Caregiving and Conferencing: Supporting Faculty Participation in Conference Travel

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Abstract

Participation in academic conferences is vital to faculty careers. A statewide program in West Virginia sought to remove travel-related barriers for scholars by reimbursing caregiving costs incurred from traveling. While women were the majority of applicants, faculty of immigrant status and those of color reported more benefits from travel. Family travel funds were requested most often to offset childcare responsibilities for dual career couples. For institutions aiming to implement intersectional, multipronged approaches to institutional change, supporting family travel is vital for the professional development of underrepresented faculty.

Keywords: Family Travel; Conference; Professional Meeting; Women; Immigrant Family

Caregiving and Conferencing: Supporting Faculty Participation in Conference Travel

Participation in professional conferences, visits to research facilities, and acceptance of invited colloquia at other institutions are critical to faculty careers. To be successful in the academy, faculty often need to obtain grant funding, perform research, and disseminate results through publications and national and international conferences (Blakey, Khachikian, and Lemus, 2018; King, Ellzy, and Barksdale, 2012). These activities depend on faculty forming collaborations with scientists at other institutions and their work being recognized and accepted within their scholarly community. Professional conferences provide a venue for such activities because participation offers visibility, peer feedback, and networking (Mata, Latham, and Ransome, 2012).

Faculty women disproportionately skip professional travel due to caregiving responsibilities, which are also disproportionately the purview of faculty women (Holley and Young, D. S., 2005), particularly for women of color (Misra, Lundquist, and Templer, 2012; Turner, Gonzalez, and Wong, 2011). Professional travel is also experienced as more stressful by female faculty with children, for example, compared to their male counterparts (Mason and Goulden, 2004). As a result, faculty women often report not submitting a conference proposal, declining an invitation to be a speaker, or forgoing field research (Tower and Latimer, 2016; Schroeder et al., 2013). However, this gendered and racialized problem is only beginning to be recognized by universities and few universities offer support to reduce it (Tower, Faul, Hamilton-Mason, Collins, and Gibson, 2015; Calisi and Working Group of Mothers in Science, 2018). This intersection of gender with ways university resources are allocated frames such a problem as one of institutional discrimination. The purpose of the article is to identify the perceived benefits of professional travel for academics as well as describe a program that

attempts to reduce institutional barriers to such travel. More specifically, objectives of the study are to address the purpose and benefits of professional travel for those receiving assistance, explore types and the intersectional nature of caregiving support, and identify how faculty actually used family travel funding.

Organizational Intersections of Gender, Race, and National Origin

Gendered organizations are dependent on gendered bodies and the gendered division of labor in the home where women still tend to perform the majority of domestic labor (Schneider, B. Z., Carden, Francisco, and Jones, 2011). Although all faculty might be faced with these demands of parenthood, the fact that women take primary responsibility for children and the domestic life of families means their careers are especially burdened. However, this literature tends to focus on barriers of motherhood as a monolithic category for academic faculty women generally, with little specific focus on the family responsibilities of faculty of color (Szelenyi and Denson, 2019), or middle-aged faculty (40-64 years old). Women in the latter category are particularly instrumental in providing caregiving for older family members; at the same time, many still care for children and are employed full time. According to the National Alliance for Caregiving (2015), for example, women provide 60% of adult caregiving and these numbers are especially high among racial minorities where women of color and immigrant women in particular experience greater pressure to provide family care. Female faculty of color compared to their white counterparts perform more caregiving of elders and other adults, and are less likely to have children, leading Misra et al. (2012) to speculate if female faculty of color sacrifice childbearing to care for extended families.

Organizations, including universities, are also gendered. The influence of gender, for example, is reflected in hierarchies and gender segregation (for example, male Deans and Chairs

controlling the work of female support staff); images and symbols of male dominance (sports as metaphor for teamwork and competition); or how a traditional workweek is organized (8-hour days, five days a week). Organizational practices and processes also tend to reward and value masculinity and privilege male workers.

Universities are not only gendered, but also racialized (Daniel, 2019; Wijesingha and Ramos, 2017). Faculty of color may experience a continuum of racism from deliberate to implicit bias (non-deliberate stereotyping), isolation from and marginalization by colleagues, hidden workloads when they serve on multiple committees to add diversity or advise or mentor racial minority students, and devaluation of their racialized research (Trower, 2003; Trower and Chait, 2002). In addition, the behavior and achievements of Black and other faculty of color are judged through racial filters, therefore adding to the barriers experienced by women generally (Daniel, 2019). Black female faculty experience more questions about their qualifications compared to Black male faculty; the former significantly were more likely to report working harder to overcome doubts about their qualifications and experience more stress related to the higher productivity they set for themselves (Griffin, Bennett, and Harris, 2011). Daniel (2019) notes that caricatures of the "angry black woman" may prevent Black faculty from challenging racism. Kim et al. (2014) also found that Asian-born female faculty expressed challenges to their authority, difficulty finding networks and mentors, high demands for service, and devaluation of their research.

In addition to the intersections of gender and race, some female faculty of color experience the added obstacles associated with being immigrants. Using data from the 2004 National Study of Postsecondary Faculty, Webber and Yang (2014) reported that foreign-born faculty present their research at conferences significantly more than their US-born peers. Non-

native English-speaking faculty may experience another layer of credibility challenges

(Hernandez, Ngunjiri, and Chang, 2015; Kim et al., 2014 Skachkova, 2007). Language use

facilitates different worldviews and interpretive lenses that are valuable in understanding

complex concepts (Hernandez, 2015). Some students and faculty, however, misinterpret this

strength as a weakness and give lower evaluations (Kim et al., 2014; Skachkova, 2007). Such

realities associated with the intersectional nature of race, gender, and nation are what Armstrong

and Jovanovic (2017) name "multiple subordinate statuses, [which] combine to shape both

identity and lived experience" (p. 218).

