

# Women's entrepreneurship: A model of business-family interface and performance

Dianne H. B. Welsh<sup>1</sup> · Eugene Kaciak<sup>2,3</sup>

© Springer Science+Business Media, LLC, part of Springer Nature 2018

**Abstract** Recently, there are renewed calls to develop new models addressing the intricacies of women-owned businesses and the women that head them. A new conceptual model of women's entrepreneurship that involves relationships between business-family-interface and firm performance is introduced in our paper. We test the model based on data from countries around the world and show that the model's links depend on the country context. As a result, we identify new boundary conditions to the domain of female entrepreneurship. Implications are discussed.

**Keywords** Women's entrepreneurship · Family-business interface · Models

## Introduction

Work and family are intertwined areas of life for most people but they may be especially connected for entrepreneurs, in general (Jennings and McDougald 2007; Hsu et al. 2016), and female business owners, in particular (Loscocco and Bird 2012; Peris-Ortiz et al. 2012; Shelton 2006). Research involving work and family typically draws on the Work-Family Interface (WFI) theory (Jennings and McDougald 2007). Entrepreneurship scholars have recently started to recognize the relevance of the business-family interface or BFI (Jennings and McDougald 2007; Hsu et al. 2016).

---

✉ Dianne H. B. Welsh  
dhwelsh@uncg.edu

Eugene Kaciak  
ekaciak@brocku.ca

<sup>1</sup> Bryan School of Business & Economics, University of North Carolina at Greensboro, P.O. Box 26170, Greensboro, NC 27402-6170, USA

<sup>2</sup> Goodman School of Business, Brock University, St. Catharines, ON L2S 3A1, Canada

<sup>3</sup> Department of Quantitative Methods and Information Technology, Kozminski University, Warsaw, Poland

There are two dimensions within the BFI framework: enrichment-business and family are positive domains, and interference-business and family comprise conflicting spheres. These two dimensions are bi-directional (Greenhaus and Powell 2006), meaning the dimensions are on a continuum from business performance to family interests and vice versa. The family-to-business enrichment construct is further divided into instrumental (organizational, financial) and affective (moral, emotional) family support (Hsu et al. 2016). The enrichment and interference processes may operate simultaneously. This is particularly true for women who fulfil multiple roles and are entrapped between the family and business duties (Rothbard 2001). Therefore, some scholars believe that the two perspectives should be combined into one overall model (Hsu 2016; Jennings and McDougald 2007). They see the processes as competing because each perspective is positive in some respects and negative in others. So far, most of research looks at the two processes separately. For example, Eddleston and Powell (2012), Powell and Eddleston (2013) focus on relationships between family enrichment and business performance. Jennings and McDougald (2007), and Shelton (2006), consider links between family interference and work.

The objective of this study is to develop a conceptual model of women's entrepreneurship that connects the two BFI dimensions and firm performance in a multi-faceted, multi-directional, fashion based on the uniqueness of women's entrepreneurship. To our knowledge, such a comprehensive model is lacking in the literature. This *Performance-Interference-Enrichment* (PIE) model will be tested based on data from various countries around the world. We will show that the model's links depend on the country context. Thus, we identify new boundary conditions to the domain of female entrepreneurship that are sorely lacking in the literature.

The paper proceeds as follows. The next section provides an overview of the extant literature on the relationships between the BFI dimensions and firm performance. Next, a conceptual model of women's entrepreneurship is developed and tested. Implementation suggestions are put forth. Finally, we discuss the results, implications, and provide conclusions.

## Literature review

Based on the models presented in the extant literature, we describe various links between the two BFI dimensions (family interference and enrichment) and firm performance.

### Links between family interference and firm performance

Shelton (2006) looks at the role of work-family conflict on venture performance by female entrepreneurs. She suggests that such conflict may impact venture performance negatively. However, she also expects a "positive mediating role of work-family management strategies on the performance of women-owned ventures" (p. 293). Among the work-family management strategies, she lists external resources (e.g., spouse support, financial resources) and internal family salience.

