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FAMILY AS A SOURCE OF INEQUALITY REPRODUCTION IN ORGANIZATIONS: THE ROLE OF FAMILY IMPACT ON WORK IN EXPLAINING THE CLASS CEILING

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FAMILY AS A SOURCE OF INEQUALITY REPRODUCTION IN ORGANIZATIONS: THE ROLE OF FAMILY IMPACT ON WORK IN EXPLAINING THE CLASS CEILING

By

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Submitted to Lee Kong Chian School of Business in partial fulfillment of the requirements

for the Degree of

Doctor of Philosophy in Business

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Singapore Management University 2019

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Declaration

I hereby declare that this PhD dissertation is my original work and it has been written by me in its entirety. I have duly acknowledged all the sources of information which have been used in this dissertation. This PhD dissertation has also not been submitted for any degree in any university previously.

Pooja Mishra, 26 July 2019

ABSTRACT

Being born into a poorer family is associated with lower socioeconomic attainment even when people are provided with identical educational and job opportunities, a pattern known as the "class ceiling." The class ceiling is generated within organizations, but specific reasons causing this effect are not well understood. I propose that one important explanation why employees from poorer families do not fare as well as their more fortunate co-workers concerns differences in families themselves. I integrate research from sociology and psychology explaining challenges faced by families with scarce resources with organizational research on specific pathways through which families can interfere with work activities of employees. This theoretical integration suggests that higher family demands (in terms of time and values) and lower family resources (instrumental support and behavioral scripts) among workers from poorer backgrounds cause a negative influence on employee personal resources, and thus act as a mechanism of disadvantage reproduction after workers join the organization. A large field study of early-career employees who managed to obtain a higher education and secure high-potential jobs conducted in Singapore provides support for the model. I propose and test both institutional as well as individual solutions to the problem. I show that higher organizational support can compensate for lower family resources, but I also find that, at present, most organizations fail to provide such support. Second, I develop and test a psychological intervention that helps workers from poorer backgrounds cope more effectively with higher family demands. A two-week field experiment utilizing a dairy study design provides evidence of the effectiveness of the intervention. Taken together, this research uncovers a fundamental process through which the class ceiling is generated and offers solutions to resolve the identified issues, with implications for socioeconomic mobility, employee wellbeing, organizational effectiveness, and a positive role of organizations in the society.

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To Marko and Madan, my role models

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CHAPTER 1: INTRODUCTION

One of the key aspirations of modern societies is to ensure equality of opportunity and socioeconomic mobility. This aspiration is usually realized by providing educational opportunities, which are seen as a major driver of mobility (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). Yet, even with the same education and same starting jobs, people born into poorer families attain lower mobility in terms of objective career success as employees in organizations. For example, Laurison and Friedman (2016), analyzed the Britain's Labour Force Survey (*N* = 43,444), and showed that "even when people who are from working-class backgrounds are successful in entering high-status occupations, they earn 17 percent less, on average, than individuals from privileged backgrounds" and noted that the effect "remains substantial even net of a variety of important predictors of earnings" (p. 668). Similar pattern has been documented in several other studies (Dreher, Dougherty, & Whitely, 1985; Pfeffer, 1977a; Pfeffer, 1977b). This pattern is known as the *class ceiling*, referring to "hidden barriers experienced by upwardly mobile members of high-status occupations which prevents them from enjoying equivalent earnings and growth as compared to people who come from intergenerationally stable backgrounds" (Laurison and Friedman, 2016: p. 669).

In this paper, I seek to make these hidden barriers less hidden. At present, managers and organizations do not know what specifically is causing the class ceiling, and thus how to create organizations inclusive to workers irrespective of their family background. The reason why barriers to workplace success of workers from poorer families remain hidden is the micro-macro disconnect that characterizes organizational scholarship on inequality (Baron & Pfeffer, 1994). At the macro level, data on earnings achievement gaps between employees from wealthier versus poorer families have been known for several decades (Dreher, Dougherty, & Whitely, 1985; Pfeffer, 1977a; Pfeffer, 1977b). However, this has not generated systematic attention among micro-level researchers to uncover what specific

processes and behaviors are causing the issue. Christie and Barling (2009) note that workers' socioeconomic origin has, in micro-level organizational scholarship, "usually been treated as nuisance variables whose influence must be excluded" (p. 1474–1475). Kish-Gephart and Campbell (2015) also note that "organizational researchers know little about how childhood experiences with social class—and subsequent upward mobility—influence individuals in the workplace" (p. 1614).

This paper seeks to bridge this micro-macro divide by advancing the understanding of the specific issues that hold workers from poorer backgrounds back even when they are provided with equitable educational and employment opportunities. I focus on the fundamental factor differentiating workers from poorer and richer families—differences in families themselves. I conduct a theoretical integration of research from sociology and psychology on differences between families of higher versus lower socioeconomic status (SES) (Biblarz & Raftery, 1999; Evans, 2004; Haushofer & Fehr, 2014; McLanahan & Bumpass, 1988) with organizational research on the role of employee family characteristics in predicting performance and success in organizations (Judge, Ilies, & Scott, 2006; Lazarova, Westman, & Shaffer, 2010). On the one hand, I identified key features distinguishing richer versus poorer families that might impact the success of people who managed to secure educational and employment opportunities. On the other hand, I connected these features with corresponding conceptualizations of processes through which families impact employee performance identified in the micro-level organizational research on work-home interface (Greenhaus & Beutell, 1985; Maertz Jr & Boyar, 2011; Ten Brummelhuis & Bakker, 2012).

This theoretical integration suggests that higher *family demands* (in terms of time and value conflict) and lower *family resources* (instrumental support and behavioral scripts) among workers from poorer backgrounds cause a negative influence on employee *personal*

resources, and thus act as a mechanism of disadvantage reproduction after workers join the organization. Uncovering these pathways through which families act as a source of the class ceiling was crucial to develop and test solutions, as I elaborate below. The negative impact of family on work among employees from poorer backgrounds in turn undermines key aspects of employee psychological functioning relevant to success at work: work engagement, job satisfaction, emotional exhaustion, and workplace anxiety. As these factors are important precursors to success of employees in the organization (Beehr, Jex, Stacy, & Murray, 2000; Gilboa, Shirom, Fried, & Cooper, 2008; Iaffaldano & Muchinsky, 1985; Wright & Cropanzano, 1998), my combined theoretical model uncovers one notable and actionable pathway explaining the class ceiling.

In addition to uncovering a notable factor contributing to the class ceiling and thus pointing to actionable solutions, I also examine and test solutions to the problem I identify and provide insights into both institutional (*what can organizations do?*) as well as personal (*what can workers themselves do?*) strategies. Organizations cannot change families, and the associated demands they might introduce. However, the identified role of lower instrumental support received workers from poorer backgrounds receive from their family suggests that support *from the organization* may act as a substitute, and thus buffer against some of the issues that are more pronounced in such families. I thus argue that family supportive work environments (FSWE) will attenuate the negative impact of poorer family background on employee personal resources. This is relevant as more than 50% of the firm in my (representative) sample *do not* create such environments through their policies and might not be aware of the social implications of their actions. I tested my theory in a field study of employed professionals in Singapore (Study 1) and found support for the hypotheses.

Furthermore, I develop a scalable psychological intervention that also gives workers themselves a tool for addressing the problem. The identified higher family demands (in terms

of time and emotions) among workers from poorer families are difficult to change, but recent research on psychological interventions suggests that simple strategies individuals employ to construe and approach certain situations differently can create positive spirals of reduced psychological strain and positive behavioral changes that mutually reinforce each other (Walton & Wilson, 2018; Yeager et al., 2016). I developed an intervention focused specifically on coping with the specific family demands that the theoretical model suggested are most relevant to workers from poorer backgrounds (time and emotional demands). The intervention can be implemented online and is thus scalable. I conducted a longitudinal field experiment utilizing a dairy study design (Study 2), which found evidence of the effectiveness of the intervention. The intervention was particularly beneficial to workers from poorer families, resulting in a level playing field in terms of coping with family demands. Figure 1 provides a summary of the theoretical model.

Insert Figure 1 about here

Through its anchoring in the class ceiling problem and attention to micro-level workplace processes that cause the problem, this research makes several notable theoretical and practical contributions. As noted above, research on how employee socioeconomic background impacts employees is limited (Côté, 2011), but there has been recent growth in interest in examining how socioeconomic origins might impact employee behaviors (Martin & Côté, 2019; Martin, Côté, & Woodruff, 2016). I contribute to this line of work through a problem-driven investigation aimed at improving work experience and success of workers from poorer families. Much of the micro-level research on employee socioeconomic origins remains disconnected from macro-level concerns (e.g., the documented class earnings gap) and thus focuses on a variety of employee outcomes, many of which have a limited ability to explain the class ceiling. For example, studies have showed that workers from families of lower socioeconomic origin have somewhat of an advantage in terms of leadership

effectiveness (albeit only as mediated by narcissism; Martin, Côté, & Woodruff, 2016), and that socioeconomic origins of CEOs are associated with firm-level risk taking (Kish-Gephart & Campbell, 2015). I add to this body of research by positioning it as relevant to the class ceiling problem, and through the first investigation of the contributing role of a fundamental feature differentiating workers from poorer and richer families, families themselves.

This research also contributes to the organizational behavior literature on social consequences of work-family challenges, which focused mostly on whether current practices and policies might disadvantage women (Duxbury & Higgins, 1991; Hoobler, Wayne, & Lemmon, 2009). The current research expands this line of work by proposing that the ability to integrate two key domains in life, as a factor clearly central in worker wellbeing and productivity, plays a key role not just in gender issues but in the more general questions of socioeconomic mobility and inequality reproduction. This insight opens avenues for workfamily scholars to contribute more extensively to the literature on organizations' impact on socioeconomic mobility and inequality, which has been characterized by lack of attention to the underlying micro-level processes (Davis & Cobb, 2010), limiting the ability to implement positive workplace changes.

The final notable contribution of the current investigation is practical. As noted at the outset, current barriers to career success of employees from poorer families are hidden. This investigation makes them less hidden, and in so doing makes it possible to more effectively manage the class ceiling and make organizations positive contributors to socioeconomic mobility. This is not only the morally right thing to do, but also offers the promise of generating large-scale economic benefits for organizations themselves. Specifically, there are major negative "implications for economic efficiency if the talents of those from poorer families are underdeveloped or not fully utilized, as those from poorer backgrounds will not live up to their productive potential" (Blanden, 2013). Thus, uncovering and tackling

dynamics within organizations that hold employees from poorer backgrounds back has the potential to generate both social as well as economic benefits.

CHAPTER 2: LITERATURE REVIEW

Employee Socioeconomic Background and Spillover from Family to Work

To construct my theory, I use the Work–Home Resources Model by Ten

Brummelhuis and Bakker (2012), a comprehensive framework of work-family interface that integrates most prior models of interactions between work and non-work domains into a general framework based on the Conservation of Resources Theory (Hobfoll, 1989, 2002).

The framework considers both positive as well as negative influences one domain can have on the other, as opposed to focusing only on negative influences, such as conflict, or only positive, such as enrichment, (Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006). This inclusive approach is also taken in the current investigation. The framework considers both how non-work domain influences the work domain, as well as the other way around. I focus only on influences of the non-work domain (and, in particular, families) on work, and not the other way around, as the investigation is motivated by the class ceiling problem, which an issue defined through employees' success in organizations (and related salary and promotion achievement gaps), making influences stemming from work to family less relevant.

The Work–Home Resources Model systematizes the various possible effects family could have on work as positive (*resources*) and negative (*demands*), which often operate in parallel. An example of a *resource* that a family can provide to an employee concerns habits, norms, and behavioral scripts employed in the household. Behavioral scripts prevalent in richer families can be less discrepant with requirements of modern organizations than behavioral scripts prevalent in poorer, making it easier for employees from higher socioeconomic families to perform effectively at work (Stephens, Markus, & Phillips, 2014). An example of a *demand* that a family can impose on an employee is a request for assistance

with personal matters that can represent a cost in terms of time, energy, and material resources. Resources and demands introduced by an employee's family in turn impact employee personal resources (e.g., time, energy, knowledge, health, etc.) needed to perform well in the organization.

