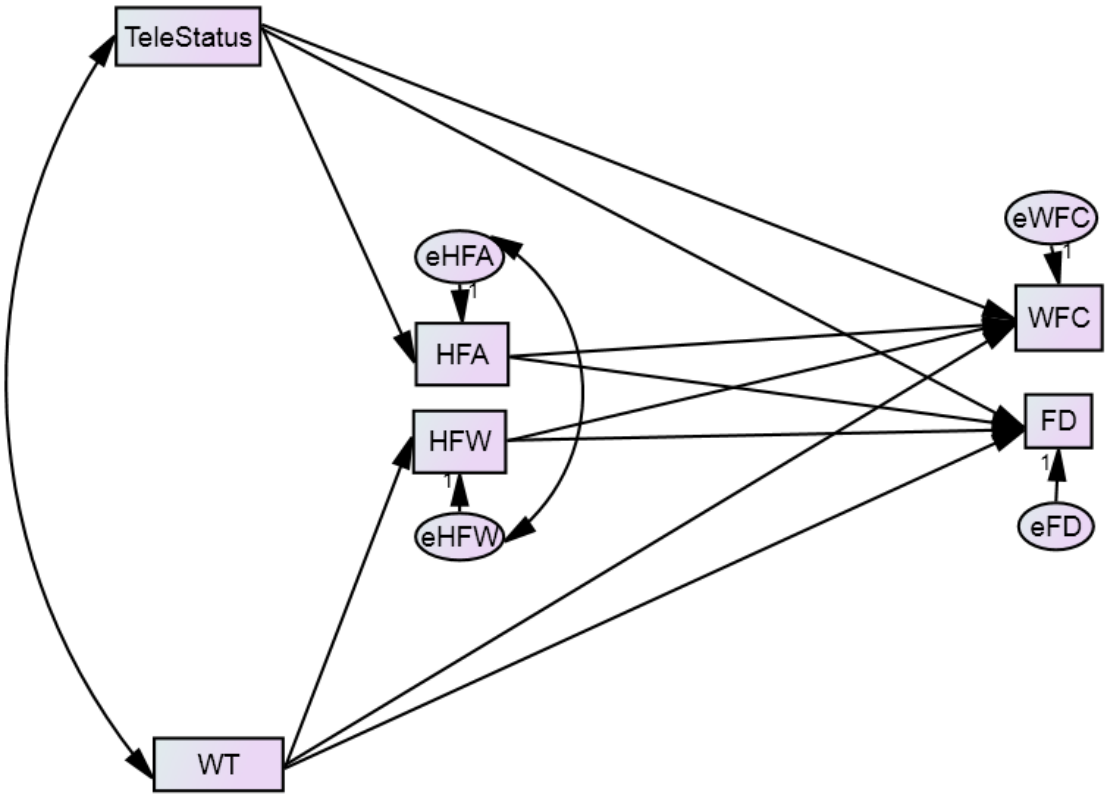

Figure 1: Hypothesized mediation model. Work overload pressures and segmentation preference were included in the model as statistical controls.