Jennings and McDougald (2007) similarly focus on spillovers between business and family realms in their conceptual model linking work-family conflict and the

performance of business owners. These researchers indicate that the strategies employed by entrepreneurs to mitigate work-family conflict can have both detrimental and beneficial outcomes. The damaging influence of work-family conflict on performance may be due to the spillover of negative emotions, attitudes, and behaviors from family to business. In return, business performance may also have reciprocal (positive or negative) effects on the constructs of their model. However, it is also suggested that work-family conflict may have a positive effect on performance which is explained by the fact that female entrepreneurs are better at multitasking which they have practiced at home and then transfer these experiences into the business domain with greater confidence.

Wincent and Örtqvist (2009) develop a conceptual framework displaying a series of relationships among the entrepreneur's role stress and its consequences that include work-family conflict, job performance, job satisfaction, and withdrawal. They propose that the greater the entrepreneurs' role stress, the lower their job performance. Wincent and Örtqvist (2009) also assume that the inverse relationship between role stress and job performance is possible. In other words, when performance is an antecedent to role stress, the greater the entrepreneur's job performance, the lower the role stress.

Finally, one of the links established in a model presented by Loscocco and Bird (2012) also indicates that work-family balance variables may be ultimately linked to firm performance.

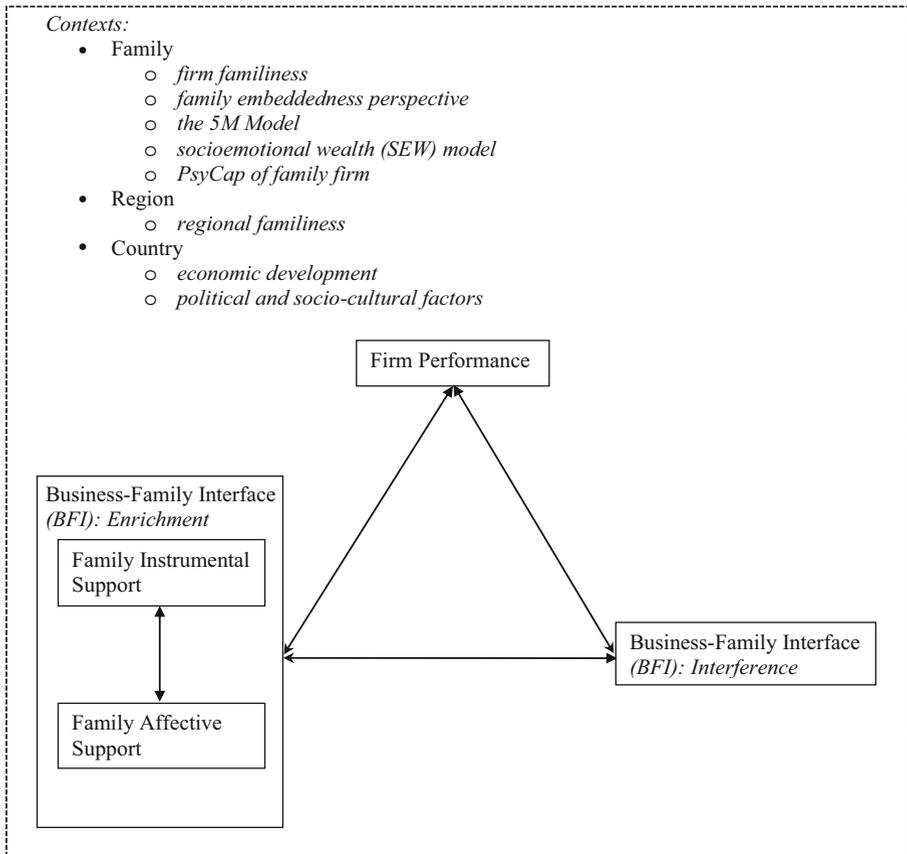
### **Links between family enrichment and firm performance**

Eddleston and Powell (2012) present a model in which instrumental and affective family enrichment and support are positively related to satisfaction with work-family balance. Powell and Eddleston (2013) show that female entrepreneurs experience benefits from both instrumental and affective family enrichment and support, while their male counterparts do not. Memili et al. (2014) investigate the relationships between family organisational PsyCap (Memili et al. 2013) and family firm innovativeness.