Guided by this overarching framework and the underlying organizational research on the family-work interface, I conducted an exhaustive review of diverse literatures on characteristics of families from different socioeconomic strata, most notably in sociology, developmental psychology, and the social psychology of social class. I searched for matches between these literatures and organizational research on family-work interface to identify potential ways in which differences in family wealth generate resources and demands that put workers from poorer families at a disadvantage in terms of personal resources. The assumption of this theoretical approach is that even when an employee from a poorer family manages to secure educational and employment opportunities, his or her family will still be somewhat different than a rich family, from the amount of resources the family has at its disposal to norms and values prevalent in the family (Kohn, 1959, 1983; Stephens et al., 2014).

I focused on those resources and demands for which the literatures on characteristics of higher versus lower socioeconomic families provided a sufficiently strong theoretical background. For example, it was clear that a lower availability of financial resources (which is a defining feature of poorer families) would translate into a lower ability of the family to provide resources in the form of instrumental support (e.g., by hiring a nanny, by helping an employee purchase a car, or rent an apartment closer to work). As an illustrative contrast, there was less theoretical background for predicting that emotional support (King, Mattimore, King, & Adams, 1995) would be lower in poorer families.

This process of searching for matches between the literature on differences in family characteristics as a function of SES and the organizational literature on family-work interface led me to hypothesize that higher family demands (in terms of *time* and *values*) and lower family resources (*instrumental support* and *behavioral scripts*) among workers from poorer backgrounds cause a negative influence on employee personal resources, and thus act as a mechanism of disadvantage reproduction after workers join the organization.

Demands: Time. The most fundamental way in which family dynamics can undermine one's capacity to perform well in the work domain concerns competing time demands (Greenhaus & Beutell, 1985). Simply put, if demands one's family has in terms of time leave an employee with less time or energy to dedicate to work, the employee is at a disadvantage compared to employees whose families are less demanding. I review here disciplinary theoretical background suggesting that family time demands would be higher among employees coming from poorer families.

The defining feature of poorer families is that they have fewer material resources and be more financially vulnerable (Bowles & Gintis, 2002). The lower availability of material resources of poorer families will translate into higher time demands placed on the employee. Various issues family members of an employee might face can be buffered through material resources. This notion is supported by research on the effect of material resources on life satisfaction (Furnham, 1998; Johnson & Krueger, 2006), which shows that "money protects people from unfortunate and unforeseen perturbations in life" (Vohs, Mead, & Goode, 2008: 208).

Take for an example, the case of illness of a family member. Poorer families will have fewer material resources available to deploy to cope with such an event, for example by hiring a nurse to be at home and take care of the ailing family member. Such employees will also have to spend more time on household activities for themselves and for the needs of their

family members as well. Employees from poorer families are thus on average more likely to be asked to assist with nonwork issues by virtue of the fact that poorer families are less capable of addressing such issues by using financial means.

Poorer families will also face more internal *social* challenges that further intensify challenges flowing from home to work and introducing demands on employees' time (Biblarz & Raftery, 1993). Evans (2004) described the differences in the family environment of poorer versus richer people and suggested that compared with their economically advantaged counterparts, poor children are exposed to more family turmoil, violence, separation from their families, instability, and chaotic households. Greater social instability in one's family domain means that one is more likely to have to attend to issues and make investments of time and energy that might otherwise be spent on work-related matters.

This theoretical background thus implies that both economic as well as social factors would result in higher demands on time placed by families of employees from lower socioeconomic background, as compared to their more advantaged colleagues. Higher time demands will result in lower levels of time and energy available to dedicate to work, and, therefore, in terms of the Work–Home Resources Model, a stronger negative family impact on personal resources at work.

Demands: Values. In addition to a higher volume of time demands, sociological research suggests that value discrepancy between employees and their families would be higher among employees from poorer compared to wealthier backgrounds, negatively impacting energy and psychological resources such as mood. Research on family value differences as a function of socioeconomic backgrounds shows that poorer versus richer families are characterized by different value systems (Kohn, 1959, 1983; Pearlin & Kohn, 1966). Given the lack of ability of poorer to buffer against shocks in life using material resources and their relative dependency on external forces such as economic volatility, poorer

families tend to develop social norms to cope with an environment that is unstable, unpredictable, and risky. These contextual forces bring about norms and values characterized by conformity, obedience, respect for authority, and interdependence (Kohn, 1959, 1983; Pearlin & Kohn, 1966). Wealthier families, in contrast, live in an environment that is relatively materially independent and secure, resulting in norms and values characterized by higher levels of self-expression, sense of control, and independence.

When people coming poorer families obtain white-collar jobs, typically characterized by norms and values of richer group that dominate such occupations (Stephens et al., 2014), they socialized into norms that are discrepant from those characterizing their families. A typical example of such a value discrepancy occurs with children's transition to college and adoption of liberal political outlooks that can lead to disagreements and discord in the family domain. In a similar vein, organizations shape employee values, and in modern organizations, and particularly in white-collar jobs, these values are much more aligned with higher-SES values of self-expression, sense of control, and independence than with lower-SES values of conformity, obedience, respect for authority, and interdependence (Lubrano, 2004; Stephens et al., 2014).

As in the example of college students, this means that, on average, disagreements concerning viewpoints, and, importantly, priorities, become more likely. For example, a blue-collar parent who has never been exposed to a 24-7 working culture prevalent in many white-collar occupations might not be able to understand this new phenomenon, resulting in differences in opinions as to how to organize joint time and what activities to prioritize (Lubrano, 2004), resulting disagreements, and energy drain. Another example would be an employee from a lower socioeconomic background currently occupying a white-collar job, who might prefer to spend less time with members of the extended family, behavior more strongly emphasized in lower-SES families. The obligation to do so nevertheless might

amplify how taxing activities in the family domain are to one's personal resources such as positive mood, energy, and focus. Taken together, demands to navigate value-based challenges should be higher among workers from lower-SES backgrounds, undermining personal resources such as energy and mood available for work.

Resources: Instrumental Support. In addition to negative influences, families can exert positive influences, conceptualized as resources provided by the family and that ultimately amplify employee personal resources at work. It is worth noting that demands and resources can cooccur, and at most times families simultaneously impose demands (e.g., on time) and provide resources (e.g., financial support). The key way in which lower-SES and higher-SES families differ is their ability to provide instrumental support to members of their family. Instrumental support is defined as assistance in accomplishing day to day household tasks, and relieve the employee of family obligations and duties to accommodate the employee's work demands (King et al., 1995; Wayne et al., 2007). Instrumental support also entails the material resources that facilitate role performance, such as money and time (Ten Brummelhuis & Bakker, 2012).

Wealthier families are drastically more capable of providing a leg up to their family members as they start working in white-collar jobs. Particularly at the beginning of the careers, entry-level positions often involve low compensation and potentially mean several years of financial vulnerability even in prestigious occupations (M. Lee & Mather, 2008). Financial assistance by the family can have a transformative impact on an employees' personal resources available to dedicate to work at such key career points. For example, an employee who manages to rent or purchase residence close to work with the help of the family can save a lot of time compared to other employees and therefore have an advantage in terms of personal resources such as time and energy to dedicate to work. Even smaller forms of instrumental assistance can have a large impact on personal resources. For example,

if one's family assists with hiring a domestic helper, that can also free up a lot of time and energy that can then be dedicated to work.

Higher-SES families can also provide stronger support in the form of social resources, in addition to material resources. Higher-SES families, compared to lower-SES families, are more likely to have connections that are potentially useful to employees from such families. These can be important sources of information or favors that can provide employees from higher-SES families with an advantage in their jobs. In sum, given the higher availability of material and social resources in higher-SES families, instrumental support as a resource should act as a pathway through which the family domain generates the class ceiling problem. As a final remark regarding instrumental support provided by the family, it is worth noting that it is not a mere flipside of time demands introduced by the family. In many cases both will be high or low. Higher-SES women might have a lot of instrumental support but also very high demands due to their gender role, which may in turn undermine women's ability to compete for highest-level positions, the glass ceiling effect. It is worth considering whether one or both issues contribute to the problem because they imply different solutions. As in the case of women, solving one issue (e.g., equalizing demands) without solving the other (e.g., providing additional instrumental support) is unlikely to close the resulting achievement gaps.

Resources: Behavioral Scripts. Differences in social norms and values between higher-SES and lower-SES families describe has implications not just for energy demands of one's family life, but also cultural resources one acquires in the family domain and that could be valuable at work. The greater complementarity in values and norms between higher-SES families and modern workplaces means that family socialization regarding effective interpersonal strategies will more effectively prepare employees from such families to navigate the social landscape of white-collar jobs.

Stephens et al. (2014) describe how norms of independence and self-expression that are characteristic of higher-SES families prepare employees from such families for demands of modern white-collar jobs, which value and reward such interpersonal style. Modern organizations are increasingly reliant on change and innovation. This fact generates the need for employees to become agents of change within the organization, i.e., to "exert control and influence by acting as sculptors of their environments" (Grant & Ashford, 2008: 7). Yet, some employees refrain from displaying personal initiative even when they have good ideas (Milliken, Morrison, & Hewlin, 2003; Morrison & Milliken, 2000), which can hinder career success given the utility of personal initiative to organizations (Detert, Burris, Harrison, & Martin, 2013; Edmondson, Bohmer, & Pisano, 2001; MacKenzie, Podsakoff, & Podsakoff, 2011).

Sociological research found that lower-SES families socialize their members into behavioral tendencies focused on conformity, and and do not prepare them to display personal initiative (Kohn et al., 1990; Kohn & Schooler, 1969; Kohn et al., 1986). Stephens, et al. (2014) reviewed evidence that socialization in lower-SES families fosters greater conformity and respect for authority, which ultimately translates into an interdependent construal of the self, reducing the propensity to express oneself and influence the situation around oneself among people from lower-SES backgrounds There is also evidence that a lower SES is associated with a reduced generalized sense of control (Grossmann & Varnum, 2010; Kluegel & Smith, 1986; Kraus, Piff, & Keltner, 2009; Lachman & Weaver, 1998), which is a prerequisite for personal initiative at work (e.g., Ashford, Rothbard, Piderit, & Dutton, 1998). Thus, lower-SES families can be expected to provide fewer resources in terms of behavioral scripts that facilitate effective work in modern white-collar jobs, resulting in lower levels of personal resources (which involve skills and thus behavioral scripts as a form of cultural capital).

Negative spillover from family to personal resources at work

Taken together, the theoretical background reviewed above suggests that employees from poorer families will experience higher family demands (time and value) and receive fewer resources (instrumental support and behavioral scripts) from their family. These will in turn cause negative impact of family on personal resources (in terms of time, energy, attention, and mood) available at work among employees from lower-SES backgrounds (Hobfoll, 1989, 2002; Ten Brummelhuis & Bakker, 2012). I refer to the overall negative impact of family on employee personal resources as negative family-work spillover, which represents a combined experience of how one's work capacity is impacted by one's family domain (Sumer & Knight, 2001). The four mechanisms of demands and resources should generate systematic differences in the overall experience of negative family-work spillover as a function of employee socioeconomic background. The construct of negative home-to-work spillover is a way to capture most direct consequences of family impact on work, the ability to effectively address everyday workplace tasks by deploying available personal resources such as time and energy. This is thus the most direct way of capturing negative impact of the family domain on work capacity and performance, and thus the class ceiling problem. I hypothesize as follows:

Hypothesis 1: Employee socioeconomic background is negatively associated with negative spillover from home to work.

Hypothesis 2: Higher employee socioeconomic background is related to lower family demands (time and value) and higher family resources (instrumental support and behavioral scripts).

Hypothesis 3: Family demands (time and value) and family resources (instrumental support and behavioral scripts) mediate the relationship between employee socioeconomic background and negative spillover from home to work.

Impact on Employee Psychological Outcomes Relevant to the Class Ceiling

To further empirically validate the importance of family work interface in explaining the class ceiling, I examine how negative impact of family on employee personal resources available at work (which I propose is more pronounced among workers from poorer families) further impacts employees psychological state at work, in addition to impacting their work capacity directly. I propose that the higher negative home-work spillover among workers from lower-SES backgrounds also undermines key aspects of employee psychological functioning relevant to success at work: work engagement, job satisfaction, emotional exhaustion, and workplace anxiety (Beehr et al., 2000; Gilboa et al., 2008; Iaffaldano & Muchinsky, 1985; Wright & Cropanzano, 1998). I identified these factors as they are most clearly relevant to employee performance (both task as well as contextual performance) (Brooks et al., 2016; Cropanzano, Rupp, & Byrne, 2003; Wright & Cropanzano, 1998) and affect supervisor's ratings of performance and promotability (Ferris, Witt, & Hochwarter, 2001; Van Scotter, Motowidlo, & Cross, 2000). Additionally, each of these factors has unique effects on employee performance and promotability (Eysenck & Calvo, 1992; Halbesleben & Bowler, 2007; Salanova, Agut, & Peiró, 2005), implying that they can constitute independent pathways through which families contribute to the class ceiling phenomenon.

