Policies that make a difference: bridging the gender equity and work-family gap in academia

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Abstract

Purpose – This paper aims to highlight interventions that promote female (and male) faculty’s ability to balance work-family issues at a specific academic institution, in response to a demand in the literature that examines the intersection between research and implementation of organizational policies within a university setting.

Design/methodology/approach – Using a case study framework, the researchers present qualitative experiences and quantitative data to evaluate the successful application of a work-family balance and organizational climate improvement initiative within an academic setting.

Findings – By highlighting specific examples of work-family and climate initiatives at the individual, organization, and community levels, this case study presents several ways in which academic institutions specifically, and organizations generally, can implement policies that make a difference.

Practical implications – Successful implementation of work-family balance and family-friendly organizational policies can positively impact employees.

Originality/value – Our goal is to highlight and provide data showing a specific example of how female (and male) faculty members’ experiences can be (and have been) improved in a prototype institution.

Keywords Academia, Work-family balance, Gender, Parents, Organizational climate, Family-friendly policies

Paper type Case study

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Previous researchers (Caulfield et al., 2004; Kossek et al., 2011; Murphy and Sauter, 2004) have posed concerns for the disconnection between work-family research and the implementation of this research. Such researchers contend that although the field of work-family research has blossomed, data from organizations show a workforce that has not reaped the benefits of this research (Kossek et al., 2011). Even more recently, Chinchilla (2013, p. 13 noted the “gap between the adoption of work-family policies and how they actually affect employees’ ability to integrate their work with their personal lives”. We agree with this sentiment; however, we argue that some progress has been made and proper attention needs to be placed upon it. Further, we contend that evidence-based research is leading to greater efforts to increase work-family balance, which has the potential to reap greater benefits in the future. Evidence of such initiatives can be seen in academia. In 2001, the National Science Foundation of the USA initiated the ADVANCE Institutional Transformation Program to provide grants to academic institutions to help increase the participation and advancement of women in science, technology, engineering and mathematics (STEM; see National Science Foundation, 2015). Research has demonstrated gendered distribution in both hierarchical levels of academic institutions and across disciplines, with women being underrepresented in STEM fields and often concentrated at lower ranks in the institution (McTavish and Miller, 2009), as is the case in many industries (Broadbridge, 2010). One of the goals of this program is to reduce work-family balance issues and create greater gender equality in academia. Since its inception, 35 academic institutions in the USA have received ADVANCE grants, suggesting that the field of academia is attempting to decrease the discord between work-family research and practice. One such institution that has made recent strides in attempting to bridge this gap between work-family research and practice by adopting research-based initiatives is Rice University in Houston, Texas. Rice was a recipient of a five-year National Science Foundation-funded ADVANCE Institutional Transformation grant initiated in 2006. Through the ADVANCE program, a large number of female and male faculty members have engaged in conversations about changing practices and procedures so they could more positively promote women's equity and foster a more positive climate and work-family balance at Rice. In this article, we use Rice University as a case study that is infused with qualitative and quantitative data (drawn from several ADVANCE-related surveys conducted at Rice) to discuss several successful initiatives that were instrumental in promoting female faculty and bridging the gaps between research and practice for organizational policies and employee perceptions. Many of the initiatives discussed below were developed and implemented through the ADVANCE program.

We acknowledge that the institution, the case study and associated data collection, and the examples we are discussing are not perfect and our goal is not to present Rice University as a utopia; rather, we showcase that institutions actually have the ability to effectively use research-based findings and implement such policies within an organizational context. Indeed, this is the goal of applied research. Furthermore, we applaud this institution for having mechanisms that ask the necessary questions, collect follow-up data to gauge the impact of interventions and engage the community in thinking and acting in ways that actively and seriously promote female faculty and bridge the gap between work and family. Although some of the initiatives that Rice has implemented lend themselves particularly well to an academic setting, most of them can be applied directly to organizations outside of academia. Thus, we believe this case
study can serve as a model for how organizations in general can implement effective work-family initiatives that can and do make a difference for employees. We address these initiatives in three broad categories: individual-level interventions, organization-level interventions, and organization-sponsored outreach programs. Work-family research is very expansive and has been conducted in various fields. In the current article, we examine the work-family research primarily in the field of psychology and use this literature to support the initiatives implemented in this case study. In each section, we will provide examples of the implementation and effectiveness of work-family policies.