 These realities underscore the necessity of work/life policies as influential forms of

institutional support. Because universities are gendered and rely on gendered bodies, when

work/life policies do not support faculty's caregiving responsibilities, women are uniquely

disadvantaged given their greater burden in childcare and elderly care. The terms work/life

balance, work/life fit or work/life satisfaction relate to the ability of workers to both conduct

work obligations and maintain personal lives (Galinsky and Matos, 2011; Schneider, B. Z., et al.;

Yost, 2004). An important aspect of this balance is the recognition that women's developmental

life cycle tends to be in conflict with the academic life cycle as the requisite years of education

and training result in the median age of new assistant professors at nearly 32 years old (Tower et

al., 2015; Wolfinger, Mason, and Goulden, 2008; NSF, 2017). Responsibilities of motherhood

can thus provide barriers to academic career milestones (Tower et al., 2015; Wolfinger et al.), an

important one being tenure. It normally takes six to seven years to achieve tenure at U.S.

universities, (EUI, 2019). If individuals wait until post-tenure to conceive, fertility will have

declined and risks of complications risen (Frett, 2010). As a result, women may opt to leave or

be forced to leave the academy along many points throughout their education (pursing and

completing a PhD) and career trajectories (applying for tenure-track position, tenure and so forth).

Bos, Sweet-Cushman, and Schneider (2017) theorize that barriers to conference travel may contribute to this "leaky pipeline." Conference travel, particularly in the early phase of one's academic career, is extremely important, affording a host of benefits that include visibility, peer feedback, networking opportunities, and social support (Mata et al., 2012; Schroeder et al., 2013; Thorlakson, 2009). Conference attendance also tends to facilitate the formation of long-term research collaborations, which may lead to higher research productivity. Asbury (2017) reported that of participants who discussed research collaboration at a conference, 60% reported having subsequent research collaboration or were in ongoing discussions. Papers that are presented at conferences are more likely to be downloaded, read, and cited (de Leon and McQuillin, 2015).

Not surprisingly, caregiving responsibilities can be important impediments to travel, particularly for female faculty (Tower and Latimer, 2016; Bos et al., 2017). Childcare responsibilities impact faculty women's ability to plan research travel, submit to professional conferences, and travel to give an invited talk (Tower and Latimer). Faculty who indicated that childcare issues had affected their ability to plan or attend research travel were almost 50 times more likely than those without a childcare issue to indicate that they had not submitted to a conference. Childcare issues also impact women's decisions to accept a speaking invitation (Schroeder et al., 2013). Alongside these personal barriers, professional obstacles to travel include insufficient institutional resources as well as being less likely than their male peers to be invited speakers at conferences, to be asked to chair conference sessions, to have a paper

accepted at a conference, or to be asked to speak at departmental colloquia (Johnson, Smith, and Wang, 2017; Kalejta and Palmenberg, 2017; Nittrouer et al., 2017; Schroeder, et al., 2013).

Better gender parity of speakers can be achieved at conferences when women participate in conference speaker selection, when conferences are chaired by women, and when conference organizers make efforts to incorporate first-time speakers into their programs (Johnson et al.; Kalejta and Palmenberg). Indeed, there are many benefits to making conferences more inclusive of parents and diverse individuals. In fact, the benefits of inclusion are much broader than support for individual faculty. The gender and racial composition of conference speakers can signal to members of underrepresented groups whether or not they can succeed in that field (Asgari, Dasgupta, and Cote, 2010; Ceci, Williams, and Barnett, 2009). Calisi and the Workgroup of Mothers in Science (2018) note that scientific innovation, the conference organization, and businesses associated with the conference all benefit from more diverse conference attendees.

The Program

This paper explores the Elsevier Foundation-funded STEM+ Family Travel Program for the professional advancement of faculty and postdoctoral scholars, who have substantial childcare, eldercare, or other dependent care responsibilities. Elsevier Foundation funded a 3-year statewide program in West Virginia that sought to reduce caregiving barriers for female faculty to attend and fully participate in conferences and other travel. It was modeled after the University of Massachusetts of STEM Family Travel Initiative (http://stemfamilytravel.org), also funded by the Elsevier Foundation. Eligible participants in the STEM+ Family Travel Program included full-time female faculty employed by any public college or university in West

Virginia. In addition, female faculty had to work in STEM, social science or women's studies fields.

Shortly after receiving external funding, the provost at the host university, West Virginia University (WVU), contributed additional monies to fund all full-time faculty employed at WVU who did not meet the original program criteria associated with the grant. The combined external funding (statewide program for female faculty in STEM fields) and the internally-funded family travel program (faculty at WVU who were ineligible according to the terms of the grant) together reimbursed incremental caregiving expenses.

Incremental caregiving expenses were defined as caregiving costs not normally incurred but resulting from travel. As an example, faculty members may bring their toddlers to a conference and place children in onsite childcare. The cost of onsite childcare was incremental, and faculty members were reimbursed for that cost as well as other costs such as the toddler's plane ticket, the crib rented from the hotel, and the rented refrigerator for storing breast milk. The onsite childcare was incremental because faculty members were also paying for childcare at their normal facility to hold a child's place. As child and dependent care needs vary widely, depending on the particular situation, the Family Travel Fund considered requests for reimbursement on a case-by-case basis. Grants of up to $800 per year were awarded to all eligible applicants. Each member of a dual career couple was permitted to request up to $800 each, even when traveling to the same destination.