I thus leverage existing research showing these key employee outcomes are undermined by a negative impact of family on employee personal resources available at work and my theoretical contribution consists of identifying outcomes relevant to the class ceiling (while many other outcomes might not be) and my empirical contribution consists of

providing a comprehensive test of the idea that a negative impact of family on employee personal resources explains *why* (identifying specific resources) as well as *how* (identifying key employee outcomes impacted) workers from poorer families are held back at work.

Emotional exhaustion. Defined as a state of physical and emotional depletion that results from excessive job demands and continuous hassles (Maslach & Jackson,1981; Wright & Cropanzano, 1998), emotional exhaustion has been linked to numerous outcomes of interest to organizations, such as job performance (Jones & Best, 1995; Leiter, Harvie, & Frizzell, 1998; Wright & Cropanzano, 1998), organizational citizenship behavior (Cropanzano et al., 2003) and turnover intentions (Cropanzano et al., 2003). Together, there is much evidence suggesting that being emotionally exhausted at work negatively affect employees, thwarting their promotions and mobility in organizations. Employees who lack personal resources such as energy and focus are less capable of displaying high levels of engagement. Accordingly, it has been found that a negative impact of family on employee personal resources predicts emotional exhaustion (Hall, Dollard, Tuckey, Winefield, & Thompson, 2010; Liu et al., 2015). Therefore, I propose that employees from poor backgrounds will report higher degrees of emotional exhaustion due to higher levels of negative impact of family on personal resources.

Workplace anxiety. Anxiety is another relevant outcome to examine due to it somewhat different nature than engagement, as well as its unique relevance (beyond effects of engagement) to employee success at work. Anxiety includes fear, frustration, stress, tension, worry, apprehension, and nervousness (Brooks & Schweitzer, 2011). Anxiety is generally an unpleasant and aversive emotion that has several negative effects for the individuals experiencing it (Brooks et al., 2016). For example, some research shows that anxiety drains working memory and impairs information processing. Thus, anxious individuals expend working memory on processes such as worrying and ruminating instead

of focusing on the task at hand (Eysenck & Calvo, 1992), leaving fewer cognitive resources for work and thus undermining employee personal resources (Mughal, Walsh, & Wilding, 1996; Spector, Dwyer, & Jex, 1988). Although, only a handful of studies examined the role of anxiety in negative impact of family on employee personal resources, they are suggestive of the role of anxiety in work-family issues (Frone, 2000; MacEwen & Barling, 1994; Netemeyer, Boles, & McMurrian, 1996). For example, Frone (2000), in a study of 2,700 employed adults found that tensions between work and family lives were associated with anxiety disorders. I thus argue that negative impact of family on employee personal resources will be reflected in higher levels of anxiety at work, an important precursor to employee success and thus a mechanism through which the class ceiling problem is generated.

Work engagement. Work engagement is "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002; p.74)." A core tenant of the Conservation of Resources Theory is that the presence of resources fosters work engagement, while their absence results in burnout (Saks, 2006). To the extent that family demands and (lack of) resources result in lower personal resources required for work engagement, such as focus and energy, negative family impact should reduce engagement at work. Consistent with this argument, several studies found that tensions between family and work domains undermine engagement (Bakker, Demerouti, & Schaufeli, 2005; Halbesleben, 2010). A meta-analysis showed that work engagement was in turn positively related to both task performance and citizenship performance (Christian, Garza, & Slaughter, 2011), and thus promotability (Allen & Rush, 1998; Johnson, 2001). Taken together, the higher negative family impact on employee personal resources among workers from lower-SES families should manifest itself in lower levels of engagement, which thus constitute a notable explanation for the class ceiling problem given the importance of engagement for work success.

Job satisfaction. Tensions between family and work domains can undermine satisfaction with one's job even when all other aspects of one's work remain the same (Bruck, Allen, & Spector, 2002; Frone, Russell, & Cooper, 1992; Rice, Frone, & McFarlin, 1992). This suggests that even when two employees are otherwise identical and work in identical jobs, there is a greater risk of job dissatisfaction among the employee coming from a lower-SES family, as a result of negative impact of family on work. Job satisfaction can be undermined through reduced energy and depressed mood due to higher demands imposed by one's family (Judge & Ilies, 2004; Williams & Alliger, 1994). Lower job satisfaction in turn impairs job performance (Iaffaldano & Muchinsky, 1985; Judge, Thoresen, Bono, & Patton, 2001), increases the risk of absenteeism, undermines job and organizational commitment, ultimately resulting in lower ratings of performance and promotability (Brown & Peterson, 1993; Hom & Kinicki, 2001; Netemeyer et al., 1996; Schaumberg & Flynn, 2017). I highlight that a lower job satisfaction, while her considered primarily in terms of costs it introduces for employee career success, is also a unique proxy of *psychological* costs borne by employees from poorer backgrounds due to a mismatch between their families and modern white-collar jobs. Thus, I hypothesize as follows:

Hypothesis 4: Negative spillover from home to work will mediate the relationship between employee socioeconomic background and key employee work outcomes relevant to the class ceiling via: a) emotional exhaustion, b) work anxiety, c) work engagement and d) job satisfaction.

Combining all the above hypotheses, I expect serial mediation such that relationship between employee poor family backgrounds and employee psychological states important for career success is transmitted as summarized below.

Table 1: SUMMARY OF SERIAL MEDIATION HYPOTHESES

Serially Mediated Pathways		
H5: Employee Socioeconomic Background to Emotional Exhaustion via	a: Demand: Time and Negative Home-to-Work Spillover b: Demand: Values and Negative Home-to-Work Spillover c: Resources: Behavioral Scripts and Negative Home-to-Work Spillover d: Resources: Instrumental Support and Negative Home-to-Work Spillover	
H6: Employee Socioeconomic Background to Work Anxiety via	a: Demand: Time and Negative Home-to-Work Spillover b: Demand: Values and Negative Home-to-Work Spillover c: Resources: Behavioral Scripts and Negative Home-to-Work Spillover d: Resources: Instrumental Support and Negative Home-to-Work Spillover	
H7: Employee Socioeconomic Background to Work Engagement via	a: Demand: Time and Negative Home-to-Work Spillover b: Demand: Values and Negative Home-to-Work Spillover c: Resources: Behavioral Scripts and Negative Home-to-Work Spillover d: Resources: Instrumental Support and Negative Home-to-Work Spillover	
H8: Employee Socioeconomic Background to Job Satisfaction via	a: Demand: Time and Negative Home-to-Work Spillover b: Demand: Values and Negative Home-to-Work Spillover c: Resources: Behavioral Scripts and Negative Home-to-Work Spillover d: Resources: Instrumental Support and Negative Home-to-Work Spillover	

A Demand-Side (Institutional) Solution: How to Promote Socioeconomic Inclusion Through Organizational Family-Related Policies

The investigation of the mechanisms through which families impact work success of employees from poorer versus richer families informs which factors may attenuate these mechanisms and thus alleviate the problem. On the institutional side, organizations cannot change families and the associated demands families introduce, but they can provide support that compensates for the lack of instrumental support provided by the family (Allen, 2001; Carlson & Perrewé, 1999; Kossek, Pichler, Bodner, & Hammer, 2011). Family supportive work environments (FSWE) are characterized by policies that compensate for lack of support with personal matters employees might have otherwise. For example, by providing some flexibility in terms of scheduling, organizations may benefit employees with longer commute times.

Such family supportive work environments may be viewed as coming at the expense of organizational economic goals, which may be the reason why many firms, including more

than 50% in our sample, do not create family supportive work environments. This reluctance to create family supportive work environments highlights the value of investigating family supportive work environments as a moderator. Namely, data on the fact that a failure to provide family supportive work environment systematically disadvantages employees from poorer backgrounds and hinders their economic productivity (which is against organizational economic interest) can impact the cost-benefit analysis of family supportive work environments from the perspective of societies as well as organizations. In sum, I expect that family supportive work environment will compensate for the lower family instrumental support of workers from poorer backgrounds, rendering differences in family ability to support employees less of a factor, and thus leveling the playing field.

Hypothesis 9. FSWE will attenuate the negative relationship between employee socioeconomic background and negative spillover from family to work.

A Supply-Side (Individual) Solution: What Can Workers Do?

I also examine strategies employees from lower-SES families can employ to minimize the negative spillover from family to work. Employees also have little control over whether their family is able to provide economic or cultural resources. However, employees can differ in how they cope and manage their family demands on time, as well as issues arising from the value discrepancy between their family and workplace norms. The Work–Home Resources Model suggests that differences in psychological resources enabling resilience "provide an explanation for why some people are better than others in coping with stressful circumstances" (Ten Brummelhuis & Bakker, 2012: 550). These resources include such traits as optimism, which impacts how people construe and cope with events, and consequentially, the negative effect of life challenges on personal resources such as energy and mood. I develop a psychological intervention that can help employees from poorer

backgrounds more effectively cope with their family demands and thus counter the negative effect of family demands on negative spillover from family to work.

One notable literature that examined how people cope with stressful events is research on coping with illness (Henry et al., 2010; V. Lee, Cohen, Edgar, Laizner, & Gagnon, 2006; Park, 2010). Resilience in the face of illness is characterized by a sense-making process that induces acceptance and gratitude and encourages positive outlook in face of challenges. This literature showed that prompting participants to engage in a guided reflection that helps them see meaning or purpose despite their current life challenges can be a powerful way to preserve psychological resources such optimism and self-efficacy during time of hardship (Henry et al., 2010; V. Lee et al., 2006). I propose that a similar meaning-making intervention would be particularly effective for workers from lower-SES backgrounds and would help them cope with their relatively higher family demands more effectively, in turn reducing the negative spillover from family to work.

I connect research on meaning-making in response to life challenges such as illness, with social psychological research on the use of theoretically-guided psychological interventions to create positive spirals related to inclusion and performance of members of disadvantaged groups. For example, Walton & Cohen (2011: 1447) tested an "intervention aimed to lessen psychological perceptions of threat on campus by framing social adversity as common and transient. It used subtle attitude-change strategies to lead participants to self-generate the intervention message." The authors find that "the intervention raised African Americans' grade-point average (GPA) relative to multiple control groups and halved the minority achievement gap. This performance boost was mediated by the effect of the intervention on subjective construal: It prevented students from seeing adversity on campus as an indictment of their belonging. Additionally, the intervention improved African

Americans' self-reported health and well-being and reduced their reported number of doctor visits 3 years" (p. 1447).

The intervention designed by Walton & Cohen (2011) focuses on changing how participants, particularly members of disadvantaged social groups, cope with challenges to social inclusion or belonging, and changing their mindset helps change actual experience and outcomes in higher education. In a similar vein, I expect that changing employee mindset and helping them cope more effectively with higher family demands will reduce the effect of family demands on negative spillover from work to home. Similar to Walton & Cohen (2011), I expect the benefits of the intervention to be most concentrated among participants among whom the issue is most salient, i.e., workers from lower-SES families. The reason for that is that this group of employees is facing greater challenges, so the same coping technique should be more relevant to such employees (as an extreme comparison, for a person with little or no family demands, there is nothing the intervention can help with).

Another reason for expecting that employees from lower-SES backgrounds would be particularly responsive to the intervention is that such employees might be at an initial disadvantage when it comes to psychological resources relevant to coping. Most notably, research in psychology suggests that coming from a poorer background will cause higher chronic levels of neuroticism (lower emotional stability). Ayoub, Gosling, Potter, Shanahan, and Roberts (2018) found that coming from a lower-SES home was associated with higher neuroticism later in life. This is important as emotional stability (vs. neuroticism) acts as an important psychological resource determining how well people cope with stressors in life. Employees higher on neuroticism (lower on emotional stability) are more focused on and bothered by various stressors at work (Kammeyer-Mueller, Judge, & Scott, 2009), and there is evidence that more neurotic employees experience more negative spillover from family to work as a function of their family demands (Boyar & Mosley Jr, 2007). The benefits of an

intervention boosting psychological coping resources should be particularly pronounced among lower-SES workers, given their likely lower initial psychological resources. In contrast, workers who are already able to cope with stressors should have less room to improve their psychological approach.