Methods
In this paper, we report results from several different sources. First, three climate studies were conducted by two external consultants (Drs Tetrick and King) in 2003, 2007 and 2001, which were administered by external consultants. Results from these surveys were based on responses of Rice faculty (143 men and 61 women in 2003, 219 men and 79 women in 2007, and 182 men and 70 women in 2011). The surveys asked faculty to respond to questions about the general academic climate that they experienced (e.g. was it tolerant, equitable, positive).

Second, an exit study was conducted and reported by three of the current study’s authors (Hebl et al., 2009). For this study, 163 former Rice faculty members who voluntarily left Rice within a ten-year period (1991-2008) were invited to participate and 83 (51 per cent response rate) did. The exit survey asked faculty to respond to questions about the reasons that they departed Rice University (e.g. the particular event that lead them to consider leaving, the climate, career compatibility, job embeddedness, and job satisfaction).

Third, as part of the ADVANCE-NSF reporting, members of the ADVANCE team collected information on demographic changes related to gender and STEM fields, gender and promotions, and other related gender aspects. A review of some of these findings is also discussed in this paper. A more detailed version of these results can be found in the Rice University ADVANCE Program Annual Report – Year 5 (2011).

Individual-level interventions
Balancing work and family is one of the most highly cited issues related to why women leave academic careers (Bystydzienski and Bird, 2006; Goulden et al., 2009; Mäkelä et al., 2011; Mason and Goulden, 2002, 2004). Rice University has implemented a number of initiatives to help promote work-family balance that individuals can opt into and participate in on a case-by-case basis. First, employees at Rice University are reminded of and can take advantage of the university’s flexible scheduling policy (e.g. choice of teaching schedule, choice in allocating teaching requirements across semesters). Flexibility with scheduling work hours (i.e. being able to come and leave when one pleases so long as work requirements have been met) has been shown to improve the work-family balance of female (and male) employees by decreasing work-family conflict (Batt and Valcour, 2003; Kossek et al., 2006; McCampbell, 1996; c.f. Shockley and Allen, 2011) and increasing positive work attitudes (Scandura and Lankau, 1997). Flexible scheduling allows employees to confront work-family conflict by utilizing coping techniques to mitigate the negative effects that they would otherwise experience (Baltes and Heydens-Gahir, 2003). Research has shown that family-friendly policies (which address work-family conflict issues), particularly flexible scheduling, contribute to an
individual’s perception of control over his or her work environment and thereby decrease negative emotional, physiological and behavioral symptoms associated with work-family conflict (Thomas and Ganster, 1995). Furthermore, knowledge about work-family policies increases perceived flexibility of work (Eikhof, 2012).

Rice University has made strides in encouraging faculty members to utilize available family-friendly policies, which represents a positive departure from other academic settings. Family-friendly policies, such as flexible scheduling and caretaker leave, may allow individuals to balance their work and family roles successfully; however, some research has shown academicians to be hesitant using all available policies (Quinn et al., 2004), and, as Eikhof (2012) suggested, the use of such policies may have negative consequences. In a study on family-friendly policy use in research universities, Quinn et al. (2004) found that many people found the communication, implementation and tracking of family-friendly policies to be inconsistent and dependent on the views of individual department chairs (Ruebsamen, 2013). It appears that academicians need to be self-educated in knowing what family-friendly policies they are qualified for and how to obtain them and that departments need to support policy use among employees. Additionally, the culture of an academic department may operate independently of the larger academic institution. Thus, both changing the institutional policies surrounding work-family-friendly initiative and communicating those policies to individual employees are important. Rice has taken steps to ensure that individuals are empowered to use the family-friendly policies that are available to them and that department heads are knowledgeable about the policies.

