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Parenting as a Moderating Factor for Research Productivity and Work-Life Balance: Evidence from Philippine Women Academics

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Abstract: Higher education institutions (HEIs) demand from their faculty excellent teaching output and substantial number of quality productive scholarship, hence, balancing work and family demands becomes a central challenge among academics to maintain a healthy work-life balance. The decision to have children and family shapes the career trajectories of academics as well as their research productivity in particular. Striking a balance between attending to family matters and becoming scholarly productive is a tall order among Filipino women academics, having a culture that is just beginning to adopt to the more egalitarian aspect of attending to family matters. The empirical result of this study shows that indeed, parenting is a moderating factor between work-life balance and research productivity among Filipino women academics. Female faculty members in particular are susceptible to a balancing act between family commitments most especially in producing quality researches. Family life still pervades within the spectrum of research productivity on one side and work-life balance on the other end among women academics.

Keywords: Parenting, work-life balance, research productivity, women academicians.

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Introduction

Balancing the demands of academic work and attending to the needs of the family has been a great challenge among academicians especially among women parents. The academic environment in the Philippines recently due to its evolving landscape to meet the demands and challenges of the changing times has imposed upon its academics, workloads of teaching and research that has posed a tall order of striking a balance between work and attending to the needs of the family. Teaching and doing research are among the most pressing situation in which faculty members are always subjected to do trade off in order to maintain a healthy work-life balance.

Although higher education institutions (HEIs) demands from their faculty excellent teaching output and substantial number of quality productive scholarship intended to foster innovative solutions for socio-economic development (Khelifi, 2019), balancing work and family demands is a central challenge and concern in almost all dynamic organizations including the academia (Valcour, 2007). Considering the human factor aspect (Mirkamali & Thani, 2011), faculty members' well-being must not be set aside at the expense of research productivity.

Work-life balance (WLB) has recently been one of the focuses of interests among organizations in managing the well-being of their employees (Downes & Koekemoer, 2012). WLB is being defined in the context of this paper as the extent to which an individual equally engaged in an equally satisfied with – his or her work role and family role purpose (Greenhaus et al., 2003).

In the Philippines, where maintaining a quality family life is one of the paramount considerations of the society, managing the competing demands of work, family and social life is an issue that affects almost all parents working in HEIs but is more pronounced among women academics. Consequently, research productivity may just take a back seat amidst the myriad of priorities in the Philippine academic setting just to maintain the work-life balance. The situation is primarily reinforced by reasons such as lack of time and teaching workload pressure (Dapiton & Canlas, 2020). This situation is more pronounced among women that spend more time on child care and household tasks relative to their

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male partners or spouses, thus, experiences more difficulty in juggling academic careers and family life (O’Laughlin & Bischoft, 2005). Seeing people as one of the most important resource in the organization, HEIs must take into consideration the importance of achieving work-life balance alongside productivity goals (Fapohunda, 2014).

Striking a balance between attending to family matters and becoming scholarly productive is a tall order among Filipino women academics. In the Philippines, having a culture that is just beginning to adopt to the more egalitarian aspect of attending to family matters, women are still expected to have more of the child rearing and caregiving responsibilities than men and of course childbearing which is exclusive for women.

Literature Review

The Baby Penalty and Research Productivity

Research productivity is one of the yardsticks for both public and private higher education institutions (HEIs) to measure the potential of their faculty for promotion and tenure (Sabharwal, 2011). The decision to have children and family shapes the career trajectories of academics as well as their research productivity in particular. The moment women academics makes choices to become mothers at the same time being a professor, they shape the future of their family life together with their career in the academe (Ward & Wolf-Wendel, 2012).