Hsu et al. (2016) look at the two BFI dimensions combined but in connection to entrepreneurial exit intentions rather than firm performance. Nevertheless, we consider their work relevant to the discussion on the importance of the BFI factors in women's entrepreneurship.

### **Conceptual framework – the model**

In view of the models discussed earlier, it seems that studies of the relationships inside the three-faceted structure – family interference, family enrichment, and firm performance – should involve connections within any subset of these dimensions, and in any direction. Thus, we suggest that a conceptual model linking the BFI dimensions and firm performance of women entrepreneurs should take the neutral form of a triangle (See Fig. 1.) We emphasize the relevance of the term *neutral*. Notwithstanding that the goal of an entrepreneur is success, our tripartite model does not necessarily assume a pivotal role for this construct, as typically is assumed in the literature. Rather, we posit that each vertex of the PIE triangle is equally important and can assume a role of the



**Fig. 1** The performance-interference-enrichment (PIE) model: Proposed reciprocal relationships between family enrichment, family interference, and performance of firms headed by women entrepreneurs

dependent, independent, moderator or mediator variable (Baron and Kenny 1986) in relation to the other two vertices. We follow calls (Jennings and McDougald 2007; Wincent and Ortqvist 2009) to focus *also* on the *reciprocal* connections stemming *from* the performance construct *to* the other two dimensions of the BFI. Furthermore, we make a case for including in the model *both* enrichment items, family instrumental and affective support, although clearly separated from each other. We suggest that the aggregate enrichment construct must be partitioned into these two sub-dimensions because their individual relationships with the other elements of the model may be different in the intensity *and*, in the direction of the connection, as suggested by Jennings and McDougald 2007, Wincent and Ortqvist 2009.

Most of studies summarized earlier employ standard models explaining firm performance through family interference and/or enrichment predictors. The PIE model suggests that any of the bilateral connections between the BFI dimensions and firm performance is equally relevant in any configuration. Thus, firm performance could be used also as a predictor of a BFI dimension rather than as a traditional criterion variable. Furthermore, a BFI element could be used as a moderator/mediator of the relationship between firm performance and the other BFI component, in any direction, from firm

performance to the BFI component or vice versa. Finally, the PIE model emphasizes an important role of the context (i.e., family, region, country) in which female entrepreneurs operate (Hughes et al. 2012). The context variable may be employed in any of the configurations as a predictor (independent variable, moderator or mediator) as well. We discuss the importance of context in the subsequent section.

## Conceptual framework – the context

The embeddedness of entrepreneurship in family and household contexts has been sufficiently developed through the familiness perspective (Habbershon and Williams 1999), family embeddedness perspective (Aldrich and Cliff 2003), the 5 M framework for female entrepreneurship (Brush et al. 2009), socioemotional (SEW) model (Gomez-Mejia et al. 2007) or organizational psychological capital (PsyCap) of family firms (Memili et al. 2013, 2014). On the other hand, there is still paucity of studies that would look at this issue through the lens of regional development in terms of regional familiness (Basco 2015) or country-specific peculiarities (Mari et al. 2016). For example, limited studies have established that country-specific factors may account for the variance in women entrepreneurs' behaviors and outcomes (Daniele and Geys 2016; Welsh et al. 2016a). As Simon-Moya et al. (2014) pointed out, only a few attempts have been made to explain entrepreneurial dynamics across various country settings. We posit that the PIE model's links may vary across countries that are characterized by unique economic and socio-cultural settings.