Second, Rice University offers primary caregiver leave, which allows a faculty member who has primary responsibility in terms of time and commitment (regardless of gender) of a child the opportunity to take one full semester of leave following the birth or adoption of a child. Since this program was implemented in 2003, 56 faculty members (46 women and 10 men) of the 643 full-time faculty members at Rice have taken a leave of absence under this policy. Although this is meant to be a benefit, research has shown that some people (particularly women) in academia perceive it negatively because they believe they may be viewed as less serious about their careers if they take time off for such family matters (Etzkowitz et al., 1994; see also Reddick et al., 2012). An initial climate survey at Rice conducted in 2003 (this was a predecessor to the two follow-up climate studies assessed as part of the ADVANCE grant and described in the methods) assessed perceptions of this policy by asking whether participants believe this policy would hinder their career advancement. When the policy was still new in 2003, 17 per cent of faculty believed that taking parental leave would hinder their advancement, while 25 per cent of participants believed it would not hinder their advancement (Tetrick, 2003). In 2007, a more positive trend appeared showing that less than 10 per cent believed it would hinder their advancement, while approximately 45 per cent of participants disagreed with this perception (Tetrick and King, 2007). This positive trend maintained in 2011 when less than 10 per cent agreed that taking primary caretaker leave would hurt their advancement, while 49 per cent of academicians disagreed (Tetrick and King, 2011). These findings suggest that Rice University may be doing a better job (than in the past) of explaining the benefits of this work-family policy, making faculty members feel secure and protected when using the benefits offered, and creating a culture that values family life.
Third, faculty and staff members with children have an available resource in the form of the Rice Children’s Campus, which began in 2008. This early-learning facility is made available to Rice faculty, staff and students, and is located adjacent to campus, providing easy access for Rice community members. Currently, 76 Rice-affiliated families (88 children) are enrolled at the Rice Children’s Campus, of which 39 are families of a faculty member. Parents who use this program suggest that they are very happy with this facility and that it decreases their job stress. This example of an institution or organization providing access to childcare has found support in the work-family literature, in which organization-supported child-care resources have been linked to lower levels of work-family conflict (Thomas and Ganster, 1995).

The importance of having family-friendly and work-family balance-related policies in place promotes a positive organizational climate, particularly for those in multi-person households and those with children (Grover and Crooker, 1995). Work stress which is related to (and often caused by) work-family conflict is moderated by the perceived availability of family-friendly policies (Youngcourt and Huffman, 2005). Furthermore, greater perceived availability of family-friendly programs was significantly related to lower work-family conflict. Additionally, individuals need to feel control and support in their use of work-family balance strategies. Workers who perceive that they have control over their schedules, particularly their flexibility, are less likely to turnover and have less work-family conflict than those who do not feel this control, over and above their actual use of the policies (Kossek et al., 2006).

**Organization-level interventions**

Despite the potential benefits of work-family policies at the individual level, some academicians do not seem to use all available policies (Quinn et al., 2004). As stated previously, Quinn et al. (2004) found that many employees cite inconsistencies in communication, implementation, viewpoint of individual department chairs and tracking of family-friendly policies as reasons for not using such policies. In an attempt to combat some of these issues, Rice has implemented at least three interventions on a broad, institution-wide scale. First, through the ADVANCE program, Rice trained department chairs to focus on diversity issues and effective management strategies (King and Rinehart, 2010). Department chairs are instrumental in helping employees manage work-family issues by communicating their awareness and support of family-friendly policies and by helping employees understand their options in using family-friendly policies (Thompson et al., 1999), both of which are highlighted in the training. Academicians are less likely to take advantage of family-friendly policies if they work in departments in which the chair does not know about the full range of policies or views them as unimportant or intrusive (Quinn et al., 2004). Department chair training (involving topics such as conflict resolution, bias, having difficult conversations, leave policies) can help break down these barriers by communicating the importance of work-family balance to worker productivity and organizational climate. Such training may have been particularly effective in increasing the representation of female faculty members in many STEM departments at Rice from 2005 to 2012. For instance, increases in the percentage of female faculty were particularly substantial in the Bioengineering (27 to 40 per cent), Civil and Environmental Engineering (0 to 25 per cent), Chemical Engineering (0 to 18 per cent), Statistics (13 to 22 per cent) and Mathematics (0 to 14 per cent) departments (these numbers and additional positive
impacts shown at Rice are described in the Rice University ADVANCE Program Annual Report: Year 5, 2011.