The supposition of gendered parenting impacts more on women, as having a family seems to negatively affect women’s academic career trajectories (Gallagher, 2015; Mason & Goulden, 2002). Having a family is often perceived as a sign of reduced commitment to the job on the part of the female academic tagged as the ‘baby penalty’ (Gallagher, 2015; Mason et. al., 2013) which significantly affects women’s academic careers (Mason et al., 2013). This type of constrain is referred to by Williams and Segal (2003) as the ‘maternal wall’ and it arises out of the situation once female academics become mothers. Empirical results also show that there is a direct relationship on publication productivity of female faculty members with children of any age (Sabharwal, 2013). To some extent, women in careers delayed their motherhood in order to gain substantial wage growth and career outcomes (Miller, 2011).

The gendered childcare and family responsibilities took a toll among academic mothers as sociological evidence reveals that mothers sometimes experience informal social sanctions for violating the prescriptive norm of the ever-available mother (Williams, 2005) and on the other hand a productive researcher.

The research productivity issue is attributed in part to gendered childcare responsibilities during family formation (Kyvik & Teigen, 1996; Wolfinger et al., 2008) which results to significant decline in the number of publications among women (Lutter & Schroder, 2019). Women are deemed to spend more time, energy and money devoted to child-rearing which can eventually reduce research productivity (Stack, 2004). Raising a family is also a full-time job which includes endless childcare and household duties and it is not easy for ‘academic mommies’ to balance work and family life (Ghodsee & Connelly, 2011). This scenario leads to some descriptive gender stereotyping that motherhood makes women fall behind men in terms of their competence and commitment (Benard & Correll, 2010) due to the apparent role of women to allocate more time to care responsibilities (Misra et al., 2012).

Reconciling Family Life, Academic Career and Research Productivity

Parenting and professing need not to be mutually exclusive (Cavendish, 2007), some academic mothers have even suggested how to reconcile both career and life’s passions (Schmidt, 2018). Although easier said than done, the demands of parenting and the struggle to keep up an academic career is hard to reconcile among faculty members especially for women (Jacobs & Winslow, 2004). Faculty members work more hours per week than in most other occupations (Jacobs & Winslow, 2004; Misra et al., 2012). This becomes a dilemma among mothers as they are being caught in a quandary to become an ideal worker and being an ideal mother all at the same time (Ridgeway & Correll, 2004). The frantic-juggling lifestyle among academic mothers leads Ghodsee and Connelly (2011) to opined that:

You cannot be everything to everyone all at the same time- a super scholar, a super-teacher and a super-mother. However, you can be a well-respected scholar, a good and conscientious teacher, and a loving and attentive mother. That needs to be good enough. (Ghodsee & Connelly, 2011, p. 61)

This is the hard-truth for female academics; one has to take side between the ideal-worker norm and the norm of parental care (Williams, 2000). Fox (2005) contends that marriage and young children are not directly associated with productivity among women academics. However, she also considered that women who have survived a rigorous and demanding process of scrutiny, selection and evaluation may experience trade-off from family demands and eventually take a toll along the way on marriage and parenthood.

Sax and colleagues (2002) also provided another contention that factors affecting faculty research productivity are nearly identical for men and women. They found out that family related variables such as having dependent children has exhibit little or no effects on research productivity. The work of Prpic et al. (2009) also points out that the research productivity gap narrows between genders in the areas of citations per publications, indicating that female academics

are not that left behind after all compared to their male counterparts. However, Prpic et al. (2009) affirm that there exists a significant difference in gender productivity in the natural sciences as compared to the social sciences area but only on the aspect of visibility. Beforehand, Carr and colleagues (1998) also has this kind of findings where women with children has fewer publications and had faced greater academic career obstacles attributed to less institutional support and little funding coming from their respective institutions. Thereafter, Long (2001) acknowledged that gender differences in productivity is narrowing due to the strides of having equal representation of women in the sciences, nevertheless the systematic difference of women in the labor force participation- the effect of having children, greatly influence their career outcomes.