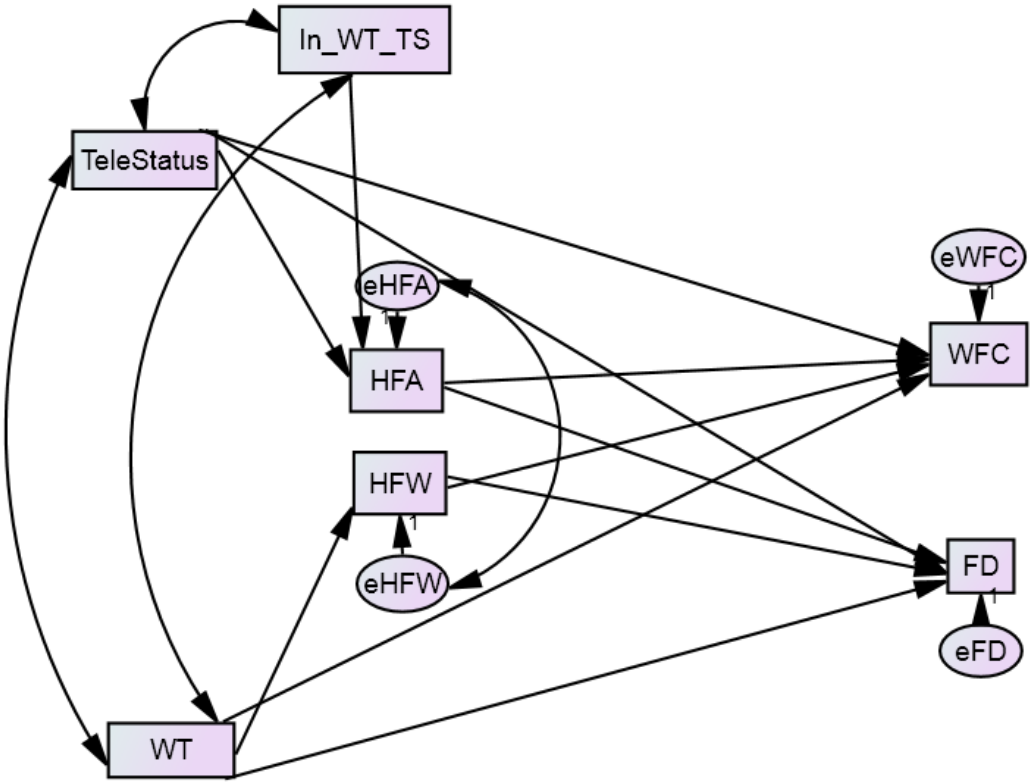

Figure 2. Hypothesized moderated mediation model. Work overload pressures and segmentation preference were included in the model as statistical controls.