Methods

Data are reported from 10 application deadlines between April 2015 and January 2018. This exempt protocol was submitted and acknowledged by the IRB.

Sample

As already noted, the STEM+ Family Travel Program was implemented in West Virginia, a rural state located in the Mid-Atlantic Region of the United States. Full-time female faculty, employed by any of the 22 public colleges or universities in WV, and who worked in STEM, social science or women's studies fields were invited to participate in the program. Within a few application deadlines, the program was expanded to also include all male faculty and female faculty at the WVU, who did not qualify for the grant-funded program. Over 3 years, calls for applications to the program were widely advertised statewide through various media across higher education institutions that included the Community and Technical College system, Women's Centers and Departments, and STEM organizations and listserves. Announcements went out through press release and emails to the program's board members and champions requesting they forward the call onto their networks, listserves, and throughout their institutions. For faculty at WVU, which initially secured the grant, a question about the need for family support and a link to the WVU Family Travel Program website was added to the application completed by all faculty requesting travel funds. Faculty women at WVU may have also received advertisements about the program from the statewide program.

Faculty from six, 4-year universities and faculty from two, 2-year colleges participated in the program (n=114). Most faculty who participated in the program 85% (97) were employed by the WVU, a public, land-grant institution classified by the Carnegie Foundation as "R1: Doctoral University – Very high research activity." R1 universities have significant resources to support research and have high numbers of faculty producing research. There are approximately 29,000 students and 2,034 full-time faculty members employed at this institution.

At WVU, 58 faculty undertook 97 "trips" or program-supported travel: seventy-three percent (n=71) of the trips were taken by women and 27% (n=26) by men. Slightly more than

half (52%, *n*=50) of program supported trips were taken by U.S.-born faculty. While only 14%

(*n*=197) of faculty at WVU are of color, 44% (*n*=43) of trips were taken there by faculty of color

(34% Asian, 5% Black, and 5% Latin/Latina).

Eleven trips (10%) were taken by faculty employed at Marshall University: an "R2"

university. R2 institutions are designated as "Very high research activity." Faculty members

from Concord University, Shepard University, and WV State University, an historically Black

public university, also participated. The demographics of faculty traveling with program support

are displayed in Table 1. Women were the overwhelming majority of beneficiaries of the

program: 77% (*n*=88) of trips for the sample and 73% (*n*=71) of trips at WVU.

Table 1

Demographics

Variable	State-Wide (*n*=114) % (*n*)	WVU (*n*=97) % (*n*)
Sex		
Female	77% (88)	73% (71)
Male	23% (26)	27% (26)
Race		
White	55% (63)	56% (54)
Asian	30% (34)	34% (33)
Black	5% (6)	5% (5)
Latin/Latina	10% (11)	5% (5)
National Origin		
US Born	55% (63)	52% (50)
Immigrant	45% (51)	49% (47)
Tenure Status		
Tenured	36% (41)	37% (35)
Tenure track, but not tenured	49% (55)	48% (46)
Other	15% (17)	16% (15)
Rank		
Full professor	8% (9)	8% (8)

Associate professor	32% (36)	33% (31)
Assistant Professor	52% (58)	51% (48)
Other	7% (8)	8% (7)
Field		
STEM	79% (81)	68% (66)
Non-STEM	30% (33)	32% (31)

Data Collection Method

All faculty applied to the Family Travel Program using a Qualtrics survey located on WVU's website. The application requested information about the applicant such as contact information and rank. Event information associated with travel was also solicited including the event name, date, and location. Participants were asked to describe the purpose of their trip, such as "present a research paper at a conference." Participants were also asked how they anticipated using the money (e.g., type of transportation) and how these costs were incremental. Finally, participants were requested to confirm they provided at least 50% of caregiving responsibilities.

After traveling, applicants completed a post-travel report with a detailed accounting of incremental caregiving costs incurred and submitted required receipts. Each participant completed a one-page checklist, listing 16 benefits faculty may endorse (or not) experiencing on the trip. These benefits included making new contacts, furthering projects and/or relationships, learning about new opportunities, and accomplishing research goals.

Data Analysis

From the application and post-travel materials, two SPSS databases were created: (a) program participants (*N*=114), including variables describing the individual, such as demographic variables and perceived benefits of each individual applying for funding, and (b) each trip (*N*=103), including how program monies were used. Dual career couples were combined into one entry in this database if they each applied for monies that would be used to

support the same trip. In other words, if both members of a dual career couple applied for funding for the same trip, each member may have different demographics, professional characteristics, or perceptions of how the trip benefited their career (database 1), but how funding was used by the couple was combined into a single data entry (database 2). All eligible applicants were fully funded up to the program limit. Univariate (frequencies, percentages) and bivariate (chi-square and ANOVAs) statistics were run.

There are, however, study limitations that should be noted. Data include self-reports of faculty members' perceived costs to travel or incremental caregiving costs. In addition, faculty self-reported the benefits perceived to have experienced as a result of taking the trip, which are recognized as subjective. Future research might examine the influence of travel on tenure and promotion using faculty evaluations. While this pilot program includes three years of data, there are only 103 trips taken by 114 faculty, most of whom were from the same university.

Findings

This article offers the first empirical assessment of a program that supports incremental caregiving. Overwhelmingly, the purpose of faculty travel was to present a paper or poster at a conference (73%, 82 individuals). This is an important travel purpose because as already noted, papers that are presented at conferences are more likely to be downloaded, read, and cited (de Leon and McQuillin, 2015). Other trips were taken to support one's teaching role, or support or recruit students (13%, 15), conduct fieldwork (7%, 8), or conduct work at another university (6%, 7).