Second, in 2007, Rice’s ADVANCE program instituted a formal cross-departmental mentoring initiative called the Triad Mentor Program, in which two assistant professors (most have been females) are matched with one senior faculty member for a nine-month mentorship. A qualitative evaluation of this program revealed that both mentees and mentors were especially satisfied with this process, and female mentees found that having a female (versus male) mentor from a different (versus same) department was particularly beneficial because they could discuss gender- and work-family-relevant issues without fear of backlash or direct departmental implications (King and Rinehart, 2010). A mere two years after the ADVANCE program began, women reported more mentors and greater quality of mentoring than they had before the policies were put in place. The Triad Mentoring Program is an example of research in practice as findings have shown that employees with mentors have reported less work-family conflict than those without mentors (Nielson et al., 2001). Furthermore, Nielson et al. (2001) found that mentors’ support of protégés’ efforts to balance both work and family reduces conflict for the protégés (see also, a recent meta-analysis by Kossek et al., 2011).

Third, in an attempt to assess the effectiveness of work-family policies at Rice University, the ADVANCE program, independent of the present case study, administered a climate survey to faculty members once every four years (again, described in the methods; Tetrick and King, 2007, 2011; Tetrick, 2003). In 2003, before the ADVANCE grant was initiated, Tetrick’s (2003) study of 215 Rice University faculty members (46 per cent of the faculty) revealed that women felt more unhappy than men about most aspects of the university environment, including overall organizational climate, work-family conflict, gender egalitarianism, incivility and tolerance. Tetrick and King (2007, 2011) could make comparisons with this initial data and the 248 faculty members who responded in 2011, thereby allowing us to track the progress made with the various work-family initiatives described in this paper. Of course, it is important to note that the data are not experimental, and we must exercise caution in drawing definitive conclusions. That said, across the board, faculty members noted a positive change in climate over the eight years of data collection (Tetrick and King, 2011). As shown in Table I, which reports the means, standard errors and confidence intervals of some of the main findings, we found that faculty members noted statistically significant improvements in the overall positivity, the tolerance level and equity of the university climate across the time span. Additionally, they noted a decrease in the negativity of climate over time. Thus, climate measures reflected significant improvements in the organizational climate perceptions faculty members had across the university. Furthermore, related to work-family measures, employees indicated statistically significant improvements in work-family leave policies within the university that created an environment in which faculty members were less likely to see parental leave as a hindrance to their professional advancement (see bottom row of Table I). Such improvements reported across the climate surveys are encouraging.

Finally, another institutional change that is currently being adapted is the implementation of a university-wide Faculty Exit Survey. Paramount to identifying and making positive institutional changes is the necessary step of gaining knowledge about the strengths and weaknesses of one’s institution, and those who leave the institution...
provide a sometimes critical but almost always critically important view of the institutions’ shortcomings and opportunities. In the data collection that was done as part of the ADVANCE initiative (and described in the methods), an Exit Survey was conducted examining the reactions of Rice University faculty as well as those faculty at other universities who voluntarily departed anytime in the last 15 years (Hebl et al., 2009; O’Brien et al., 2015). The qualitative data from this survey show important directions for change that departing faculty members identified. Here are just a few of the responses that departees indicated in being asked “Do you have advice that would make Rice a better institution?”:

Rice needs better common spaces (café, etc.,) where now professors can meet others, especially because some of the departments are so small. (Departing Faculty Member)

Develop guidelines, policies or rules related to all departmental issues so that faculty’s rights are not violated. (Departing Faculty Member)

Create a faculty career development center to provide support to faculty at various career stages. (Departing Faculty Member)

If Rice is serious about attracting and retaining top female faculty, it has to think about spousal appointments, not reserve them as perks for the retention of male faculty only. (Departing Faculty Member)

Importantly, some of the weaknesses identified in the qualitative data gathered from the Exit surveys have been addressed. For instance, there is now a large pavilion coffee shop in the middle of campus where faculty often gather to meet with each other. Additionally, ripples of the ADVANCE initiative have resulted in the establishment of
an Office of Faculty Development with a director and a program administrator. We rearticulate that Rice is not a utopia and, certainly, there are more improvements to be made, but it is a place where bottom-up activity concerning the intersection between gender and work-family balance is having an impact on the organization as a whole.