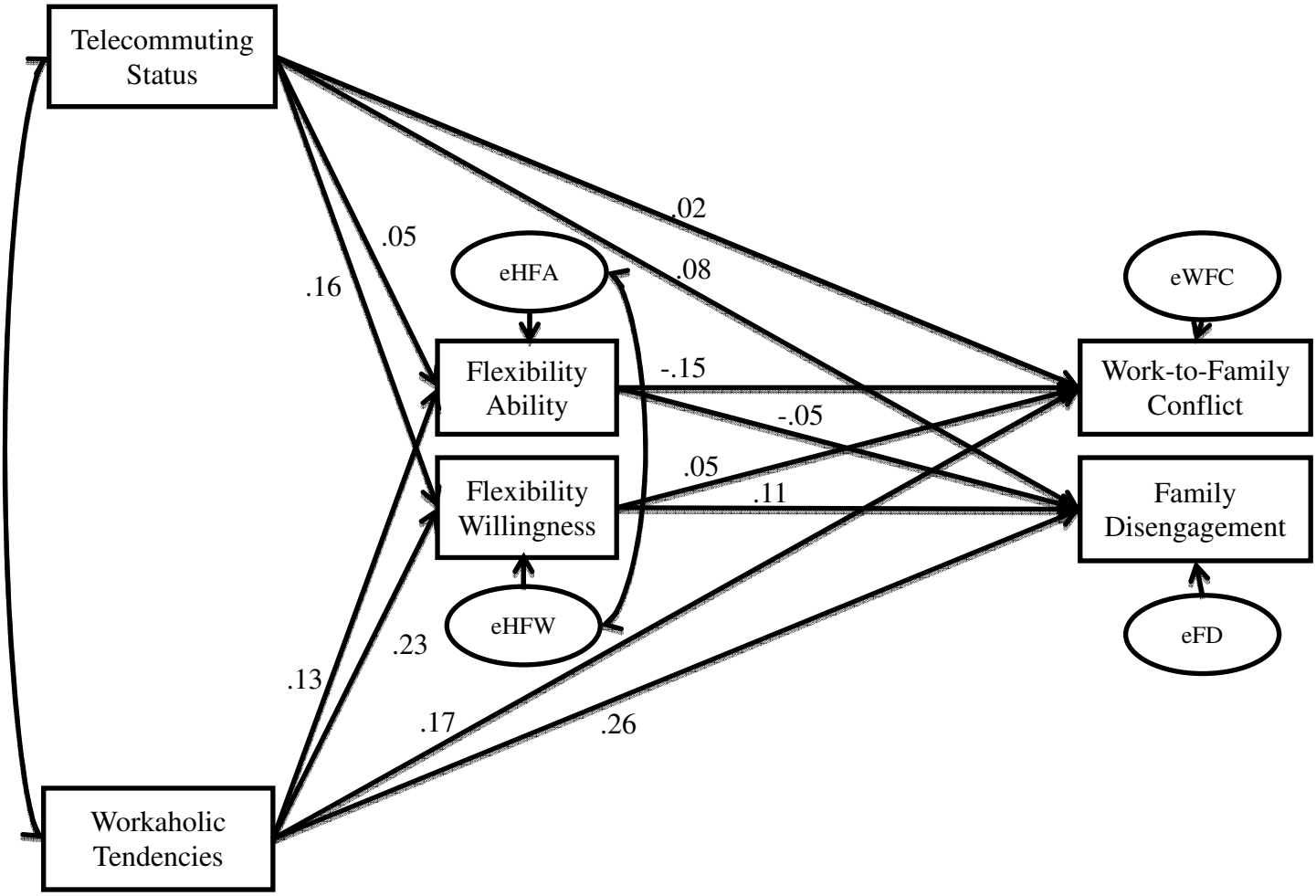

Figure 3: Results from path analysis including deleted paths, control variables, and standardized coefficients. Work overload pressures and segmentation preference were included in the model as statistical controls.