Benefits of Travel

Faculty reported numerous benefits from participating in travel. Overwhelmingly, they benefited from making contacts with potential collaborators and furthering projects and

relationship with collaborators. Tables 2 and 3 display frequency of 16 travel benefits faculty

perceived experiencing for the sample and WVU. Of the 16 listed benefits, faculty reported on

average eight benefits (SD=4) for each trip taken, with a median of seven and mode of four.

Faculty are accomplishing multiple goals when traveling.

Table 2
Travel Benefits: WVU White Compared to Faculty of Color and Sample

	State-Wide Program	WVU			
	All Faculty (*n=114*)	White Faculty (*n=43*)	Faculty of Color (*n=54*)	X^2	*p*
		% (n)	% (n)		
Made New Contacts					
Potential Collaborator(s)	91% (82)	57% (38)	43% (29)	4.98	**.025**
Potential Mentor(s)/Sponsor(s)	58% (52)	52% (23)	48% (21)	3.32	.056
Potential Publisher(s)	38% (34)	52% (14)	48% (13)	1.43	.17
Potential Funder(s)	27% (24)	40% (8)	60% (12)	4.98	**.025**
Furthered Projects and Relationships					
Collaborator(s)	80% (71)	54% (30)	46% (26)	2.83	.079
Mentor(s)/Sponsor(s)	43% (49)	48% (19)	53% (21)	4.75	**.025**
Publisher(s)	26% (23)	33% (6)	67% (12)	6.45	**.012**
Funder(s)	20% (18)	31% (5)	69% (11)	6.47	**.012**
Learned about New Opportunities					
Development Opportunities	70% (62)	46% (22)	54% (26)	9.89	**.001**
Meetings/Conferences	69% (61)	47% (23)	53% (26)	8.82	**.003**
Jobs for Themselves or Students	46% (41)	54% (19)	46% (16)	0.06	.298
Funding Solicitations	35% (31)	41% (11)	59% (16)	5.84	**.015**
Accomplished Research Goals					
Worked on a Research Paper	57% (51)	49% (21)	51% (22)	4.38	**.031**
Worked on a Grant Proposal	23% (20)	43% (6)	57% (8)	1.84	.146
Collected Data	18% (16)	55% (6)	46% (5)	0.10	.500
Worked on a Book Proposal	9% (7)	43% (3)	57% (4)	0.824	.303

Of WVU participants, no significant difference was found between gender and the number of benefits reported from travel; however, there were differences based on immigration status (mean 11 immigrant faculty vs. 6 US-born faculty; $F=25.15$, $p=.000$) and race (mean 10 faculty of color vs. 7 white faculty; $F=17.31$, $p=.000$) reported experiencing significantly more benefits from travel.

Table 2 displays chi-squares between white faculty and faculty of color. Significantly more faculty of color reported benefiting from travel (8 out of 16 benefits), for example, made a new contact with a potential funder, furthered work with a mentor or funder, and learned about future meetings and funding solicitations. Armstrong and Jovanovic (2017) found that ADVANCE IT universities tend to empower women of color to build community at conferences, consortia, and coalitions as a strategy for academic success.

Table 3 displays chi-squares between US born faculty and immigrant faculty. Significantly more immigrant faculty (10 out of 16 benefits) reported benefiting from travel and were significantly more likely to meet a potential mentor when traveling, for example. This is consistent with Skachkova's (2007) finding that such faculty women tend to develop social networks with colleagues outside of their university with similar national/ethnic group and international colleagues.

Table 3

Travel Benefits: US Born Compared to Immigrant Faculty at WVU

	State-Wide Program	WVU			
	All Faculty (*n=114*)	US Born (*n=50*)	International (*n=47*)	X^2	*p*
		% (n)	% (n)		
Made New Contacts					
Potential Collaborator(s)	91% (82)	54% (36)	46% (31)	2.64	.108

Potential Mentor(s)/Sponsor(s)	58% (52)	43% (19)	57% (25)	8.15	**.004**
Potential Publisher(s)	38% (34)	37% (10)	63% (17)	6.74	**.009**
Potential Funder(s)	27% (24)	60% (12)	40% (8)	3.14	.066
Furthered Projects and Relationships					
Collaborator(s)	80% (71)	48% (27)	52% (29)	4.20	**.036**
Mentor(s)/Sponsor(s)	55% (49)	40% (16)	60% (24)	7.82	**.005**
Publisher(s)	26% (23)	28% (5)	72% (13)	7.04	**.008**
Funder(s)	20% (18)	31% (5)	69% (11)	4.59	**.032**
Learned about New Opportunities					
Development Opportunities	70% (62)	44% (21)	56% (27)	6.90	**.008**
Meetings/Conferences	69% (61)	43% (21)	57% (28)	8.57	**.003**
Jobs for Themselves or Students	46% (41)	49% (17)	51% (18)	1.05	.215
Funding Solicitations	35% (31)	37% (10)	63% (17)	5.46	**.018**
Accomplished Research Goals					
Worked on a Research Paper	57% (51)	44% (19)	56% (24)	4.75	**.025**
Worked on a Grant Proposal	23% (20)	36% (5)	64% (9)	2.55	.098
Collected Data	18% (16)	55% (6)	46% (5)	0.00	.619
Worked on a Book Proposal	9% (8)	43% (3)	57% (4)	0.45	.392

In this way, a family travel program may be one of several structural changes that can support the success of female faculty of color in STEM and beyond.