Another interesting point to consider about research productivity among women is their area of specialization. In the findings of Leahey (2006), she concluded that the extent of research specialization is a critical intervening variable for research productivity among women. Leahey (2006) inferred that women specialize less than men and that makes women lose out an important means in increasing their productive scholarship. Mayer and Rathmann (2018) analyzed that publication pattern among women academics is also a factor for gender productivity. Women tend to be more satisfied of submitting their work on less-prestigious book chapters while male academics would go for more competitive journals.

Subsequently, DeLaat (2007) recommended that an egalitarian marriage to address the competing career decisions and child-care responsibilities would be feasible alongside with gender sensitive institutional policies to balance the issues of professional demands and competing personal needs among couples. This was also supported by the works of Mason and her colleagues (2013) that structural institutional changes would be necessary to promote family-friendly atmosphere across academia and to have a workplace flexible enough to cater for family needs. O'Laughlin and Bischoft (2005) have promoted that departmental support for balancing work and family demands are two factors that could be easily addressed by most HEIs. Garg and Yajurvedi (2016) also suggests the necessity for having child care options as a means of helping employees achieve work-life balance, productivity and increasing job satisfaction. Academics that are highly satisfied of their jobs are more likely seen to be contented of their work-life balance and consequently influence their affective commitment (Akar, 2018) towards research productivity.

Such change is imperative in order for the academia to retain its most talented young stars. Arensbergen and her colleagues (2012) also pointed out that the traditional performance difference between male and female academics is disappearing over time. It is an old case that that men outperformed women researchers, but it is not anymore the case in the younger generation as female are increasingly doing at par and even better than male.

It is about time that traditional institutional practices must be improved to address the changing landscape of cultural and societal norms that affects women's lives as well as the new realities of modern academic workplace (Ward & Wolf-Wendel, 2017). Family-friendly employment policies (Cole & Curtis, 2004) must be in place and should be available to all gender especially for women.

Methodology

Research Goal

This paper investigated the moderating effect of parenting between research productivity and work-life balance among Philippine women academics through structural equation modelling (SEM). Parenting is used in the context of this paper as the third variable-a moderator, that affects the strength of the relationship between research productivity and work-life balance among Philippine women academics. A moderator variable specifies when or under what conditions a predictor variable influences a dependent variable (Baron & Kenny, 1986; Holmbeck, 1997).

Parenting-deemed as a moderator variable, if found to be significant, can cause an amplifying or weakening effect between research productivity and work-life balance. On this regard, parenting variable establishes its domains of maximal effectiveness with regards to research productivity (Baron & Kenny, 1986; Peyrot, 1996). Parenting may reduce or enhance the direction of the relationship between work-life balance and research productivity, or it may even change the direction of the relationship between the two variables from positive to negative or vice versa (Lindley & Walker, 1993).

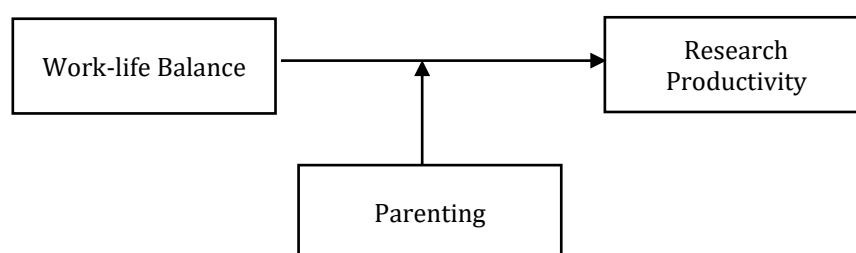


Figure 1: Framework for testing Parenting as a moderator between Work-life balance and Research Productivity

Hypothesis

This paper proposes a hypothesis that: *parenting amplifies the gap between work-life balance and research productivity among Filipino women academics.*

Sample and Respondents

A total of 306 women academics from private and public HEIs from the Philippines were surveyed with the inclusion criteria of being: 1) married or single parent, 2) having at least one child or more, and 3) having permanent appointment in their respective HEIs.