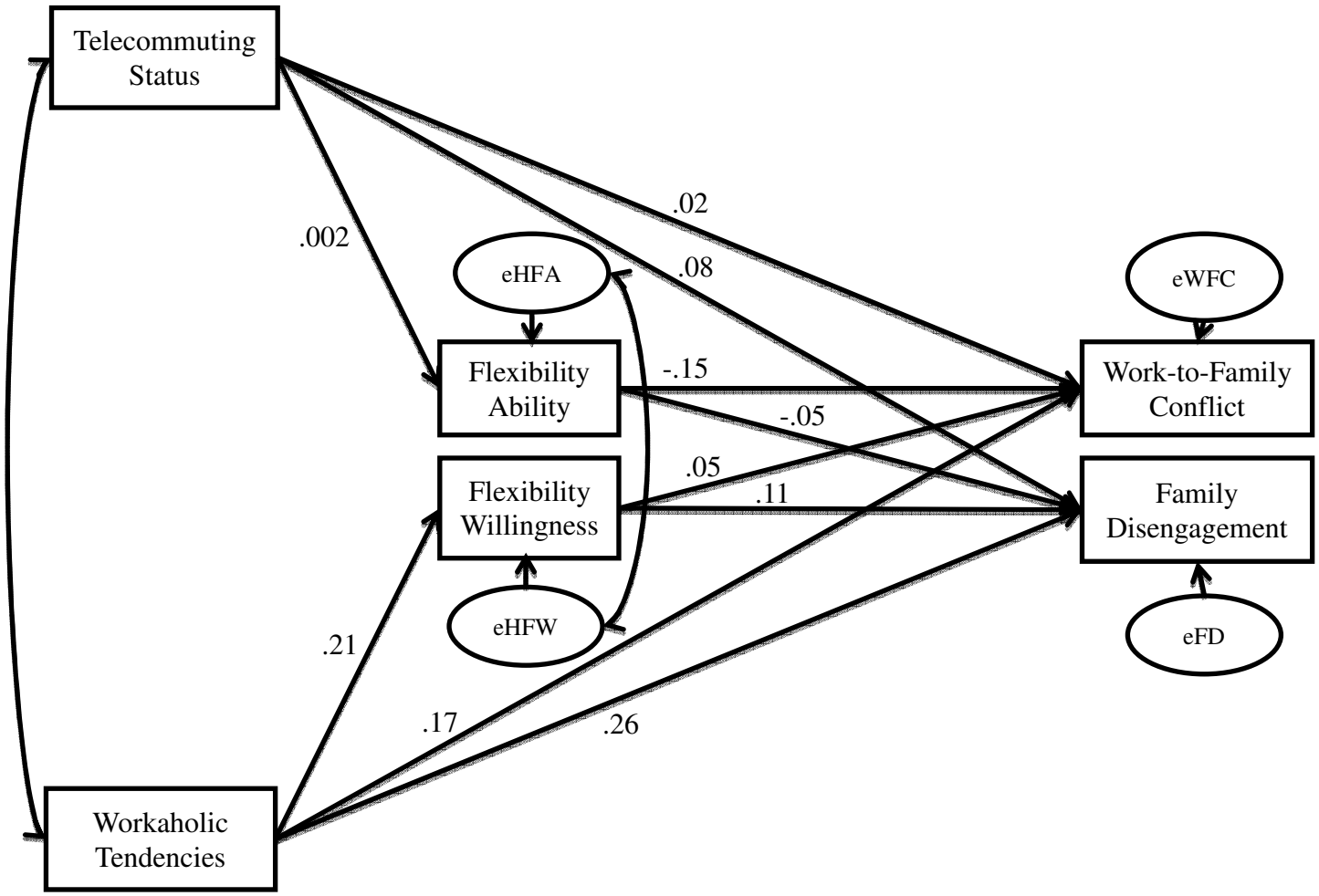

Figure 4. Hypothesized structural model including standardized coefficients and excluding the proposed moderator. Work overload pressures and segmentation preference were included in the model as statistical controls.