Need for Childcare Support

Overwhelmingly, family travel requests were for childcare. WVU faculty involved families with one child 47% (40) or two children 36% (31). Fifteen percent of families (13) had three children. Even though only two faculty requested funding for eldercare, it is anticipated that more demand is forthcoming. Given the aging demographics of Americans, the expected need for eldercare (Ortman, Velkoff, and Hogan, 2014) and concomitant support, requests will grow.

Another possible explanation for low demand of eldercare support requested may be the norm of faculty needing to relocate for a tenure-track job (NSF, 2018). When faculty relocate to a university located in a rural area, faculty may not have family located within a distance where they might assist daily with caregiving (Tower and Latimer, 2016). Research is needed to understand at what rates grandparents or other extended family follow an adult faculty child to their new town and if there are differences based on faculty members race, national origin, or both.

Difference in Need

The need for funds appears to have gender, race, and national origin dimensions. Most requests for funds by WVU faculty were made by women (73%, 71), compared to men (27%, 26). Women as the majority of beneficiaries of the program was anticipated because female faculty perform more domestic and caregiving chores than their male counterparts (Misra et al., 2012).

Nearly half of trips taken by WVU faculty program participants were by immigrant faculty (49%, 47) and faculty of color (44%, 43). Most immigrant faculty program participants are faculty of color (81%, 38); most US born faculty are white (90%, 45) (X^2=49.28, p=.000), therefore there should be overlap with immigration status and race. Nearly half of WVU participants were immigrant faculty (*n*=25), which is 56% (45) of all full-time immigrant faculty employed at WVU (WVU, 2018). The program appears to be even more impactful for foreign-born faculty because they tend to present their research more than their US-born peers (Webber and Yang, 2014).

Trips taken by immigrant faculty 62% (21) vs US-born faculty 38% (13) (X^2=3.46, p=.050) were more likely to have an international destination. No significant difference was found for race or gender and travel destination. Perhaps immigrant faculty have a stronger motivation to travel internationally. Some faculty reported traveling to their country of origin. This may be to extend professional contacts, visit extended family, or a combination. Moreover, immigrant women tend to develop social networks with colleagues outside of their university with similar national/ethnic group colleagues and international colleagues (Skachkova, 2007).

At WVU, 56% (14) of men shared expenses with a spouse on significantly more trips to 44% (11) of women (X^2=14.63, p= .000). Of dual faculty career couples, immigrant faculty 68% (17) shared significantly more trips vs. US born 32% (8) (X^2= 5.15, p=.020) and faculty of color shared significantly more trips 68% (17) vs. white faculty 32% (8) (X^2= 7.65, p=.006). No significant difference was found between whether faculty shared trip expenses through the program or not and travel destination (i.e., domestic vs. international).

Faculty often need to relocate to secure full-time academic employment. More than 56% of doctoral recipients who took an academic job moved out of state for it (NSF, 2018). These trends reinforce the importance of strong dual career programs for academic and non-academic couples, including family travel support. A potential positive unintended consequence of a family travel program may be to help couples manage the distance without divorce. Research is needed to understand long-distance academic couples with and without caregiving responsibilities. Research is also needed to understand dual career couples who travel together for work, particularly those in different departments or fields.

Fund Usage

Faculty spent program monies in a variety of ways (See Table 4). On more than half of the trips, WVU faculty brought one or more children on the trip (62%, 53). Almost a quarter of trips included an accompanying caregiver 24% (20).

Table 4
How Funding was Spent

Funding Spent	State-Wide (*n*=103) % of Trips (# of trips)	WVU (*n*=86) % of Trips (# of trips)
Dependent Travel Costs*	59% (61)	62% (53)
Airfare/Baggage	54% (55)	56% (48)
Ground transportation/Rental car/Gas	14% (14)	12% (10)
Per Diem	45% (46)	44% (37)
Extra hotel charge (roll away bed, crib, extra occupancy)	4% (4)	5% (4)
Accompanying Caregiver	23% (23)	24% (20)
Airfare/Baggage	17% (17)	18% (15)
Ground transportation/Rental car/Gas	7% (7)	7% (6)
Per Diem	20% (20)	20% (17)
Hotel**	4% (4)	2% (2)
Caregiver Travel to Family Home	9% (9)	9% (8)
Airfare/Baggage	9% (9)	9% (8)
Ground transportation/Rental car/Gas	9% (9)	9% (9)
Per Diem	4% (4)	5% (4)
Caregiver Charges**	40% (41)	33% (28)

*Dependent travel costs are reported for the first (or only) child.
**Non-family, paid caregivers or facility charges.

Most of the sample (87%, 97) and WVU (87%, 83) participants (87%) were in dual career partnerships. Table 5 displays the status of second parents in terms of their ability to help with the caregiving associated with travel. At WVU, where men were eligible to participate, the program funded both faculty parents to present at a conference 35% (*n*=34). Two of these trips were not the same conference, but rather consecutive conferences in the same part of the world.

These couples describe taking turns caring for the children while the other worked. Table 5 lists

other ways second parents help faculty applicants. In other situations, second parents were

unable to help because, for example, they worked full-time 42% (48) for the sample and 36%

(34) for WVU participants.