Therefore, a meaning-making intervention that boosts psychological resources relevant to coping with family demands can be expected to be particularly beneficial among employees from poorer backgrounds given their relatively large family demands, as well as their likely relatively lower initial ability to cope with such demands, together making the intervention particularly relevant to such works. I hypothesize as follows:

Hypothesis 10. A psychological meaning-making intervention will attenuate the negative relationship between employee socioeconomic background and negative spillover from work to home, and the benefits should be particularly pronounced among employees from poorer backgrounds.

CHAPTER 2: OVERVIEW OF STUDIES AND EMPIRICAL CONTEXT

I conducted a field study in Singapore with full-time working professionals in white-collar jobs. The purpose of conducting this study was manifold. First, I use Study 1 to examine the key differences between employees coming from richer versus poorer families in terms of their family structures and their experiences at work. Thus, this study helps identifying major differences in objective and subjective family related constraints of employees from richer versus poorer backgrounds. This study serves as a first test of the role of employee childhood backgrounds in explaining the differences in experience of negative spillover from home to work and its subsequent consequences. Study 1 was a one-time survey where participants responded about their childhood and current economic situation, their family environment, their current jobs, and questions related to their personalities and beliefs.

Study 2 was an intervention study where I surveyed the participants using interval-contingent experience-sampling methodology (Wheeler and Reis, 1991; Alliger and Williams, 1993), closely following the methods of studies of fluctuations in daily behavior at work (e.g., Scott and Barnes, 2011). I contacted the participants from Study 1 to participate in the daily dairy study one week after they have responded to the Study 1 survey. For this study participants were surveyed once a day at the end of the day for 10 consecutive workdays. Participants were paid for each completed survey and a bonus for completing at least 80 percent of the surveys.

The part of the research project reported here was conducted in Singapore, and replications are ongoing in the U.K. and the U.S.A. Singapore is an appropriate context for examining phenomenon of interest for several reasons. First, due to the unprecedented economic growth in last three decades, there has been tremendous socio-economic mobility in Singapore (Huff, 1997; I. Ng, 2007). Economic growth has further led to improvement in

quality and accessibility of education (Ng, 2014) as well as growth in the availability of professional jobs. These improvements contributed to a significant population of young Singaporeans to attain high-paying professional jobs, irrespective of their childhood backgrounds. This makes Singapore an interesting context in which to examine the effects of childhood backgrounds on current employee-level outcomes.

Moreover, it is not uncommon for young people in Singapore to live with their family members. This was important because I wanted to capture a broad range of family driven demands and resources instead of just examining the time-related constraints captured in the extant work-family conflict literature, Singapore context provided an opportunity to understand various facets of the conflict driven from the employee's family structures. Finally, as Singapore is an island nation governed by similar policies and lifestyle across the nation, issues like standardization of proxies of childhood backgrounds and issues arising from within-country mobility can be easily controlled for. As my variable of interest was *relative* economic childhood backgrounds of the employees, it was important that respondents' understanding of their childhood backgrounds are comparable. As Singapore contains very diverse working populations from different nationalities, I restricted my examination to only Singapore citizens to control for childhood background variables. Thus, all respondents were Singaporeans who grew up in Singapore.

Study 1: Cross-Sectional Field Study

Participants and Design

To recruit participants for study 1, I used employee panels of Qualtrics LLC, a provider of research services, maintaining panels of working adults interested in participating in research studies. I worked with the company to set relevant recruitment criteria (e.g., profession, current personal income, living with family, Singapore citizens etc.). In line with the theoretical focus, I surveyed early-career workers who managed to secure high-potential

jobs, which was defined as paying at least 3000 Singapore dollars per month based on statistics of starting salaries from local business graduates (Graduate Employee Survey, Ministry of Singapore, 2018) as well as preliminary qualitative interviews with local experts. Qualtrics reached out over 8000 survey respondents in Singapore from their nationwide panel of five hundred thousand adults over 18 years old who had previously expressed an interest in participating in Qualtrics research projects. Their panel was compensated with "survey cash," credits that could be converted into monetary compensation after individuals participated in a certain number of research studies, including this study.

I restricted recruitment criteria to only those potential participants with a minimum of a graduate level degree or professional diplomas. All participants were thus full-time professionals working in Singapore, in various industries. All participants lived with their family members. We included several attention check questions where participants received questions, embedded within the scales, asking them to choose one of the given 5 scale anchors. People who failed attention checks questions were not included in the analysis.

The final sample consisted of 425 people (mean age = 26.55, s.d.= 3.25, 45.65% were male). On average participants had 3.31 years of work experience (s.d. = 1.16) and worked in the current organization for 3 years (s.d. = 1.26). Participants worked in different industries, most notably finance and insurance (17.30%), followed by healthcare and social assistance (11.96%), manufacturing (11.45%), and professional scientific and technical services (7.89%). The average size that of the organization participants worked for was in the 1601-1700 range. Participants' average monthly income was in the S\$5,000-S\$6000 range. 42.12% participants were married or had a long-term partner.

Measures

Unless otherwise noted, all measures in this study used a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Appendix A contains items for all the measures.

Independent Variable: Employee socioeconomic background. Employee's socioeconomic background was measured by using an expanded version of the perceived resource availability measures from Griskevicius and colleagues (2011). This scale asks participants to indicate to what extent did they feel resource-deprived in their childhood. Sample items include "I grew up in a relatively wealthy neighborhood", "I felt relatively wealthy compared to others my age" and "I felt relatively wealthy compared to the other kids in my school." I also added 3 more statements particularly applicable in the Singapore context. Sample items include "I could always afford latest technological gadgets". Cronbach alpha for the scale was 0.91.

Hypothesized mediators: 1) Demand: Time: I measured time based family demands using the 6-item inter-role conflict scale from Kopelman, Greenhaus, and Connolly (1983) adapting it to family to work conflict. Sample items include "Because my family is demanding, at times I am irritable at work" and "My family schedule often conflicts with my work role" ($\alpha = .85$).

Hypothesized mediators: 2) *Demand: Value.* Value-based family conflict was measured by the 7 items from the Kopelman, Greenhaus, and Connolly (1983) family conflict scale. Sample items include "My family does not enjoy doing some of the things I'd like to do" and "My family and I have different ideas about who our friends should be" ($\alpha = .87$).

Hypothesized mediators: 3) Resources: Behavioral Scripts. I measured behavior script matching using the 3-items scale from the Carslon, Kacmar, & Williams' (2000) workfamily conflict scale. Sample item includes "The behaviors that work for me at home do not seem to be effective at work" and "Behavior that is effective and necessary for me at home would be counterproductive at work" ($\alpha = .77$).

Hypothesized mediators: 4) Resources: Family instrumental support: I used 6-items from the Family Support Inventory by king et.al. (1999) to measure instrumental support

from family. Sample items include "Members of my family cooperate with me to get things done around the house", and "If my job gets very demanding, someone in my family will take on extra household responsibilities" ($\alpha = .88$).

Negative spillover from home to work. Negative spillover from work was measured by using 5-item the negative-spillover from home to work subscale from the Sumer and Knight's (2001) work-family linkage questionnaire. Sample items include "My home problems produce tensions and anxieties that decrease my work performance," My home life makes me so irritable that I take it out on the people at work," and "I let my personal problems affect my work performance." Participants were asked to indicate how often their family life interferes with their work-life on a 5-point scale from 1 = "never" to 5 = "always" ($\alpha = .93$).

Institutional solution: Family-supportive work environment. I measured family supportive work environments by using 14-item scale from Allen (2001). Participants were asked to indicate to what extent the given statements reflect the philosophy or beliefs of their current organization (rather than their own personal beliefs). Sample items include "In my organization, people believe that it is assumed that the most productive employees are those who put their work before their family life" and "In my organization, attending to personal needs, such as taking time off for sick children is frowned upon (R)" ($\alpha = .86$).

Employee outcomes relevant to the class ceiling: emotional exhaustion, anxiety at work, work-engagement, and job satisfaction. Employee exhaustion was measured by 9 items from the Maslach and Jackson (1981) burnout inventory. Participants were asked to indicate the extent to which they feel the emotions on average. Sample items include "I feel burned out from my work" and "I feel emotionally drained from my work" (α =.93). I measured anxiety at work using a modified version of PANAS (Watson & Clark, 1998). Participants were asked to indicate to what extent they feel following emotions at work on

average; participants responded to "At work I generally feel—anxious, tense, distressed, uncomfortable, nervous" (α = .89). I measured employee work engagement by the 9-item short Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002). Sample items include "I get carried away when I'm working", At work, I feel that I am bursting with energy" and "I feel happy when I am working intensely" (α = .90). Finally, job satisfaction was measured by utilizing 3-items from the Cammann, Fichman, Jenkins, and Klesh (1983) job satisfaction scale and 4-items from Diestel, Wegge, and Schmidt (2014). Sample items include "I am satisfied with my job", "I am satisfied with the career opportunities in this job", and "I am satisfied with the kind of work I do on my job" (α = .91).

Control variables. I collected data on several control variables. First, I control for respondents' education level as it might affect the way respondent perceive family impact on work and how they approach their jobs. I also control for respondents' current income to isolate any current job differences when gauging effects of family background. Second, I control for gender and age, which have been found to be relevant for work life conflict (Duxbury & Higgins, 1991; Martins, Eddleston, & Veiga, 2002), as well as exhaustion, anxiety, work engagement and job satisfaction (Kacmar & Ferris, 1989; Twenge, 2000). I also examine the role of the number of children and dependents to isolate effects of family size from the nature of family dynamics, which my theory focuses on.

Study 1: Results

Table 1 displays the descriptive statistics and zero order correlations between the study variables. As predicted employee socioeconomic backgrounds is negatively related with current negative spillover work home to work i.e. employees from poorer background reported higher negative spillover than those from the richer backgrounds. Employees' current household income was positively correlated with their socioeconomic backgrounds. Current personal income was not correlated with their childhood backgrounds, reflecting

successful sampling of people who managed to secure high-potential jobs but are drawn from diverse SES backgrounds. Relatedly, I also found no differences in reported job autonomy (b=.04, s.e.=.05, p=.360) or sense of control at work (b=.07, s.e.=.06, p=.197) ¹ as a function of employee socioeconomic backgrounds, which also suggests that the sampling strategy was effective in reaching a sample that is comparable in terms of current job conditions (including those relevant to managing the work-family interface), but exhibits variation in employee family SES.

Analytical Strategy

I used Ordinary Least Square (OLS) regression to test my hypotheses. I first test for each hypothesis separately and then examine the serial mediation models including all the hypothesized mediators. Results hold with or without the control variables.

Insert Table 1 about here

Effect of Employee Socioeconomic Background on Negative spillover from home to work (Hypothesis 1 Test).

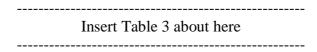
I examined Hypothesis 1 that coming from poorer childhood backgrounds will lead to higher experience of negative spillover from home to work. Table 2 (model 2) contains regression analysis results and shows that coming from a wealthier childhood background was negatively associated with negative spillover from home to work (b = -.09, s.e. = 0.04, p = .036) supporting Hypothesis 1.

Insert Table 2 about here

¹Validated measures of the two variables were used and can be found in the appendix.

Effect of Employee Socioeconomic Background on Family Demands and Resources (Hypothesis 2 Test).

Next, I regressed the hypothesized first stage mediators i.e. family demand: time and value as well as family resources: instrumental support and behavioral scripts, of the serial mediation from employee childhood background to negative spillover from home to work to employee level outcome variables. Results of regression analysis on first stage mediators are displayed in table 3. Table 3 shows that people from poorer families indicated higher degrees of time demands from their family (model 1: b = -0.11, s.e. = 0.04, p = .007), more value related demands (model 2: b=-.13, s.e.=0.05, p=0.008), less congruence between the behavioral scripts of family and work (model 3: b=-.07, s.e.=.05, p=0.071) as well as less instrumental support from the family (model 4: b=.10, s.e.=.04, p=0.010) as well as. Thus, Hypotheses 2 is supported.



Demands and Resources Mediate the Relationship Between Employee SES Background and Negative Spillover (First stage mediation i.e. hypothesis 3 test).