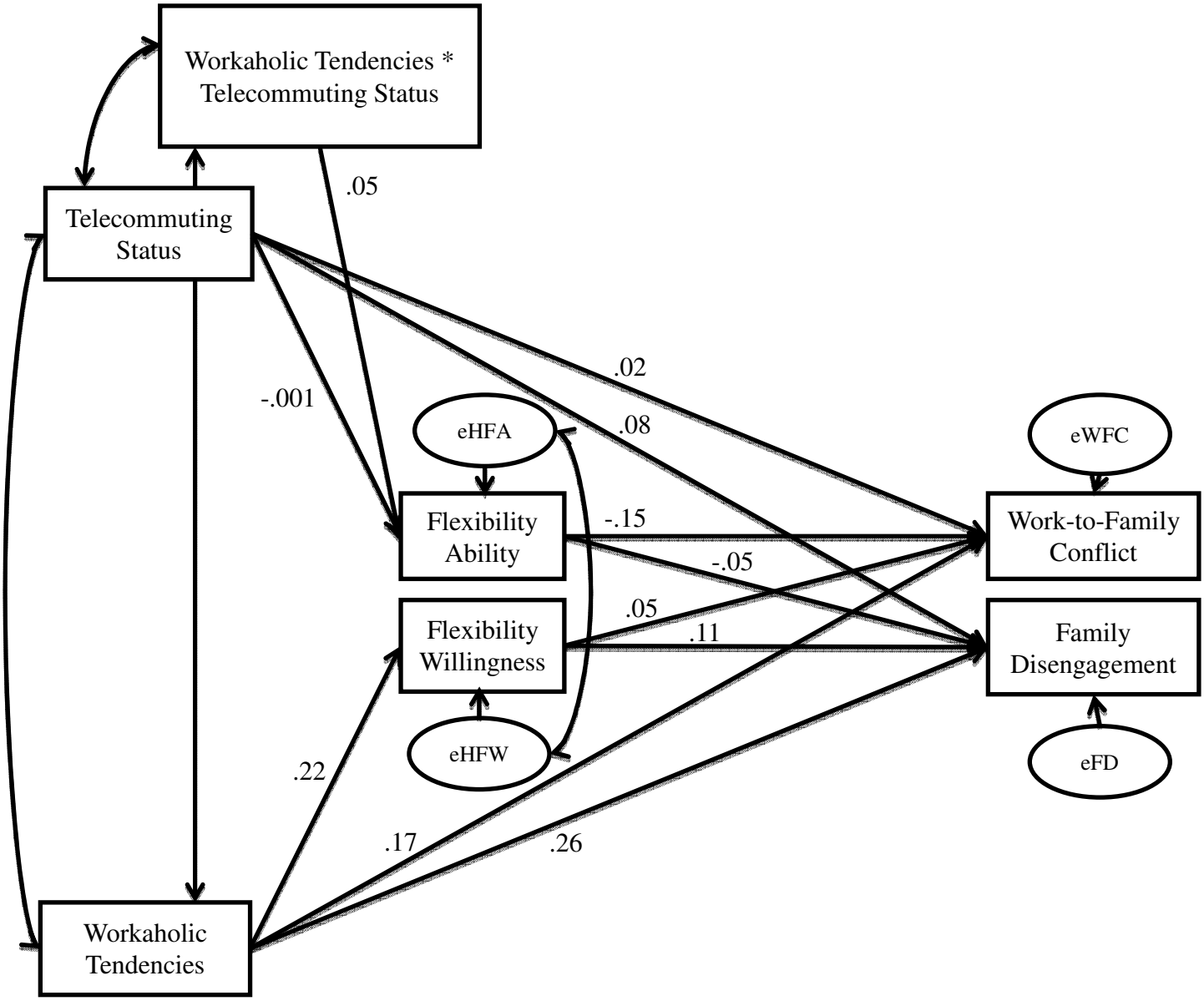

Figure 5. Hypothesized structural model including the proposed moderator. Work overload pressures and segmentation preference were included in the model as statistical controls.