Table 5
Partner Status

Partner Status in Relation to Needing Funds	State-Wide % of faculty (*n*=114)	WVU % of faculty (*n*=97)
Both parents presenting/attending conference	30% (34)	35% (34)
Single parent	12% (13)	12% (11)
2nd parent disabled	2% (2)	0.0% (0)
2nd parent working full-time; unable to help	42% (48)	36% (34)
2nd parent lives out of state/country	12% (14)	12% (11)
2nd parent working full-time	24% (27)	18% (17)
2nd parent traveling elsewhere for work	6% (7)	6% (6)
2nd parent help traveling parent	16% (18)	18% (18)
2nd parent accompanied as caregiver	7.0% (8)	8% (8)
Parents spit-up children for the trip	7.0% (8)	8% (8)
2nd parent who lives out-of-town cared for children	2% (2)	2% (2)

*On 14 trips, a faculty member was also breastfeeding

Implications

Financial support of faculty travel is important. Financial support for caregiving while

travelling in particular may allow faculty to travel when they otherwise would not (Tower and

Latimer, 2016), lengthen travel time, participate fully in travel activities, or reduce stress

associated with travel. Reducing barriers to conference travel may help departments retain

women in the academy (Bos et al., 2017) and also help women be more successful in the

academy because faculty careers benefit from conference travel.

A travel support program that is linked to university travel support and broadly utilized recognizes and legitimizes the caregiving role. This tends to be antithetical to the masculine norms found in organizations, including higher education. Work/life policies also give faculty women and men more options for how they manage their work and personal responsibilities (Tower and Dilks, 2015). Such programs may help chip away at current gendered norms in universities.

In this way, for institutions aiming to implement intersectional, multifaceted approaches to institutional change (Armstrong and Jovanovic, 2017), a family travel program may be an additional option to support diverse faculty, faculty women, and dual career couples be successful in the academy. Travel, particularly to conferences, has been shown herein and by others to have important implications for faculty careers (Mata et al., 2012; Schroeder et al., 2013; Thorlakson, 2009). When underrepresented faculty are successful, they are less likely to leave the academy, perhaps ascend the academic hierarchy, and increase their numbers as younger faculty enter. More underrepresented faculty in positions of power and in the pipeline may not only reduce institutional discrimination, but also impact intersectional and multidimensional institutional change.

The national trend of states defunding institutions of higher education reduces departmental and college budgets (Mitchell, Leachman, and Masterson, 2017). Travel budgets tend to be one of the first items to be cut (Young, J. R., 2009). Budget cuts make travel more difficult for faculty who have to shoulder a higher percentage of travel costs. For faculty who also have caregiving responsibilities, a program that reimburses incremental caregiving is more important than ever because incremental caregiving costs are frequently invisible, but are heavily relied upon when faculty decide to travel or not (Tower and Latimer, 2016). Making incremental

caregiving visible and reimbursable may be more meaningful to faculty women and immigrant

faculty who were found to use and benefit from the program more often. Family travel programs

should be linked to faculty travel funds, so faculty are aware of the additional support.

Simultaneously, budget cuts and concerns for the environment are trends that are

reducing conference participation (MoChridhe, 2019). In addition, the recent COVID pandemic

has led many universities to discourage all professional travel. Reduced conference participation

has implications for professional organizations and their faculty members, as conference

registration and trade show booth fees have become a larger part of such organizations' overall

budgets (American Society of Association Executives Foundation, 2016).

Sustainability

The Family Travel Program continues at the WVU with a broadly earmarked foundation

fund, controlled by the Provost. Since the beginning of the program, the university has had three

strong female provosts who are committed to equity. The program was also championed by an

Associate Vice President who oversees the program as well as by the ADVANCE Director. The

support of upper level administrators has been critical to the longevity of the program.

The first step in institutionalizing the program occurred when the program was added to

university websites highlighting work/life support. It was further institutionalized when a

question about the need for family support and a link to the Family Travel Program website was

added to the application completed by all faculty requesting university travel funds. This change

was made by the Associate VP champion and it added tremendous visibility to the program. The

program was originally administered by the grant PI who trained the current administrator of the

program, the Associate Vice President. The grant PI remains available to consult on allowable

expenses as needed.

Recently, a meeting with foundation administrators, the Associate VP champion, and PI

was held to clarify and further institutionalize it. There had been questions by the person

processing the travel forms on appropriateness of faculty using these funds to support older

adolescents. It allowed the Associate VP and PI to further educate our colleagues on the needs

that families with children face; it also underscored the need for complete documentation as to

the purpose of the travel supplement as it related to each family's unique circumstance.

Institutionalization was able to happen because of a few upper administrators' commitment to

supporting female faculty as well as the relatively low cost of the program (i.e., no more than

$20,000 per year) and data that demonstrated the value of the program.

During the pandemic, WVU implemented a temporary program, modeled after the family

travel program. This Childcare Emergency Relief Fund reimburses incremental childcare caused

by the pandemic (e.g., delay and staggard start to the school year or COVID+ children being

quarantined) to help faculty meet their teaching responsibilities.

Conclusion

This paper offers the first empirical evidence that family travel programs may be an

intersectional and important benefit for faculty. Faculty reported numerous benefits for work

travel, female faculty, immigrant faculty, and faculty of color may particularly benefit from such

a program. The objectives of the study were to explore the following: (a) Purpose of Travel:

Most often faculty requested support to deliver a paper or poster at a professional conference; (b)

Travel Benefits: Participants perceived experiencing many career benefits from traveling,

particularly when traveling to professional conferences. Immigrant faculty and faculty of color

reported significantly more benefits, for example, making contacts with potential collaborators and furthering projects and relationship with collaborators per trip than their native-born and white colleagues. Those benefits are particularly important to diverse faculty who may rely on social networks outside their university. (c) Need for Care: The most common reason family travel funds were requested was to offset childcare responsibilities for dual career couples. Faculty frequently choose to use monies to bring one or more children on the trip. (d) Differences in Need: Funds were requested more by female faculty, immigrant women, faculty of color, and dual career academic couples. Finally, (e) Fund Usage: Faculty used travel funds in a variety of ways, at times relying on the help of second parents and grandparents.