I first tested indirect effect from employee socioeconomic background to current negative spillover from family to work through each of the hypothesized mediators (hypotheses 4a-4d). I used structural equation modelling (SEM) and calculated the significance of the indirect effects in SEM using the bootstrap method with 5,000 bootstrap samples (Shrout & Bolger, 2002). See Figure 2 for coefficients of each individual path. The results are displayed in Table 5. Results show that the indirect effect of employee SES background on negative spillover from home to work was mediated by the fact that workers from poorer families experienced higher times based demands (95% CI: -0.13, -0.02), higher value based demands (95% CI: -0.09, -0.01), lower level of behavioral script

congruence between family and work (90% confidence interval: 95% CI: -0.05, -0.00), and lower level of family instrumental support (95% CI:-0.06, -0.01). Thus, Hypotheses 3 is supported.

Insert Table 4 and Figure 2 about here

Demands and Resources Relate to Employee Outcomes (Hypothesis 4a-4d Test)

Table 5 contains the results of the regression analysis on the employee outcome variables and shows that negative spillover from home to work was positively associated with employee emotional exhaustion (model 1, b = 0.34, s.e.=.05, p = .000), and work anxiety (model 2, b=.41, s.e.=.05, p < .001), and negatively associated with employee work engagement (model 3, b= -.20, s.e.=.05, p = 0.000), and employee job satisfaction (model 4, b= -.19, s.e.=.05, p = 0.000). Thus, Hypothesis 4a-4d are supported.

Insert Table 5 about here

Serial Mediation (Hypotheses 5-8 Test)

Before testing for the serial mediation, I also examined the main effects of employee SES background on each outcome variable. Results are displayed in table 8 and shows that the effects were significant in the predicted direction.

Insert Table 8 about here

I then tested for mediation paths from each of the first-stage mediators i.e. time and value based demands and family instrumental support and behavioral scripts to each employee outcome variables i.e. emotional exhaustion, work anxiety, work engagement, and job satisfaction. Each of these paths were significant and coefficients from the SEM are displayed in Figure 2.

I tested for the serial mediation hypotheses (hypotheses 5-8) using the stepwise procedure proposed by Taylor, MacKinnon, and Tein (2008) for a three-path mediation model. In three-path mediation model two mediators intervene one after the other to explain the relationship between an independent variable and a dependent variable. Taylor, MacKinnon, and Tein (2008) suggested a joint significance test which requires for a separate test for each mediated path. I examined the full mediation model for each specific paths and results are displayed in Table 6. I conducted the bootstrap using 5,000 random samples with replacements and interpreted the results using 95% confidence intervals. To establish significance, the CIs must exclude zero. The indirect effects, direct effects, and their CIs are presented in Table 6.

Insert Table 6 and Figure 2 about here

Hypotheses 5a-5d posited that the effects of employee SES backgrounds on employee emotional exhaustion would be serially mediated by each of the four first stage mediators and, in turn, via negative spillover from home to work. The 95% CI excludes zero for all paths. Thus, hypotheses 5a-5d were supported. Hypotheses 6a-6d posited that the effects of employee backgrounds on work anxiety would be serially mediated by each of the four first stage mediators and FWI. The 95% CI excludes zero for all paths. Thus, supporting hypotheses 6a-6d. Hypotheses 7a-7d postulated serially mediated effects of employee backgrounds on work engagement by each of the four first stage mediators and negative spillover from home to work. The 95% CI excludes zero for paths from demands but not resources. Thus, supporting hypotheses 7c-7d and not supporting hypotheses 7a-7b. Hypotheses 8a-8d postulated serially mediated effects of employee backgrounds on job satisfaction by each of the four first stage mediators and negative spillover from home to work. The 95% CI excludes zero for paths from demands but not resources. Thus, supporting

hypotheses 8c-78 and not supporting hypotheses 8a-8b. The total indirect effects of employee childhood backgrounds on emotional exhaustion, work anxiety, work engagement, and job satisfaction are significant, revealing that employee SES backgrounds influence employee outcomes indirectly through family demands and resources and their subsequent impact on negative spillover from home to work.

Moderation Hypotheses Test

To test for hypothesis 9, I ran an OLS regression to test the interaction between employee SES background and family supportive work environments (FSWE) on negative spillover from home to work. As shown in Table 7 (model 4), the interaction between employee SES background and FWSE negatively related to negative spillover from home to work (b=-0.11, s.e.=0.02, p=0.000). I then plotted the interaction effects using Aiken and West's (1991) procedure, computing slopes one standard deviation above and below mean of the moderating variable. Figure 3 shows the interaction pattern. Specifically, employee SES background is negatively related to negative spillover from home to work when FSWE is low (b=-.24, s.e.= .09, p=.009) but is unrelated to negative spillover from home to work when FSWE is high. This shows that FSWE reduced the negative effects of SES backgrounds on negative spillover from home to work such that when FSWE is high there is no difference between the richer and poorer background employees in experience of negative spillover from home to work. Thus, hypothesis 9 was supported.

Supplementary Analysis²

I conducted supplementary analysis in order to rule out potential alternative mechanisms informed by the prior research (Stephens et al., 2014). First, research on

² Measures of all supplementary analysis variables can be found in the appendix.

childhood backgrounds suggest that people from poorer backgrounds might have more family motivation and might be more focused on family needs (Bielby, 1992; Menges, Tussing, Wihler, & Grant, 2017). I tested for such motivational individual to examine whether higher negative spillover from home to work among workers from lower-SES families might be not due to higher family demands, but because of a higher importance such workers place on the family domain (and, potentially, lower importance placed on the work domain). I found that people from richer backgrounds showed that they are more focused on family than people from poorer backgrounds (b= .10, s.e.=.05, p=.056), have marginally higher family motivation than their poor counterparts (b= .07, s.e.=.04, p=.07), and there was no difference between employees from poor or rich backgrounds in terms of self-importance of the work domain (b= .03, s.e.=.05, p=.451).

Study 2: Psychological Intervention

Study 1 showed that people from poorer backgrounds reported higher negative homework spillover which in turn led them to experience more emotional exhaustion and anxiety at work as well as lower work engagement and job satisfaction. Study 2 complements Study 1 by gathering daily-snapshots data, which provide a richer insight into how employee demands generate negative home-work spillover on a daily basis and thus constitute another test of the phenomenon from a different and useful perspective. Work and family domains influence each other on a daily basis (Butler, Song, & Ilies, 2013), so organizational researchers have been increasingly studying challenges of the work-family interface using experience sampling designs, whereby participants are repeatedly surveyed for several days. This approach allows for a richer investigation of work-family processes as they occur in their daily dynamic form, and, importantly, it also allows to examine how daily time-variant factors, such as employee actions, matter for negative home-work spillover.

Specifically, organizational policies such as family supportive work environment represent a factor that generally does not vary from day to day, and as such it can be most productively conceptualized and measured on a chronic level, assuming some degree of stability. In contrast, employees' personal strategies can vary or be impacted on a daily level (see Maertz Jr & Boyar, 2011, for a framework classifying different factors relevant to the work-family boundary in terms of whether they vary on a daily level or can be more productively treated as exhibiting some temporal stability). Therefore, the ESM design allowed me to gauge the extent to which the meaning-making intervention changed over a two-week period of time how effectively employees cope with daily fluctuations in family demands. The study thus examines how daily within-person variation in family demands impact the overall negative home-work spillover, and whether the intervention helps attenuate the negative effect, particularly for workers from lower-SES backgrounds. I focus on overall negative home-work spillover as the key outcome variable given its key relevance to work performance and the class ceiling, as well as the established connections with other psychological outcomes, also validated in Study 1.

Participants and Procedure

I used an experimental experience-sampling design (Foulk, Lanaj, Tu, Erez, & Archambeau, 2017) for this study where I surveyed participants once a day at the end of the day for 10 consecutive workdays. I contacted the participants from Study 1 to participate in the daily dairy study one week after they have responded to the Study 1 survey. 223 out of the 425 (response rate= 52%) people from study 1 agreed to participate in study 2. There were no significant demographic differences between the people who did or did not participate in Study 2. To ensure that participants had completed the surveys at the appropriate times we sent out the surveys via emails at 5pm everyday and kept the surveys open only untill midnight. We also used timestamps to verify the time at which the survey

was taken. In total I received total 1811 completed surveys. I included all those in the analysis who completed at least 3 out of 10 daily surveys following the recommendation of Ployhart and Vandenberg (2010). Participants worked in a variety of industries such as medicine, engineering, education, and banking. On average, participants worked 9.38 hours each day (SD=2.24).

I randomly assigned participants to the control or intervention condition such that the participants were either in the control condition or in the intervention condition for all 10 days. Each day the survey asked participant about a list of specific family demands they might have encountered, as well as experienced negative home-work spillover. The survey ended with the intervention (versus control) text where participants were also asked to write about their plan for next day to manage their daily experiences.

Meaning-Making Intervention

The intervention used in this study was designed through a comprehensive literature review of psychological interventions in various fields educational psychology, clinical psychology, and social sciences (Cohen et. al., 2006; Cohen & Sherman, 2014; Park et. al., 2008, Walton, 2014). Research on psychological meaning-making intervention shows that acceptance and finding positive meaning of the present condition help people to combat such problems (Henry et al., 2010; V. Lee et al., 2006; Park, 2010). In both the control and intervention condition, participants engaged in a daily reflection task. This was done to have a comparable control condition with the treatment condition. In this daily diary study half of the participants are in treatment condition where they are taught to be more acceptive of the fact that spillover from home to work exists and that it is very common. They were then asked to write about their specific goal and plans to manage next day's family demands. Participants read as follows:

Research shows that for more than 90% of junior workers such as yourself, family matters can interfere with work. If you are also experiencing this, you are not alone. Although you cannot change your family, research suggests changing how you think about your family can help. Two particularly effective strategies are:

- 1) Acceptance: Accept that family interference with work is common and that many junior workers are experiencing same issues as you.
- 2) Meaning-making: If you focus on how you are benefiting your family through your work (such as by providing financial support), it reduces negative experiences due to family-work conflict. Think about how your family members are proud of you and look up to you in time of need. You are improving your family's situation by your work and are making a positive impact in their life.

After the participants read this text, they were asked to engage in a reflection task using wiring a few sentences as follows:

In 4-5 sentences (or more), please write your plan for tomorrow for managing family matters that might impact your work, focusing on

- 1) Acceptance (be accepting of family matters interfering with work)
- 2) Meaning-making (having in mind that family challenges you are experiencing serve greater good and that you are benefiting your family)

In the control condition participants were asked to generally reflect on their daily life by engaging in a writing task. Research shows that daily positive writing helps employees with managing their emotions as well as other negative experiences (Kirk, Schutte, & Hine, 2011). This control condition provides a conservative comparison with the treatment condition as both the control and intervention condition have ben found to have positive effects on employees. By comparing the control condition with meaning-making intervention, I was able to examine whether the meaning-making intervention specifically

helps employees, and particularly from lower SES backgrounds, above of the more general positive processes of self-reflection. Participants in the control condition read:

Research suggests that following two strategies can be helpful for you to be more effective at work:

- 1) Daily reflection: Reflect on your workday tomorrow. Think of anything that comes to mind.
- 2) Daily writing: Writing a few sentences everyday helps people feel better. You can write about anything that comes to mind."

After the participants read this text, they were asked to engage in a reflection task.

They were told that "Capturing your random thoughts 'in writing' can have positive impact on your psychology. One should take some time to write a few lines every day" and were then asked to engage in a free writing task using the same format as in the treatment condition.

Measures

Unless otherwise indicated all measures were rated on a scale of 1 = strongly disagree to 5 = strongly agree.

Daily Family Stress. I asked participants to report how much family related stress they faced on the given day. I utilized daily stress measure from Bolger and colleague (1989) and DeLongis and colleagues (1988) and created a list of various daily stressors. Participants were given a list of troublesome things that cause stress in people's everyday lives and then they were asked to indicate the extent to which each of the events caused stress to them during the day. Sample items in the list include Sickness of a family member, financial care for a family member, and difficulty in finding affordable and good meals. Participants indicated for each event whether it occurred (1) or not (0).

Daily Negative Spillover from Home to Work. To capture the overall negative impact of family on employee personal resources, I used the same 5 items from the negative-

spillover from home to work subscale from the Sumer and Knight's (2001) work-family linkage questionnaire used in Study 1. I instructed participants to focus their answers on their experiences on that particular day. Sample items include "Today, my home problems produced tensions and anxieties that decreased my work performance," "Today, my home life made me so irritable that I took it out on the people at work," and "Today, the demands of my home life made it difficult to concentrate on my job". The benefit of using the same measure as in Study 1 was to create clear linkages between the findings from the two studies and how they fit the overall picture of family as a factor in the class ceiling. Occurrences of different demands were highlight related to each other, so they were averaged ($\alpha = .90$).