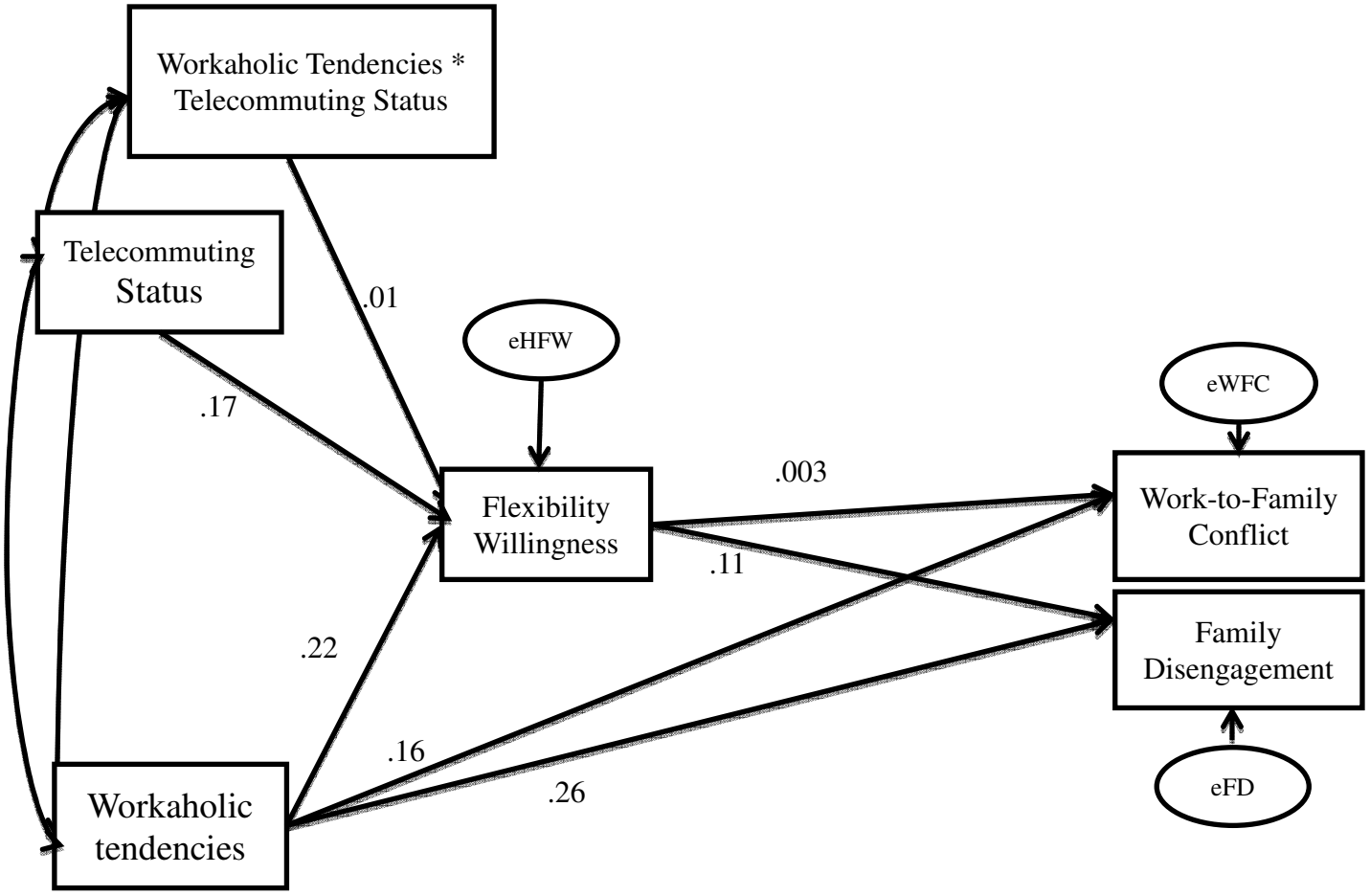

Figure 6. Post-hoc moderated mediation model with standardized coefficients. Work overload pressures and segmentation preference were included in the model as statistical controls.

Appendix A

Table A1. Item Content for Measures Used in Analyses

Workaholism			
10-items	1-4 scale	α=.7 and above	Del Líbano, Llorens, Salanova, & Schaufeli, 2010
Please rate the extent to which you agree or disagree with each of the following statements...			
I seem to be in a hurry and racing against the clock			
I find myself continuing work after my co-workers have called it quits			
It's important for me to work hard even when I don't enjoy what I'm doing			
I stay busy and keep my irons in the fire			
I often feel that there's something inside me that drives me to work hard			
I spend more time working than socializing with friends, on hobbies, or on leisure activities			
I feel obliged to work hard, even when it's not enjoyable			
I find myself doing two or three things at one time such as eating lunch and writing a memo, while talking on the phone			
I feel guilty when I take time off work			
It is hard for me to relax when I'm not working			
Telecommuting			
1-item	1-5 days		
On average, how many days a week do you telecommute?			
Domain Boundary Flexibility			
11-items	1-7 scale	α=.77-.86	Matthews, Barnes-Farrell, & Bulger, 2010
Please rate the extent to which you agree or disagree with each of the following statements...			
Flexibility Ability			
My family and personal life responsibilities would not prevent me from changing my work schedule (for example going in early or staying longer to finish work related responsibilities)			
If the need arose, I could work late without affecting my family and personal responsibilities			
My family and personal life responsibilities would not prevent me from going into work early if the need arose			
My family and personal life responsibilities would not prevent me from going into work an extra day in order to meet work responsibilities			
From a family and personal life standpoint, there is no reason why I cannot rearrange my schedule to meet the demands of my work			
Flexibility Willingness			
I am willing to change plans with my friends and family so that I can finish a job assignment			
I am willing to change vacation plans that I have made with friends and family to meet work related responsibilities			
While at home, I do not mind stopping what I am working on to complete a work related responsibility			