Faculty who used the family travel support program appear to have complex work/life fit. With the assistance of the program, they demonstrated creativity and resilience in managing their careers and family. Institutional changes in work/life travel policies may reduce barriers to traveling for faculty with dependent caregiving responsibilities. Universities and other organizations should offer funding to offset incremental caregiving costs, including childcare, care for adult dependents with special needs, and eldercare costs. Such programs should be flexible to accommodate a variety of caregiving needs and preferences, including the ability for family members to assist in caregiving. The Faculty Travel Program described herein is a small but crucial component that can provide faculty with greater opportunities for travel. Because barriers to conference travel may contribute to the "leaky pipeline" (Bos et al., 2017), family travel programs may play an important role in patching some potential leaks in this pipeline.

References

American Society of Association Executives, Foundation (2016). Data: Membership dues aren't

      the only revenue stream.

www.asaecenter.org/resources/articles/an_magazine/2016/november-december/data-membership-dues-arent-the-only-revenue-stream

Armstrong, M. A., & Jovanovic, J. (2017). The intersectional matrix: Rethinking institutional change for URM women in STEM. *Journal of Diversity in Higher Education, 3*, 216-231.

Asbury, E. A. (2017). The importance of conference attendance in developing research collaborations. *Whitireia Nursing Journal, 24*, 59-62.

Asgari, S., Dasgupta, N., & Cote, N. G. (2010). When does contact with successful ingroup members change self-stereotypes? A longitudinal study comparing the effect of quantity vs. quality of contact with successful individuals. *Social Psychology, 41*, 203-211.

Blakey, E., Khachikian, C., & Lemus, D. (2017). Increasing research requirements for tenure at teaching universities: Mission creep or mission critical? Teacher-Scholar. *Journal of the State Comprehensive University, 8*(3).

Bos, A., Sweet-Cushman, J., & Schneider M. C. (2017): Family friendly academic conferences: a missing link to fix the "leaky pipeline"? *Politics, Groups, & Identities*.

Calisi, R. M., & Working Group of Mothers in Science (2018). How to tackle the childcare-conference conundrum. *PNAS*, www.pnas.org/cgi/doi/10.1073/pnas.1803153115

Carnegie Classification of Institutions of Higher Education (n.d.). About Carnegie Classification. http://carnegieclassifications.iu.edu/

Ceci, S. J., Williams, W. M., & Barnett, S. M. (2009). Women's underrepresentation in science: Sociocultural and biological considerations. *Psychological Bulletin, 135*, 218-261.

Daniel, B. J. (2019). Teaching while black: Racial dynamics, evaluations, and the role of White

    females in the Canadian academy in carrying the racism torch. *Race Ethnicity and*

    Education, 22(1), 21-37.

de Leon, F. L. L., & McQuillin, B. (2016) The Role of Conferences on the Pathway to Academic

    Impact: Evidence from a Natural Experiment. SSRN: https://ssrn.com/abstract=2507361

Frett, R. C. (2010). Effects of advanced maternal age on pregnancy. *Birth, 37*(3), 219-226.

Galinsky, E., & Matos, K. The future of work-life fit. *Organizational Dynamics, 40*(4), 267-280.

Griffin, K. A., Bennett, J. C., & Harris, J. (2011). Analyzing gender differences in black faculty

    marginalization through a sequential mixed-methods design. *New Directions for*

    Institutional Research, 151,

Hernandez, K. C., Ngunjiri, F. W., Chang, H. (2015). Exploiting the margins in higher

    education: A collaborative autoethnography of three foreign-born female faculty of color.

    International Journal of Qualitative Studies in Education, 28(5), 553-551.

Holley, L. C., & Young, D. S. (2005). Career decisions & experiences of social work faculty: A

    gender comparison. *Journal of Social Work Education, 41*, 297–313.

Johnson, C. S., Smith, P. K., and Wang C. (2017). Sage on the Stage: Women's Representation

    at an Academic Conference. *Sage Journals*, *43*(4), 493-507. doi:

    10.1177/0146167216688213

Kahlenberg, R. (2015). How Higher Education Funding Shortchanges Community Colleges.

    https://tcf.org/content/report/how-higher-education-funding-shortchanges-community-

    colleges/?session=1

Kalejta, R. F. & Palmenberg, A. C. (2017). Gender Parity Trends for Invited Speakers at Four

    Prominent Virology Conference Series. *Journal of Virology*. doi: 10.1128/JVI.00739-17

Kim, E., Hogge, I., Mok, G., & Nishida (2014). Work experiences of foreign-born Asian women

      counseling and psychology faculty. *Multicultural Counseling & Development, 42*, 147-

      160.

King, D., Ellzy, J. A., Barksdale, T. L. Nucleus of higher education tenure (HEAT): A

      significant review. *Review of Higher Education & Self-Learning, 5*(14), 121-133.

Mason, M. A., Goulden, M. (2004). Marriage and baby blues: Redefining gender equity in the

      academy. *The Annals of the American Academy of Political & Social Science 596*(1), 86-

      103.

Mata, H., Latham, T. P., & Ransome, Y. (2012). Benefits of professional organization

      membership & participation in national conferences: Considerations for students & new

      professionals. *Health Promotion Practice, 11*, 450–453.