Study 2: Results

Analytical Strategy

I used multilevel modelling with data nested under participants to account for non-independence of responses due to a within-subjects study design. The focal prediction for this study entails testing a cross-level interaction, whereby condition and participant family SES (level-2 factors) interact in predicting how daily fluctuations in family demands impact daily negative spillover from home to work. In the context of this study design, centering the level-1 predictor included in the interaction is essential to avoid conflation of within and between sources of variance, and thus generate unbiased estimates of cross-level interactions (Gavin & Hofmann, 1998; Enders & Tofighi, 2007). I thus centered the variables accordingly to obtain estimates of moderators of within-person relationships, and I introduced person-level means of family demands to isolate between-person effects (Wang & Maxwell, 2015).

Because the intervention (instructions, reflection tasks, etc.) were administered only at the end of the first day, data concerning experienced negative spillover from work on the first day could be used to control for baseline differences and thus obtain more power in estimating within-person fluctuations. Same control variables were used as in Study 1.

Employee SES background and Prevalence of Family Demands (Hypothesis 2)

I first examined whether employee SES background was associated with daily occurrences of family demands, providing a partial test of Hypothesis 2 in the context of daily variation in family demands. Prevalence of family demands consisted of an average of a series of either one or zero values (denoting either a that the given demand occurred on a given day or not). As such, the combined variable captures the proportion of demands that occurred in the given day, resulting in a variable ranging from 0 to 1. Given the nature of the variable, a fractional logit model was appropriate (Papke & Wooldridge, 1996). In addition, this variable can be computed not as an average of occurrences of different demands, but as a sum of the total number of demands that occurred. Computed this way, the dependent variable can be meaningfully interpreted as a count response, in which case a negative binomial model would be appropriate. I found using both approaches that higher employee socioeconomic status was associated with lower level of family daily demands (fractional logit: b = -.10, s.e. = .05, p = .033; negative binomial: : b = -.8, s.e. = .04, p = .029). The results thus replicate the relationship between employee socioeconomic background and family demands and provide additional partial support for Hypothesis 1.

Intervention Tests (Hypothesis 10)

I proceeded to test the cross-level interaction between the intervention condition, employee socioeconomic background, daily fluctuations in family demands, and negative spillover from home to work. This hypothesis subsumes and supersedes Hypotheses 1 and 3 as it predicts conditions under which relationships specified in these hypotheses *do not* hold.

First, in line with my arguments about the greater reactivity of employees from lower-SES backgrounds to family demands, I found a marginally significant cross-level interaction between employee SES background and negative spillover from home to work (b = .20, s.e. = .12, p = .093). An analysis of conditional effects showed that the presence of the same family

demand led to a stronger negative home-work spillover among participants from lower-SES backgrounds (b = .76, s.e. = .15, p < .001), compared to their higher-SES counterparts (b = .36, s.e. = .18, p = .042). Figure 4 depicts the interaction.

Finally, I found support for the main cross-level interaction between the intervention condition, employee socioeconomic background, daily fluctuations in family demands, and negative spillover from home to work (b = .54, s.e. = .26, p = .035). An analysis of conditional effects showed that, while in the control condition daily family demands caused stronger negative spillover from work to home among workers from lower-SES backgrounds (b = 1.03, s.e. = .21, p < .001) compared to higher-SES backgrounds (b = -0.08, s.e. = .34, p < .812; simple slope difference test: b = -1.10, s.e. = .42, p = .008), the treatment condition effectively eliminated the difference between employees form lower-SES (b = 0.54, s.e. = .21, p = .012) and higher-SES families (b = 0.51, s.e. = .21, p = .015) in terms of impact of daily family demands on negative home-work spillover (simple slope difference test: b = -0.02, s.e. = 0.30, p = .931). The results thus demonstrate the utility of the psychological intervention in addressing the negative work-family spillover, and the benefits are particularly pronounced among workers from lower-SES backgrounds (who otherwise experience more of such issues and are more adversely impacted by them). Thus, Hypothesis 10 is supported.

DISCUSSION

A field study in Singapore found support for the hypotheses that family impact on work is one mechanism through which employees from poorer backgrounds face disadvantage at work. Results of the study shows that employees from poorer backgrounds reported higher family demands and lesser resources from their families as compared to their more advantaged coworkers. These two processes, in turn, led to their higher reporting of family interference with work leading to negative outcomes contributing to the class ceiling

effects. In addition, the findings advance the idea that organizational support can solve part of this problem by providing buffer to these employees. In a follow up psychological intervention study utilizing the experience sampling method I examined an intervention that can help employees from poorer backgrounds cope with their family demands and thus counter the negative effect of family demands on negative spillover from family to work. This study not only revealed that the presence of the same family demand led to a stronger negative home-work spillover among participants from lower-SES backgrounds, compared to their higher-SES counterparts, it also showed that the intervention effectively eliminated the difference between employees form lower-SES and higher-SES families in terms of impact of daily family demands on negative home-work spillover. The results thus demonstrate the utility of the psychological intervention in addressing the negative work-family spillover, and the benefits are particularly pronounced among workers from lower-SES backgrounds.

Theoretical Contributions, Limitations, and Ongoing Data Collections

The most significant contribution of this research is to demonstrate that family impact on work is acts as a process through which the class ceiling is generated in organizations. Anecdotal evidence (Lubrano, 2004) as well as work from other domains such as sociology and psychology suggest that childhood backgrounds can have profound impacts on how individuals behave and other life outcomes much later in life (Grossmann & Varnum, 2010; Lachman & Weaver, 1998; Tan & Kraus, 2015). However, organizational research has ignored an important social implication of family to work conflict, the fact that it can be an instrument holding employees from poorer families back. By integrating the prior scholarship on socioeconomic origins with work-family literature, I show that people from poorer backgrounds experience higher degrees of negative spillover from home to work as compared to the people from richer backgrounds and that this effect occurs due to higher demands and lower available resources from their families. The higher negative spillover from home in

turn undermines key aspects of employee psychological functioning relevant to success at work: work engagement, job satisfaction, emotional exhaustion, and workplace anxiety. As such, I extend the study of socio-economic origins in organizational sciences which is still at very nascent stage (Côté, 2011; Kish-Gephart & Campbell, 2015).

In addition, my investigation extends our understanding of how growing up in a poor versus wealthy environment impacts the family to work interface of the employees in their later lives when they start working in organizations. Past work has found that family structures impact employees work outcomes through family-to-work conflict (Adams, King, & King, 1996; Dumas, Phillips, & Rothbard, 2013; Pluut, Ilies, Curşeu, & Liu, 2018). My findings extend this past work, suggesting that employee childhood background shapes the family structures and values and thus acting as an important antecedent to the family-to-work conflict. This study, thus, provides novel insights into the micro processes of the ways in which such conflicts manifests at home.

My findings also inform the macro level research on class ceiling effects through psychological i.e. micro mechanisms. Sociological research has documented the prevalence of the class ceiling effects (Friedman & Laurison, 2019; Friedman, Laurison, & Miles, 2015; Laurison & Friedman, 2016). However, it is still not known what causes these effects in organizations. I proposed an important and novel mechanisms through which the class ceiling effect is generated. As one of the key disadvantages that employees from poorer backgrounds face is their resource-scarce families, it is arguably an important source of barriers to the socio-economic advancement of workers from poorer backgrounds in organizations.

Finally, by examining institutional support as one of the buffering mechanisms, my paper also provides possible solutions to the identified issues. Work-family conflict research has documented empirical evidence showing that the organizational support do help the employees balancing their work and family lives (Allen, 2001; Butts, Casper, & Yang, 2013;

King et al., 1995). However, we cannot assume that the organizational support for family impact on work will work similar for all employees. Not all employees share the same socioeconomic origin and access to resources, therefore, we do not know whether the higher negative spillover experienced by employees from poorer backgrounds can be attenuated by the family supportive work environment. I argued and showed that it does and that FSWE helped employees from poorer backgrounds much more than those from the richer backgrounds. Some research (Kossek & Lautsch, 2018) review on low-income workers and notes their difficult working conditions. However, this research focuses on differences in experiences of workers working in different kinds of jobs (e.g., low versus high level jobs) and as such is not meant to speak to the question of why, even when societies provide equal educational and job opportunities, socioeconomic mobility of workers from poorer backgrounds tends to be limited. My research thus makes novel contribution to identifying causes behind the grand challenges previous unexplored.

This study not only identified the causes behind the class ceiling pattern in organizations but also proposed and examined solutions to tackle the problem. Through two studies, I examined institutional as well as individual solutions to the problem. Study 1 showed that higher organizational support can compensate for lower family resources. In Study 2, I develop and test a psychological intervention that helps workers from poorer backgrounds cope more effectively with higher family demands. A two-week field experiment utilizing a dairy study design provides evidence of the effectiveness of the intervention. Although this research makes significant contribution, it is not without limitations. One key limitation of this research is that it was done in a specific context and generalizability might be limited. To tackle this problem, I am conducting two more studies (ongoing) with comparable samples in the United Kingdom and United States. Around 500 people in the USA and 500 people in the U.K. have finished the first part of the study and

currently the daily diary study is in progress. These two studies will add to the external validity of the results as well provide us with constructive replication of the results found in Singapore study.

CONCLUSION

Despite the sociological evidence on class ceiling effects, it was not known what are the mechanism through which this phenomenon occurs in organizations. By integrating this research with social psychology research on family impact on work and employee success, I discovered that early childhood backgrounds are related to employees' current family-to-work-interference and subsequent employee behaviors thus explaining the class ceiling. These findings open the door to future examinations of employee childhood backgrounds' influence on other behaviors relevant in organizations. Moreover, by providing evidence on organizational and individual interventions that can help tackle issues arising from employee childhood origins, this research uncovers a fundamental process through which the class ceiling is generated and offers solutions to resolve the identified issues, with implications for socioeconomic mobility, employee wellbeing, organizational effectiveness, and a positive role of organizations in the society.

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TABLES AND FIGURES

Table 2: Study 1-Descriptive Statistics and Correlation

Means, Standard Deviations, and Inter-Correlations Among Key Variables

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	_
1. Work engagement	3.37	0.76	(.90)																	
2. Job satisfaction	3.52	0.86	0.76	(.91)																
3. Work anxiety	2.69	0.9	-0.43	-0.50	(.89)															
4. Emotional exhaustion	2.91	0.9	-0.57	-0.60	0.68	(.93)														
5. Negative spillover from home to work	1.64	0.8	-0.17	-0.17	0.36	0.29	(.93)													
5. Demnad: Time	2.21	0.7	-0.19	-0.22	0.43	0.43	0.56	(.85)												
7. Demand: Value	2.72	0.86	-0.22	-0.23	0.35	0.37	0.39	0.48	(.87)											
3. Resource: Behaviour script	2.92	0.82	-0.10	-0.14	0.27	0.28	0.30	0.32	0.47	(.77)										
Resource: Family instrumental support	3.91	0.7	0.25	0.27	-0.16	-0.19	-0.23	-0.26	-0.32	-0.09	(.88)									
10. Gender ^a	0.45	0.5	0.14	0.20	-0.10	-0.16	0.04	0.05	-0.01	-0.06	0.16									
1. Age	26.54	3.22	0.03	0.02	-0.08	-0.07	0.02	0.02	-0.04	-0.01	-0.01	0.08								
2. Education level	6.93	0.47	-0.02	-0.01	0.00	0.01	0.05	0.07	0.06	0.00	-0.06	-0.07	0.12							
3. Current personal income	3.12	1.93	0.12	0.19	-0.06	-0.08	0.09	0.08	0.09	0.02	0.12	0.19	-0.04	0.22						
4. Current household income	9.43	3.84	0.02	0.00	-0.13	-0.12	-0.13	-0.10	-0.07	-0.12	0.06	-0.03	-0.03	0.09	0.30					
5. Number of family members	4.06	1.3	0.09	0.03	-0.04	-0.01	-0.05	-0.02	-0.02	0.05	-0.04	-0.06	-0.17	-0.02	-0.05	0.23				
6. Number of dependents	2.29	1.66	0.13	0.11	-0.07	-0.07	0.03	0.11	0.07	0.16	0.09	0.11	0.00	-0.03	0.16	-0.04	0.40			
17. Number of children	1.22	0.56	0.17	0.23	-0.24	-0.25	0.02	0.03	-0.02	0.01	0.08	0.09	0.17	0.04	0.37	0.10	0.08	0.38		
18. Employee socio-econmic background 1	2.88	0.86	0.13	0.12	-0.18	-0.18	-0.11	-0.13	-0.13	-0.09	0.12	0.01	-0.05	0.00	-0.01	0.32	0.09	0.01	0.09	(.91

Note: correlations greater than |0.10| are statistically significant at P<0.05

Alpha reliabilities are shown in parentheses along the diagonal.