Although the data we report in this section are not experimental, the positive trends suggest that the university made progress on issues related to creating a positive and supportive work environment for all faculty members though further improvements can be made. The national visibility brought by this National Science Foundation initiative – and other similar initiatives – encourages institutions to ask vital questions about work-family balance. As posited by Kossek et al. (2011), national advocacy is critical to sustainability and accountability for equitable work places.

Organization-sponsored outreach programs
Rice University implemented a number of initiatives that focused on outreach beyond the borders of the university. The goals of these initiatives included increasing knowledge and sharing best practices concerning gender and work-family issues to other institutions for the mutual benefit of Rice, the other institutions and the constituents of every institution involved. We believe that these outreach programs are an essential aspect of improving work-family concerns on a broad, inter-institutional scale.

One method of outreach that Rice has undertaken is to support empirical research in the field of faculty recruitment and retention. An example of these efforts is a recent research study at Rice that has shown how the basic use of a video-based realistic job preview can influence future academician’s expectations about academia (O’Brien and Hebl, 2015). Such expectations include facts and general information about work-family issues that may be particularly effective in increasing potential female employees’ knowledge of, expectations about, and ability to cope with greater work-family challenges they will face relative to men (Bachman, 2011; Duxbury et al., 1994; Shockley and Singla, 2011). O’Brien and Hebl (2015) focused on one potential remediation strategy in reducing voluntary turnover in academia (of which there is more turnover for women than men; Settles et al., 2006; Xu, 2008), by having late-stage graduate and post-doctoral students either view no video or view a video that depicted realistic challenges about work-family balance. Those viewing (versus not viewing) the videotape were significantly more likely to have an improved understanding of the challenges of both work-family balance and necessary job characteristics. In addition, preliminary analyses suggest that those who received this knowledge subsequently were more satisfied with work-family balance when they began working. These videos can be supplied to jobseekers (such as graduate and post-doctoral students in STEM fields) on a large scale.

To address the issue of women leaving during their post-doctoral years, the ADVANCE Program hosted a national post-doctoral scholar and PhD student workshop, Negotiating the Ideal Faculty Position (NIFP), for several consecutive years, in which 50-70 participants were selected from a nation-wide applicant pool. This workshop provided a vast amount of information on life in academia – including work-family balance – from accomplished scholars across the nation. This workshop created national visibility for Rice University, provided our departments the opportunity to mentor aspiring young scholars, and gave Rice an opportunity to mentor.
other institutions interested in hosting similar workshops. Analysis of qualitative comments suggested that participants benefitted from considering work-family related issues prior to getting jobs.

Rice also engages in outreach through inter-institutional collaborations with Prairie View A&M University (PVAMU) and Texas A&M University. These collaborations developed through the National Science Foundation’s Partnerships for Adaptation, Implementation, and Dissemination grant, designed to mentor female faculty, particularly at historically Black colleges and universities. Rice hosted the first mentoring workshop and has a representative on the PVAMU PAID Advisory Board. The workshop focuses on work-family balance, career strategies and networking. These types of partnerships build strength across institutions and help create relationships to advocate for institutional changes that affect work-family policies. Through outreach initiatives, Rice can offer support to other institutions (and individuals at these institutions) in effectively implementing work-family policies.