Misra, J., Lundquist, J. H., & Templer, A. (2012). Gender, work time, and care responsibilities

      among faculty. *Sociological Forum, 27*(2), 300–323.

Mitchell, M., Leachman, M., & Materson, K. (2017). A lost decade in higher education. State

      cuts have driven up tuition and reduced quality. Center on Budget & Policy Priorities

https://www.cbpp.org/research/state-budget-and-tax/a-lost-decade-in-higher-education-funding

MoChridhe, R. (2019, March 19). *Academic travel culture is not only bad for the planet, it is*

      also bad for the diversity and equity of research.

      https://blogs.lse.ac.uk/impactofsocialsciences/2019/03/19/academic-travel-culture-it-is-

      not-only-bad-for-the-planet-it-also-bad-for-the-diversity-and-equity-of-research/

National Alliance for Caregiving (2015). Caregiving in the U.S. 2015.

https://www.caregiving.org/wp-content/uploads/2015/05/2015_CaregivingintheUS_Final-

Report-June-4_WEB.pdf

NSF (2018). Doctoral recipients from US universities. Alexandria, VA. NSF 19-301.

https://ncses.nsf.gov/pubs/nsf19301/report/patterns-of-interstate-mobility-what-are-the-employment-and-geographic-trends

NSF (2017). Statistical profile of doctorate recipients, by ethnicity, race, and citizenship status: 2017. Table 72. Doctoral recipients from US universities. Alexandria, VA. NSF 19-301.

https://ncses.nsf.gov/pubs/nsf19301/assets/data/tables/sed17-sr-tab072.pdf

Nittrouer C. L., Hebl, M. R., Ashburn-Nardo, L., Trump-Steele, R. C. E., Lane, D. M., Valian, V. (2017). Gender disparities in colloquium speakers at top universities. *Proceedings of the National Academy of Sciences of the USA*, *115*(1), 104-108. doi: 10.1073/pnas.1708414115

Ortman, J. M., & Velkoff, V. A., & Hogan, H. (2014). An aging nation: The older population in the United States. Population estimates & projections. US Census Bureau. P25-1140

https://www.census.gov/prod/2014pubs/p25-1140.pdf

Schroeder, J., Dugdale, H. L., Radersma, R., Hinsch, M., Buehler, D. M., Saul, J., . . . Horrocks, N. P. (2013). Fewer invited talks by women in evolutionary biology symposia. *Journal of Evolutionary Biology, 26*, 1–7.

Schneider, B. Z, Carden, W., Francisco, A., & Jones, T. O. (2011). Women 'Opting Out' of Academia: At What Cost? *Forum on Public Policy*, *2011*(2), 1–19.

Skachkova, P. (2007). Academic careers of immigrant women professors in the U.S. *Higher Education, 53*(6), 697-738.

Szelenyi, K., & Denson, N. (2019). Personal and Institutional Predictors of Work-Life Balance among Women and Men Faculty of Color. *Review of Higher Education, 43*(2), 633-665.

Thorlakson, L. (2009). Collected wisdom: Advice to new entrants to the profession. *European Political Science, 8,* 162–167.

Tower, L. E., Faul, A. C., Hamilton-Mason, J., Collins, W. L., Gibson, P. (2015). Work-Life Fit: The Intersection of Developmental Life Cycle and Academic Life Cycle. *AFFILIA: Journal of Women and Social Work, 30*(4), 519-532. *doi: 10.1177/0886109914555217*

Tower**,** L. E., & Dilks, L. (2015)**.** Work/Life Satisfaction Policy in ADVANCE Universities: Assessing Levels of Flexibility. *Journal of Diversity in Higher Education, 8(3),* 157-174. http://dx.doi.org/10.1037/a0039372

Tower, L. E., & Latimer, M. (2016). *What role does childcare play in female faculty's ability and willingness to participate in research related travel? AFFILIA, 31(3), 317-330.* DOI: 10.1177/0886109915622527

Trower, C. A., & Chait, R. P. (2002). Faculty diversity. Too little for too long. *Harvard Magazine.* 33 – 37, 98.

Trower, C. A. (2003). Leveling the Field. *The Academic Workplace, 14*(2), 1, 3, 6-7, 14-15.

Turner, C. S. V., González, J. C., & Wong, K. (L). (2011). Faculty women of color: The critical nexus of race and gender. *Journal of Diversity in Higher Education, 4*(4), 199-211.

Webber, K. L., & Yang, L. (2014). The increased role of foreign-born academic staff in US higher education. *Journal of Higher Education Policy and Management, 36*(1), 43-61.

West Virginia University (2018). IPEDS Human Resources Report. Part A3-Full-time instructional staff totals. https://institutionalresearch.wvu.edu/files/d/5366985b-9429-4f96-ba87-6db0f7c3010e/ipeds_human_resources_wvu.pdf

Wijesingha, R., & Ramos, H. (2017). Human capital or cultural taxation: What accounts for

differences in tenure and promotion of racialized and female faculty. *Canadian Journal of Higher Education, 47*(3), 54-75.

Wolfinger, N. H., Mason, M., & Goulden, M. (2008). Problems in the pipeline: Gender, marriage, and fertility in the ivory tower. *Journal of Higher Education,79,* 388 – 405.

Yost, C. (2004). *Work/life: Finding the fit that's right for you*. New York, NY: Riverhead Books.

Young, J., R. (2009, March, 27). Economic downturn limits conference travel. *Chronicle of Higher Education*. https://www.chronicle.com/article/Economic-Downturn-Limits/117185