Instrument Development

The work-life balance scale developed by Tasdelen-Karckay and Bakalim (2017) which was an eight-item instrument was adapted to identify the work-life balance parameters but contextualized in an academic setting. Tasdelen-Karckay and Bakalim (2017) originally used their instrument to gage the work-life balance of Turkish employees as a mediator between work-family conflict and life satisfaction. The reliability index of the instrument tested in the local setting was 0.87.

The work of Stack (2004) had given inputs on the development of parenting scale with a reliability index of 0.92. The research productivity scale was developed through the aggregation of different readings contained in the references section of this paper and was tested with a reliability index of 0.94. All reliability indices were tested using the Cronbach’s alpha at the local setting.

Using the Harman’s single factor test, the percentage of variance is only 32.43% which denotes that there is a very minimal common method bias induced by the instrument. Appendix 1 presents the instrument used in this study.

Data Analysis

The data gathered was processed through structural equation modelling utilizing AMOS 23. The conditional effects of the moderator variable were processed using the Haye’s PROCESS v3.3.

The data does not follow a normal pattern, rather they are skewed indicating that the responses are towards the negative direction on the effect of parenting for work-life balance and research productivity. Work-life balance is negatively skewed with a Shapiro-Wilk index of 0.00 along with research productivity which is also negatively skewed with a Shapiro-Wilk index of 0.00. Parenting is skewed to the right with Shapiro-Wilk index of 0.00 indicating the strong effect of parenting to research productivity.

Findings and Results

In can be seen in Table 1 that all p-values for the three paths; ZRP<---ZWLB, ZRP<---ZPar and ZRP<---Int have significant relationships. The regression weight estimate for the path ZRP<---ZWLB suggests that when ZWLB goes up by 1 standard deviation, ZRP goes up by 1.019 standard deviations. Another path which is ZRP<---ZPar suggests that, when ZPar goes up by 1 standard deviation, ZRP goes up by 0.019 standard deviation. Both two aforementioned paths have positive correlations. On the other hand, the path ZRP<---Int, suggests that when Int goes up by 1 standard deviation, ZRP goes down by 0.047 standard deviation, indicating that there is an inverse relationship between the two variables. It demonstrates that research productivity goes down due to the interaction of the parenting variable.

Table 1. Path Regression Weights

Paths	Estimate	S.E.	C.R.	p	Interpretation
ZRP <--- ZWLB	1.019	.010	99.188	***	Significant
ZRP <--- ZPar	.019	.008	2.333	.020	Significant
ZRP <--- Int	-.047	.010	-4.750	***	Significant

Note: ZRP-standardized values for Research Productivity;
ZWLB- standardized values for Work-life Balance;
ZPar-standardized values for Parenting;
Int- Interaction between ZPar & ZRP as Moderating Variable

The covariance for the paths ZWLB<-->ZPar (-0.048) and ZPar<-->Int (-0.003) has no significant relationships (Table 2 & Table 3). While ZWLB<-->Int with a covariance of 0.636 is deemed to have a significant relationship. It suggests that when the parenting variable interacts between work-life balance and research productivity, it lowers the work-life balance of an academic mother thereby leading to a lower research productivity output.

Table 2. Covariance estimates

Paths	Estimate	S.E.	C.R.	p	Interpretation
ZWLB <--> ZPar	-.048	.057	-.842	.400	Not Significant
ZPar <--> Int	-.003	.060	-.050	.960	Not Significant
ZWLB <--> Int	.636	.070	9.075	***	Significant

Note: ZRP- standardized values for Research Productivity;
 ZWLB- standardized values for Work-life Balance;
 ZPar- standardized values for Parenting;
 Int- Interaction between ZPar & ZRP as Moderating Variable