^aGender is coded as 0=female,1=male

^b Employee socio-economic background is measured from 1-5 with higher value indicating richer backgrounds

Table 3: Study 1- Effects of Employee socioeconomic background on Negative Spillover from Home to Work

	Model 1:	Controls	Model 2: Employee Socioeconomic Background			
Predictors	b	s.e.	b	s.e.		
Constant	1.03*	(0.63)	1.32*	(0.65)		
Gender	0.04	(0.08)	0.05	(0.08)		
Age	0.00	(0.01)	0.00	(0.01)		
Education	0.06	(0.09)	0.06	(0.09)		
Current personal income	0.03	(0.02)	0.03	(0.02)		
Number of dependents	0.01	(0.03)	0.01	(0.03)		
Number of children	-0.03	(0.08)	-0.01	(0.08)		
Employee socioeconomic		. ,		,		
background			-0.09*	(0.04)		
Observations	425		425			
R-squared	0.01		0.02			

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05

Table 4: Study 1 - Mediators Regression Analysis Results

	Model 1: Do Time	Model 1: Demand: Time		Model 2: Demand: Value		Model 3: Resource: Behaviour Scripts		source: support
Predictors	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Constant	1.66**	(0.56)	2.74***	(0.69)	3.14***	(0.66)	4.09***	(0.56)
Gender	0.05	(0.07)	-0.04	(0.09)	-0.15	(0.08)	0.19**	(0.07)
Age	0.00	(0.01)	-0.01	(0.01)	-0.00	(0.01)	-0.00	(0.01)
Education	0.09	(0.07)	0.08	(0.09)	-0.00	(0.09)	-0.10	(0.07)
Current personal income	0.02	(0.02)	0.04	(0.02)	0.00	(0.02)	0.04	(0.02)
Number of dependents	0.05*	(0.02)	0.05	(0.03)	0.10**	(0.03)	0.02	(0.02)
Number of children	-0.05	(0.07)	-0.12	(0.09)	-0.07	(0.08)	-0.01	(0.07)
Employee socioeconomic background	-0.11**	(0.04)	-0.13**	(0.05)	-0.12+	(0.05)	0.10*	(0.04)
Observations	425		425		425		425	
R-squared	0.04		0.04		0.05		0.06	

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05,

⁺p=0.06

Table 5: Study 1 - Mediation Analysis on Negative Spillover from Home to Work Resultsa

		Bootst	rap CIs	Indirect effe	ct coefficients
Relationship	Mediators	LLCI	ULCI	b	p
	a: Demand: Time	-0.13	-0.02	-0.07	0.008
H3: Employee socioeconomic	b: Demand: Value	-0.09	-0.01	-0.05	0.009
background on negative spillover from home to work via	c: Resource: Behavior scripts	-0.05	0.00	-0.02	0.083
spino er nom nome to work via	d: Resource: Instrumental support	-0.06	-0.01	-0.03	0.025

^aLLCI (ULCI) denotes lower (upper) limit of the 95% confidence interval of the specific indirect effect of the relationship listed on the columns on the left.

Table 6: Study 1 - OLS Regression of Negative Spillover from Home to Work on the Outcome Variables

	Model 1: Er exhaus		Model 2: \anxiet		Model 3: engagen		Model 4: Job satisfaction	
Predictors	b	se	b	se	b	se	b	se
Constant	3.17***	(0.64)	2.91***	(0.64)	1.68**	(0.58)	1.64*	(0.64)
Gender	-0.19*	(0.08)	-0.19*	(0.08)	0.08	(0.07)	0.10	(0.08)
Age	-0.01	(0.01)	-0.01	(0.01)	0.00	(0.01)	-0.00	(0.01)
Education	-0.02	(0.09)	-0.02	(0.09)	-0.03	(0.08)	-0.03	(0.09)
Personal income	0.00	(0.02)	0.00	(0.02)	0.02	(0.02)	0.05*	(0.02)
Number of dependents	0.01	(0.03)	0.01	(0.03)	0.03	(0.02)	0.01	(0.03)
Number of children Negative Spillover from	-0.40***	(0.08)	-0.37***	(0.08)	0.00	(0.08)	0.02	(0.08)
Home to Work	0.34***	(0.05)	0.41***	(0.05)	-0.20***	(0.05)	-0.19***	(0.05)
Observations	425		425		425		425	
R-squared	0.20		0.20		0.08		0.12	

Standard errors in parentheses

^{***} p<0.001, ** p<0.01, * p<0.05

Table 7: Study 1 - Serial Mediation Analysis Results

	Serially Mediated Pathways	Indirect Effect Through Specific Pathways [LLCI ULCI]	Total Indirect Effect Through All Pathways Combined [LLCI ULCI]			
	a: Demand: Time and Negative Home-Work Spillover	[02 .004]				
H5: Employee SES background to	b: Demand: Values and Negative Home-Work Spillover	[02002]	07 [1104]			
Emotional Exhaustion via	c: Resources: Behavioral Scripts and Negative Home-Work Spillover	[02 -002]	U/ [11U4]			
	d: Resources: Instrumental Support and Negative Home-Work Spillover	[01000]				
	a: Demand: Time and Negative Home-Work Spillover	[03002]				
H6: Employee SES background to	b: Demand: Values and Negative Home-Work Spillover	[03010]	07.5.11.041			
Anxiety at Work via	c: Resources: Behavioral Scripts and Negative Home-Work Spillover	[02002]	07 [1104]			
	d: Resources: Instrumental Support and Negative Home-Work Spillover	[02000]				
	a: Demand: Time and Negative Home-Work Spillover	[001 .02]				
H7: Employee SES background to	b: Demand: Values and Negative Home-Work Spillover	[004 .01]	0.4.5.0.0.0.0.7			
Work Engagement via	c: Resources: Behavioral Scripts and Negative Home-Work Spillover	[.001 .01]	.04 [.02 .06]			
	d: Resources: Instrumental Support and Negative Home-Work Spillover	[.001 .01]				
	a: Demand: Time and Negative Home-Work Spillover	[003 .02]				
H8: Employee SES background to	b: Demand: Values and Negative Home-Work Spillover	[004 .01]	00 [12 04]			
Job Satisfaction via	c: Resources: Behavioral Scripts and Negative Home-Work Spillover	[.003 .01]	08 [1304]			
	d: Resources: Instrumental Support and Negative Home-Work Spillover	[.002 .01]				

Notes: ^a LLCI (ULCI) denotes lower (upper) limit of the 95% confidence interval of the specific indirect effect of the relationship listed on the columns on the left.

Table 8: Study 1- Interaction effects of employee SES background and family supportive work environments on Negative Spillover from Home to Work

	Model 1	: Control	Model	2: IV	Model 3: Mo	oderator	Model 4: Interaction	
Predictors	b	se	b	se	b	se	b	se
Constant	1.03	(0.63)	1.32*	(0.65)	2.39***	(0.63)	3.22***	(0.79)
Gender	0.04	(0.08)	0.05	(0.08)	0.01	(0.08)	0.01	(0.08)
Age	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)
Education	0.06	(0.09)	0.06	(0.09)	0.09	(0.08)	0.08	(0.08)
Personal income	0.03	(0.02)	0.03	(0.02)	0.03	(0.02)	0.03	(0.02)
Number of dependents	0.01	(0.03)	0.01	(0.03)	-0.00	(0.02)	0.00	(0.02)
Number of children	-0.03	(0.08)	-0.01	(0.08)	-0.03	(0.08)	-0.04	(0.08)
Employee socioeconomic								
background (A)			-0.09*	(0.04)	-0.10*	(0.04)	-0.41*	(0.08)
Family supportive work								
environment (B)					-0.38***	(0.06)	-0.65***	(0.06)
A x B							0.10***	(0.05)
Observations	425		425		425		425	
R-squared	0.01		0.02		0.12		0.09	

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05

Table 9: Study 1- OLS regression of employee SES background on the outcome variables

	Model 1: Ei Exhaus		Model 2: Work Anxiety		Model 3: engage		Model 4: Job satisfaction	
Predictors	b	se	b	se	b	se	b	se
Constant	4.06***	(0.70)	3.90***	(0.70)	2.87***	(0.61)	2.94***	(0.67)
Gender	-0.27**	(0.09)	-0.17	(0.09)	0.18*	(0.08)	0.29***	(0.08)
Age	-0.01	(0.01)	-0.01	(0.01)	0.00	(0.01)	0.00	(0.01)
Education	0.01	(0.09)	0.01	(0.09)	-0.04	(0.08)	-0.05	(0.09)
Personal Income	0.01	(0.02)	0.01	(0.02)	0.02	(0.02)	0.05*	(0.02)
Number of dependents	0.02	(0.03)	0.02	(0.03)	0.03	(0.02)	0.01	(0.03)
Number of children	-0.37***	(0.09)	-0.35***	(0.09)	0.13	(0.08)	0.24**	(0.08)
Employee SES background	-0.17***	(0.05)	-0.18***	(0.05)	0.10*	(0.04)	0.11*	(0.05)
Observations	425		425		425		425	
R-squared	0.11		0.10		0.06		0.10	

Standard errors in parentheses

^{***} p<0.001, ** p<0.01, * p<0.05

Table 10: Study 2 - Results of a Fractional Logit Regression Model Predicting Occurrence of Daily Family Stress

	Model 1	: Control	Model 2: Daily family stress		
Predictors	b	s.e.	b	s.e.	
Constant	-1.49	(0.78)	-1.06	(0.81)	
Male	0.03	(0.09)	0.02	(0.09)	
Age	0.03*	(0.02)	0.03	(0.02)	
Education	-0.06	(0.10)	-0.06	(0.10)	
Personal Income	-0.01	(0.02)	-0.01	(0.02)	
Condition	0.15	(0.09)	0.16	(0.09)	
Employee socioeconomic background			-0.10*	(0.05)	
N	1,598		1,598		

Robust standard errors in parentheses

^{***} p<0.001, ** p<0.01, * p<0.05

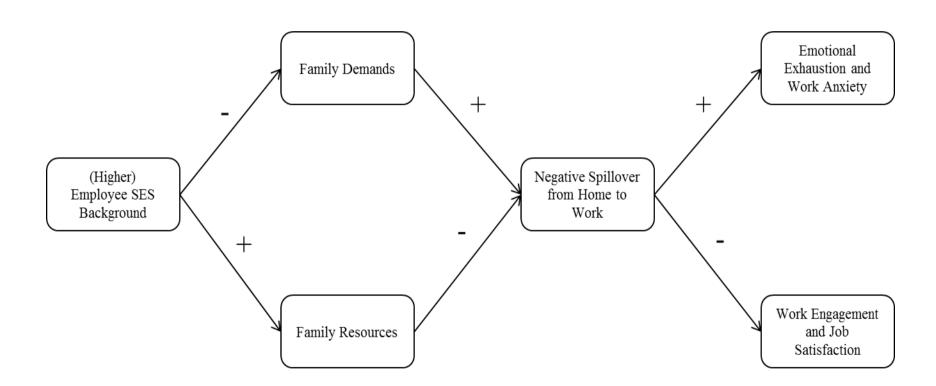
Table 11: Study 2 - Results of a Negative Binomial Model Predicting Occurrence of Daily Family Stress

	Model 1:	Control	Model 2: Daily family stress		
Predictors	b	s.e.	b	s.e.	
Constant	1.55***	(0.24)	1.45**	(0.52)	
Male	-0.03	(0.03)	0.04	(0.06)	
Age	-0.02***	(0.01)	0.02	(0.01)	
Education	0.00	(0.03)	-0.07	(0.07)	
Personal Income	-0.00	(0.01)	-0.01	(0.01)	
Condition	0.02	(0.03)	0.11	(0.06)	
Employee socioeconomic background			-0.08*	(0.04)	
N	1,598		1,598		

Robust standard errors in parentheses

^{***} p<0.001, ** p<0.01, * p<0.05

Figure 1: Study 1- Schematic Representation of the Theoretical Model



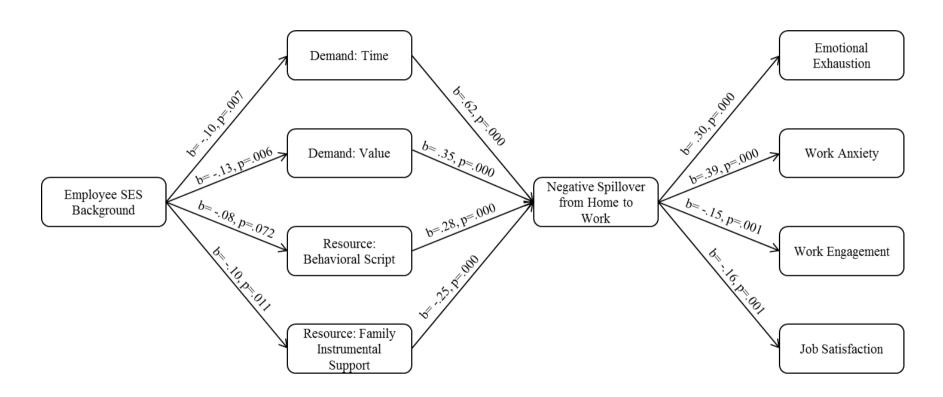


Figure 2: Study 1-Serial Mediation Analysis Results

Notes. Coefficients from structural equation modelling are displayed against relevant paths. The overall indirect effect from employee childhood background is significant for each outcome variable.