Implications
This case study has provided several examples of institutional changes that Rice undertook in an effort to create a more congenial environment. At three levels of intervention – individual, organizational and community – Rice presents a model that can inform managerial actions in any organization, not just in academia. At the individual level, for instance, organizations can provide their employees with family-friendly policies that make it possible for men and women to successfully balance their work and non-work lives. That commitment to a family-friendly environment must include resources, such as primary caretaker leave, on-site day-care facilities and flexible work schedules, as well as communication regarding the availability of those policies. Individuals also could be required to attend training sessions (e.g. equitable practices in search training, department head search training) that enhances gender equity and awareness. By creating a culture that values working parents, making employees aware of bias, and helps employees appreciate diversity at all levels, an organization can create an environment that welcomes and maximizes the individual contributions of all of their employees (Bilimoria and Buch, 2010; Bilimoria et al., 2008; Valian, 1999). As Bilimoria et al. (2008) state, it is critical to note that such a transformation can help the workplace become more supportive (not just for women and members of minority groups but) for all of its employees.

At the organizational level, efforts at the organizational level must be systematic and not piecemeal. As Meyerson and Fletcher (2000) state, “It’s not the ceiling that’s holding women back; it’s the whole structure of the organizations in which we work: the foundation, the beams, the walls, the very air.” Hence, our efforts must be in identifying all of the hidden barriers and working in systematic ways to remove and/or restructure each of them. Additionally, organizational-level evaluation of the initiatives is critical to assessing the utility of efforts. Rice is an excellent example of implementing a program of inclusion that continuously monitors its progress. If institutional-level change is to happen on a more systematic basis, other ADVANCE research projects suggest the enormous utility of data tracking. For instance, as Biliamoria et al. (2008) state if STEM ADVANCE efforts are to be successful and academic institutions are to be transformed into more egalitarian places, it is essential that “gender equity data should be tracked” and "system-wide efforts must be undertaken".
Finally, at the community level, organizations have an opportunity and a responsibility to positively impact their surroundings. Outreach allows organizations to share their culture with others and to provide a benefit to the community. Our institution has partnered with other universities hoping to gain ADVANCE and other-transformative grants. Bilimoria et al. (2008) has begun to look across the organizations to get a broader look at how ADVANCE is shaping the academic community as a whole. As Valian (1999) has suggested, we must teach people as a whole about gender bias. King and Cortina (2010) describe the social responsibility of organizations to do the right thing because it is corporate responsibility that governs the livelihood and social conscience of communities. In summary, communication of the organization’s mission to improve the working lives of its employees is critical at all levels of intervention.

Conclusion
Criticisms of work-family research have stated that there is a science–implementation gap that could be addressed by researchers studying effective policy and practice implementation (Kossek et al., 2011). We believe the recent initiatives at Rice University make it a good case study from which to learn how to bridge the gap between work-family research and its practical applications in the workplace. The ADVANCE Institutional Transformation grant, coupled with other best practices, have made campus-wide ripples and expedited a wealth of ongoing and newly formed initiatives that are bridging the work-family gap. Through this case study, we have attempted to illustrate a meaningful and effective example of how an institution can respond to the dynamic changing needs involved in enhancing work-family balance. Rice University is continuing to try to meet these challenges by providing institutional mechanisms for asking the important questions, engaging the community and responding to the feedback.

Clearly, there is more work ahead for researchers and practitioners as they begin to explore yet under-researched but potentially critical moderators of the relation between gender and work-family balance. Such moderators might include the role that men and women’s individual differences play (e.g. affect), more emphasis on the home domain (e.g. marital satisfaction, leisure satisfaction) and styles of coping (e.g. social capital theory; for more, see Afful, 2013; Eby et al., 2005; 2010; Fox et al., 2011). Further efforts will be needed to translate these findings from empirical research to implementation in the field as well. With limited budgets, resources and person power, administrators will need to prioritize which efforts are most doable, and will lead to the most important and significant individual-level, organizational-level, and outreach-sponsored change. In the meantime, however, we believe the engagement of more institutions like Rice provides the critical bottom-up attempt that will be needed to eventually change a societal work-family gap. We encourage other institutions and organizations to follow suit.

References


Ruebsamen, M.S. (2013), “Stopping the tenure clock: university support or scorn?”, Doctoral Dissertation, Louisiana State University, Baton Rouge, LA.


Tetrick, L.E. (2003), Rice University Academic Climate Report, Rice University, Houston, TX, available at: http://professor.rice.edu

Tetrick, L.E. and King, E.B. (2007), Rice University Academic Climate Report, Rice University, Houston, TX.


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