Table 3. Correlation coefficients

Paths	Estimate
ZWLB <--> ZPar	-.048
ZPar <--> Int	-.003
ZWLB <--> Int	.608

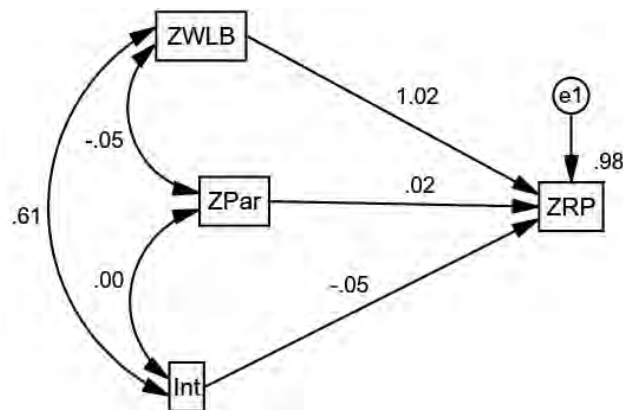


Figure 2: Model Output for Parenting as a moderator between Work-life balance and Research Productivity

All conditional effects of parenting (Table 4) to the focal predictor which is work-life balance are significant (p=0.000) at all levels as shown in Table 4. Presented below are the effects from the 16th percentile responses of 3.00 (1.1823) to the 50th percentile of 3.80 (1.1178) and up to 84th percentile of 4.60 (1.0533). Thus, it supports the hypothesis of this study that parenting amplifies the gap between work-life balance and research productivity among Filipino women academics.

Table 4. Conditional effects of the focal predictor at values of the moderator

Parenting (moderator)	Effect	p
3.00 (16 th percentile)	1.1823	0.000
3.80 (50 th percentile)	1.1178	0.000
4.60 (84 th percentile)	1.0533	0.000

The findings presented shows that parenting significantly influence the level of research productivity and it also affects the work-life balance of women academics. It suggests that women academics particularly in the case of the Philippine setting are vulnerable to some setbacks with regards to their research productivity. This is due to preoccupations involving household commitments that considerably takes their time and greatly affects their efforts in doing productive scholarship.

Discussion

As research performance becomes one of the yardstick for university prestige and faculty promotion (Morley, 2014), women academics feels the pressure to heed on to the demands and challenges of research productivity mandate. In the Philippines with a lesser egalitarian home culture, women academics are faced with the struggles of negotiating their university job and family obligations (Bailyn, 2003; Probert, 2005), hence the empirical result of this study justifies the research hypothesis. The research productivity anchored on gender gap phenomenon can only hold true as in the case of this study due to some aggravating factor such as parenting wherein it put additional pressure for work-life balance along with other routine academic tasks of teaching and administrative work (Symon et al., 2008). Hence,

time spent on housework lessens the time to be spent on research activities (Heijstra et al., 2016). Antecol and colleagues (2016) asserted that men are more productive in producing quality researches compared to their women counterparts given the opportunity during their tenure track break timeframe. This gives the general picture of this study that family life still pervades within the spectrum of research productivity on one side and work-life balance on the other end among women academics (Heijstra et al., 2017). A strong social support system coming from the family and other special individuals is necessary (Demir, 2019) to sustain the commitment towards research productivity especially for women academics while maintaining their work-life balance. Academic institutions should pay attention to the proper work-life balance of their academics as it encompasses in almost all aspects of their entire well-being, spanning from their job productivity up to their health and wellness (Gragnano et al., 2020).

Conclusion

The empirical result of this study shows that indeed, parenting is a significant moderating factor between work-life balance and research productivity among Filipino women academics. Female faculty members in particular are susceptible to a balancing act between family commitments and the fulfilment of their academic roles (Cole & Curtis, 2004), most especially in producing quality researches. The time divide amongst the need to attend to almost all household and family responsibilities in contrast to satisfying the role of being an academic has brought a tremendous challenge among female faculty members resulting to some extent an incongruity between family and work roles (Jacobs & Winslow, 2004). Sax et al. (2002) has explained on the premise of family-related variables focusing on marriage life and having children as one of the major factor that affects the productivity of women in the academic world. Women academics or what Ropers-Huilman (2000) has termed as academic mommies has been constrained to the demands of parenting and household chores at the same time struggling to become a successful academic researcher (Beddoes & Pawley, 2013; Raddon, 2010). This research clearly shows how parenting and being an academic mother entails a lot of sacrifices in order to balance both academic career especially on the aspect of being research productive along with attending to family's needs and concerns.