I am willing to cancel plans with my friends and family to deal with work related responsibilities			
I am willing to miss activities with family or friends (like a school play or dinner with family or friends) so that I can finish a job assignment			
I would be willing to miss holidays with family or friends so that I could go into work and deal with my responsibilities there			
Work-to-Family Conflict			
8-items	1-5 scale	α=.78-.90	Kopelman, Greenhaus, & Connolly, 1983
Please rate the extent to which you agree or disagree with each of the following statements...			
My work schedule often conflicts with my family life			
After work, I come home too tired to do some of the things I'd like to do			
On the job, I have so much work that it takes away from my other interests			
My family dislikes how often I am preoccupied with my work while I'm at home			
Because my work is demanding at times I am irritable at home			
The demands of my job make it difficult to be relaxed all the time at home			
My work takes up time that I'd like to spend with my family			
My job makes it difficult to be the kind of spouse or parent that I'd like to be			
Family Disengagement			
3-items	1-7 scale		
When I am with my family...			
I have a hard time forgetting about work			
I often think about work			
I am easily distracted by work			
Work Overload Pressures			
7-items	1-7 scale		
At my job...			
I feel pressured to work excessively			
My coworkers would think less of me if I worked less than they did			
The culture of my organization is centered around working excessively			
Segmentation Preference			
4-items	1-7 scale	α=.90	Kreiner, 2006
I don't like to have to think about work			
I prefer to keep work life at work			
I don't like work issues creeping into my home life			

Appendix B

Table A2. CFA Results and Fit Indices for Established Measures

Measure	**% variance explained**	χ^2	**CFI**	**TLI**	**RMSEA**
Workaholism	51%	$\chi^2(34)=214.87$, $p>.05$	.858	.771	.104 (.091-.117)
Home Boundary Flexibility Ability	66%	$\chi^2(5)=11.78$, $p<.05$	.994	.982	.052 (.011-.092)
Home Boundary Flexibility Willingness	63%	$\chi^2(9)=39.60$, $p<.05$	.979	.951	.083 (.058-.110)
Work-to-Family Conflict	60%	$\chi^2(20)=225.89$, $p>.05$	.886	.794	.145 (.128-.162)
Segmentation Preference	72%	$\chi^2(0)=0$	1.0	--	--

Appendix C

Bootstrapping Results from Mediation Analyses

Table A3.

Bootstrapping Bias-Corrected Confidence Intervals for Standardized Regression Weights

Parameter	**β**	**Lower Bound**	**Upper Bound**
Workaholism → Flexibility Willingness	.210*	.109	.297
Workaholism → Work-to-Family Conflict	.170*	.090	.249
Workaholism → Family Disengagement	.262*	.182	.345
Telecommuting → Flexibility Ability	.002	-.072	.075
Telecommuting → Work-to-Family Conflict	.019	-.052	.087
Telecommuting → Family Disengagement	.076*	.009	.141
Flexibility Ability → Work-to-Family Conflict	-.151*	-.225	-.074
Flexibility Ability → Family Disengagement	-.048	-.133	.031
Flexibility Willingness → Work-to-Family Conflict	.053	-.034	.141
Flexibility Willingness → Family Disengagement	.111*	.018	.206

Note. * indicates *p* values less than .05.

Table A4.

Bootstrapping Bias-Corrected Confidence Intervals for Standardized Total Effects

Parameter	**Lower Bound**	**Upper Bound**	**Two Tailed Significance**
Workaholism → Work-to-Family Conflict	.108	.259	.001
Workaholism → Family Disengagement	.205	.365	.001
Telecommuting → Work-to-Family Conflict	-.055	.085	.599
Telecommuting → Family Disengagement	.009	.141	.018

Note. * indicates *p* values less than .05.

Table A5.

Bootstrapping Bias-Corrected Confidence Intervals for Standardized Direct Effects

Parameter	**Lower Bound**	**Upper Bound**	**Two Tailed Significance**
Workaholism → Work-to-Family Conflict	.090	.249	.001
Workaholism → Family Disengagement	.182	.345	.001
Telecommuting → Work-to-Family Conflict	-.052	.087	.569
Telecommuting → Family Disengagement	.009	.141	.018

Note. * indicates *p* values less than .05.

Table A6.

Bootstrapping Bias-Corrected Confidence Intervals for Standardized Indirect Effects

Parameter	**Lower Bound**	**Upper Bound**	**Two Tailed Significance**
Workaholism → Work-to-Family Conflict	-.006	.034	.207
Workaholism → Family Disengagement	.004	.052	.014
Telecommuting → Work-to-Family Conflict	-.012	.011	.935
Telecommuting → Family Disengagement	-.006	.004	.790

Note. * indicates *p* values less than .05.