Figure 3: Study 1- Marginal effects of employee socioeconomic background on Negative Spillover from Home to Work by FSWE

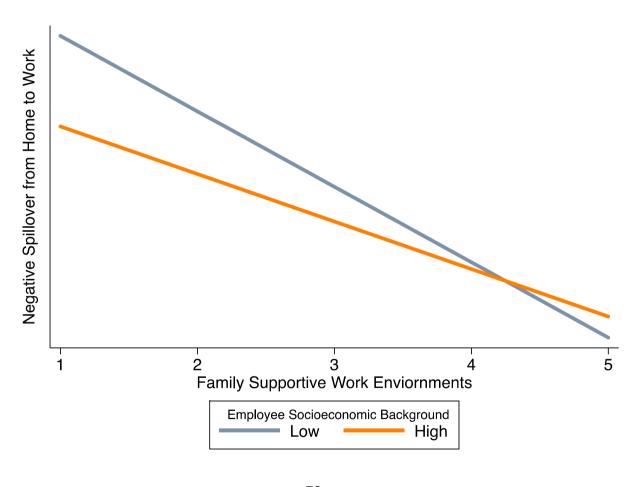


Figure 4: Study 2- Cross-level interaction between the employee socioeconomic background, daily fluctuations in family demands, and negative spillover from home to work

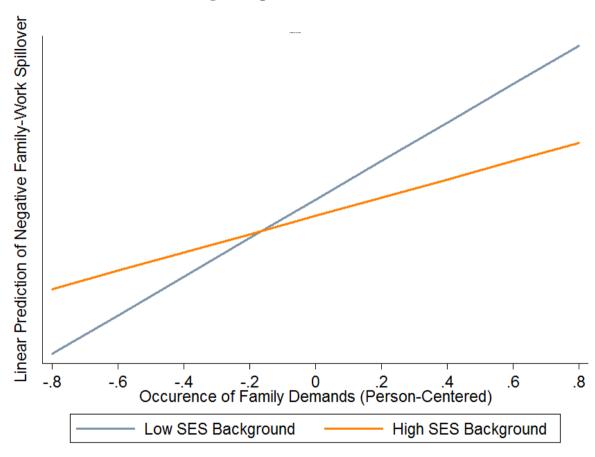


Figure 5: Study 2- Three way cross-level interaction between the intervention condition, employee socioeconomic background, daily fluctuations in family demands, and negative spillover from home to work (b = .54, s.e. = .26, p = .035)

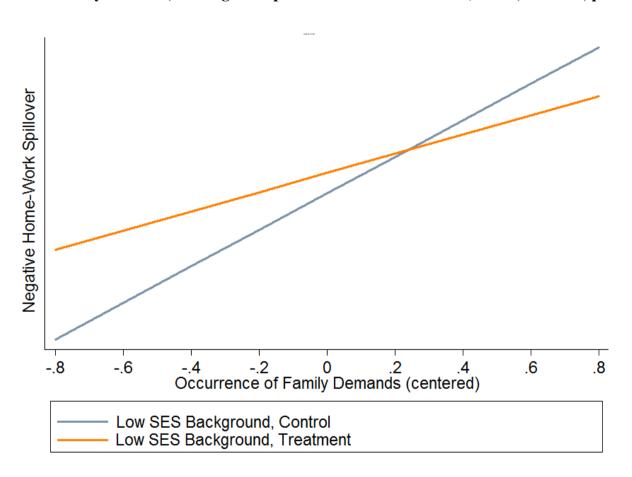
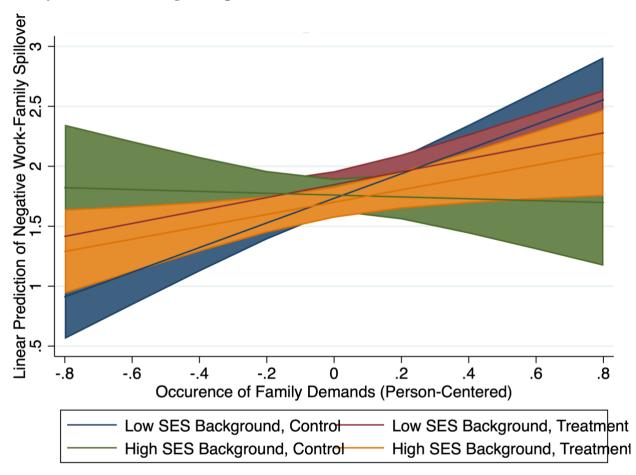


Figure 6: Study 2- Three way cross-level interaction between the intervention condition, employee socioeconomic background, daily fluctuations in family demands, and negative spillover from home to work (all conditions with confidence intervals)



APPENDIX

List of Measures: Key Study Variables

Employee SES background (expanded version of the perceived resource availability measures from Griskevicius and colleagues (2011):

The following questions ask about your personal situation during your childhood. Please indicate to what extent you agree with the statements below:

- 1. My family had enough money to buy things I wanted
- 2. My family didn't worry too much about paying our bills
- 3. I felt relatively wealthy compared to the other kids in my school
- 4. I grew up in a relatively wealthy neighborhood
- 5. I felt relatively wealthy compared to others my age
- 6. My family apartment was more spacious than that of my peers
- 7. My family had more money to spend on vacations than my peers
- 8. I could always afford latest technological gadgets

Time Demands (Adapted from Kopelman, Greenhaus, & Connolly, 1983)

- 1. My family schedule often conflicts with my work role.
- 2. I come to work too tired to do some of the things I would like to do.
- 3. I have so much work to do at home that it takes away from my job.
- 4. My manager dislikes how often I am preoccupied with my family while I am at work.
- 5. My family takes up time that I'd like to spend at my job.

6. My family makes it difficult to be the kind of employee I would like to be.

Value (Mis)match (Kopelman, Greenhaus, & Connolly, 1983)

- 1. My family does not enjoy doing some of the things I'd like to do.
- 2. My spouse and I have different ideas about who our friends should be.
- 3. My family responsibilities force me to do things I rather not do.
- 4. My family and I have different ideas about spending time with relatives.
- 5. My family and I have different preferences with respect to entertainment.
- 6. My family and I differ about spending time alone.
- 7. My family and I have different goals.

Behavior Scripts (Mis)match (Carlson, Kacmar, and Williams, 2000)

- 1. The behaviors that work for me at home do not seem to be effective at work.
- 2. Behavior that is effective and necessary for me at home would be counterproductive at work.
- 3. The problem-solving behavior that work for me at home does not seem to be as useful at work.

Instrumental support (King et. al., 1995)

- 1. Members of my family cooperate with me to get things done around the house.
- 2. My family members do their fair share of household chores
- 3. Members of my family are willing to straighten up the house when it needs it.
- 4. Someone in my family helps me out by running errands when necessary

- 5. If my job gets very demanding, someone in my family will take on extra household responsibilities
- 6. When I'm having a difficult week at my job, my family members try to do more of the work around the house.

Negative Spillover from Home to Work (Sumer and Knight, 2001)

- My home problems produce tensions and anxieties that decrease my work performance
- 2. The demands of my home life make it difficult to concentrate on my job
- 3. My home life makes me so irritable that I take it out on the people at work
- 4. My home life tires me out so I feel drained for work
- 5. I let my personal problems affect my work performance

Emotional Exhaustion (Maslach & Jackson, 1981)

- 1. I feel emotionally drained from my work
- 2. I feel used up at the end of the workday
- 3. I feel fatigued when I get up in the morning and have to face another day on the job
- 4. Working with people all day is really a strain for me
- 5. I feel burned out from my work
- 6. I feel frustrated by my job
- 7. I feel I'm working too hard on my job
- 8. Working with people directly puts too much stress on me
- 9. I feel like I'm at the end of my rope

Work Anxiety (Modified version of PANAS, Watson & Clark, 1998)

To what extent do you feel following emotions at work:

- 1. Anxious
- 2. Tense
- 3. Distressed
- 4. Uncomfortable
- 5. Nervous

Work-engagement (Utrecht Work Engagement Scale, Schaufeli et. al., 2002)

At work.....

- 1. I feel that I am bursting with energy
- 2. I feel strong and vigorous
- 3. I am enthusiastic about my job
- 4. My job inspires me
- 5. When I get up in the morning, I feel like going to work
- 6. I feel happy when I am working intensely
- 7. I am proud of the work that I do
- 8. I am immersed in my work
- 9. I get carried away when I'm working

Family-Supportive Work Environments (Allen, 2001): To what extent do you agree that each of the following statements represent the philosophy or beliefs of your organization (remember, these are not your own personal beliefs—but pertain to what you believe is the philosophy of your organization)."

- 1. Work should be the primary priority in a person's life (R)
- 2. Long hours inside the office are the way to achieving advancement (R)
- 3. It is best to keep family matters separate from work (R)
- 4. It is considered taboo to talk about life outside of work (R)
- 5. Employees who are highly committed to their personal lives cannot be highly committed to their work (R)
- 6. Expressing involvement and interest in nonwork matters is viewed as healthy
- 7. Attending to personal needs, such as taking time off for sick children is frowned upon (R)
- 8. Employees should keep their personal problems at home. (R)
- The way to advance in this company is to keep nonwork matters out of the workplace
 (R)
- 10. Individuals who take time off to attend to personal matters are not committed to their work (R)
- 11. It is assumed that the most productive employees are those who put their work before their family life (R)
- 12. Employees are given ample opportunity to perform both their job and their personal responsibilities well
- 13. Offering employees flexibility in completing their work is viewed as a strategic way of doing business
- 14. The ideal employee is the one who is available 24 hours a day (R)

Job satisfaction (Cammann, Fichman, Jenkins, & Klesh, 1979; Diestel, Wegge, & Schmidt, 2014)

- 1. All in all, I am satisfied with my job
- 2. In general, I like working here.
- 3. In general, I don't like my job.
- 4. I am satisfied with the kind of work I do on my job
- 5. I am satisfied with the working conditions
- 6. I am satisfied with the career opportunities in this job
- 7. I am satisfied with this organization and management

List of Measures: For supplementary analysis

Family motivation (Grant, 2008a; Ryan & Connell, 1989)

Why are you motivated to do your work?

- 1. I do this job because I care about supporting my family
- 2. I want to help my family
- 3. I want to have a positive impact on my family
- 4. It is important for me to do good for my family
- 5. My family benefits from my job

Work absorption (Rothbard, 2001)

- 1. When I am working, I often lose track of time
- 2. I often get carried away by what I am working on

- 3. Nothing can distract me when I am working
- 4. When I am working, I am totally absorbed by it

Work autonomy (Morgeson & Humphrey, 2006)

The job allows me...

- 1. ...to make my own decisions about how to schedule my work
- 2. ...to decide on the order in which things are done on the job
- 3. ...to plan how I do my work

Sense of control at work (Lachman and Weaver, 1998)

In your job, to what extent do feel you have control over...

- 1. ...over aspects of work time
- 2. ...when you begin and end each workday or work week
- 3. ...the number of hours you work each week
- 4. ...when you can take a few hours off
- 5. ...when you take vacations or days off