Suggestions

The gender gap research productivity particularly in the aspect of women parenting roles can be mitigated by various measures from institutional and personal end. Strong family support and organizational commitment for female academicians can be developed on a personal and individual level as well as on the institutional level respectively (Demir, 2019).

Striking a balance between academia and parenthood is a great challenge for women academics amidst the demands of child care and family obligations (O'Laughlin & Bischoff, 2005), yet once managed and successfully surpassed it becomes a rewarding test of mettle. The predicament of balancing family and work roles can be mitigated in a variety of ways.

On the relational level, male partners have to share the burden of family commitment which would eventually lessen the weight carried among academic mothers as studies have shown that women are more prone to work and family stress when subjected to longer working hours (Michie, 2002; Weston et al., 2019) that might affect the cognitive function (Virtanen et al., 2009). At the institutional level of the academia, a more progressive outlook regarding policy formulation for work-family balancing issues should be crafted (Amer, 2013). Organizational support carried by top and middle-level educational managers are important gestures that can lessen the burnout levels perceived among academics (Uzun, 2018) which in turn increases their commitment towards research productivity.

Limitations

The result of this study is grounded upon the empirical investigation within the context of parenting as it affects the research productivity of Filipino women academics. The authors of this study do well understand that the result of this investigation might be different from other authors that have conducted similar or related studies prior and in parallel to the timeline of this research. Other factors have also partly interacted with research productivity such as the research culture, institutional support and the very capacity of an academician to carry on a scholarly activity-all have interplays with research productivity. No universal contention has been so far reached that there is a global phenomenon about the effect of parenting as negative equity for productive scholarship. Other studies of similar orientation like this research have a different outcome such as the case of the result conducted by Aiston & Jung (2015) that utilized the Changing Academic Profession (CAP) survey data wherein it yielded the conclusion that family factor does not operate as a negative equity. However, it has been also modest from the point of Aiston & Jung (2015) to include the caveat and became cautious of their contention that women academics that are married, have taken career breaks or have children are productive because they have the access to domestic support and thus enables them to accomplish their scholarly works.

Conflict of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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Appendix

Work-life Balance Scale
1. I can satisfy my own needs and the needs of the important people in my life and can still do research activities
2. I can manage my roles related to family and academic life in a balanced manner
3. I can make enough time for myself by preserving the balance between my academic life and family life
4. I feel loyalty to my roles both in my academic life and my family
5. I manage my professional and family life in a controlled manner
6. I am successful at creating a balance between my multiple life roles (professor/researcher/spouse/mother, father, etc.)
7. I can deal with the situations that occur due to the conflict between my roles that are specific to my professional and family life
8. I am equally content with my roles in my family and professional life

Research Productivity Scale
1. I have consistently presented my research outputs in regional, national and international research conferences.
2. I have published a significant number of articles in peer-reviewed journals.
3. I have published a significant number of monographs or books.
4. I am occasionally invited in several research conferences as a resource person.
5. I have been invited by credible peer-reviewed journals as one their peer reviewers or editorial board member.
6. I am actively involved in research related activities such as thesis/dissertation adviser or panel member.

Parenting
1. Caregiving activities has taken so much of my extra time to do research
2. Childbearing makes it impossible for me to do research
3. Childrearing activities and responsibilities have taken so much of my extra time to do research.
4. Looking after the needs of my children is more of a priority than spending time to do research.
5. My priority is on the aspect of taking care of the welfare of my family instead of spending my time doing research.