Not all connections in the PIE model have been proposed and/or tested in the extant literature. The models discussed earlier tap only into selected associations between the BFI dimensions and firm performance. However, we hope that the PIE model may guide researchers in their choices of estimation strategies involving modeling of entrepreneurial behaviors in various contexts, whether gender sensitive or not. We elaborate on this further in the conclusion. In the next section, we present the results of our estimation of various models in the selected countries. We show that these results validate some of the relationships depicted in the PIE model.

## Testing the PIE model

We collected data on the BFI dimensions and performance of firms headed by female entrepreneurs in countries at various stages of economic development with distinct socio-cultural environments and sample sizes from each country: Austria (186), Brazil (137), Canada (155), China (115), Egypt (117), Japan (128), Morocco (116), Poland (184), South Korea (100), Sudan (89), and Turkey (147). In each country, the same, self-administered, questionnaire, adapted from Hisrich et al. (2006), was utilized. A copy of the questionnaire is found in Welsh et al. (2014b). We used on-line and field collection, as well as mail and phone survey distribution. We also attended various business events and collected surveys through face-to-face interviews.

*Firm Performance* was assessed using the respondent's current annual business income. In each country, the respondents were presented with five annual income brackets from which they could choose one that best reflected their business income.

For each country, the brackets were adjusted so that the middle bracket contained the country's average annual salary. The income selections were then aggregated into two categories, coded (1) when the respondent's annual business income was selected from any of the three highest income categories (high business performance group), and (0) when the first two income brackets were selected (low business performance group).

*Family Affective Support* was measured in each country as moral (intangible) support from the family at two levels: (1) when such a support from the family member (spouse, child, parent, sibling, and/or a relative) was acknowledged by the respondent, and (0) – when it wasn't.

*Family Instrumental Support* was measured as the presence (1) or lack (0) of *Family Financial Support* and/or *Family Organisational Support*.

The *BFI Interference* dimension was determined through *gender-related personal problems* of female entrepreneurs. It was measured as (1) when a woman entrepreneur indicated the presence of any combination of emotional stress, family stress, loneliness, influence of business on family relationships, influence of business on personal relationships, poor or lack of institutional support, loneliness, time management, dealing with males, or (0) with no indication of such problems.

To examine the relationships within the PIE model, we conducted binary logistic regressions. The choice of the binary logistic regression analysis was dictated by the binary (0/1) nature of the dependent variable employed in each model. A positive relationship between the family *affective* support and performance of firms headed by female entrepreneurs was found in China (Welsh et al. 2017b) and Turkey (Welsh et al. 2017a). In Japan, the association between the enrichment dimension and firm performance was also found to be positive (Welsh et al. 2014b). In this case, however, the *total* family support (affective, financial, and organizational) was used as the enrichment construct. No relationship between the family affective support and firm performance was found for female entrepreneurs in South Korea (Welsh et al. 2014a), Morocco (Welsh et al. 2017a), and Poland (Welsh et al., ongoing research).

A significant relationship between the family *instrumental* support (financial and/or organizational) and firm performance was also found in several countries. In terms of strictly *financial* support, this relationship was found positive in Canada (Welsh and Kaciak, ongoing research) and Morocco (Welsh et al. 2017a). In Poland, using the women entrepreneur's own savings at the venture's start-up phase rather than money borrowed from family or others, was found to be positively related to firm performance (Welsh et al., ongoing research). In Brazil, however, this relationship was negative (Welsh et al. 2017d). At the same time, *organizational support* was found to be positively related to firm performance in Brazil. On the other hand, no relationship between firm performance and financial support was found in Turkey (Welsh et al. 2017a). Similarly, no relationship between family financial and organizational support and firm performance was found for Egyptian female entrepreneurs (Welsh et al. 2018).

*Gender-related personal problems* were found negatively related to firm performance in Canada (Welsh and Kaciak, ongoing research) and South Korea (Welsh et al. 2014a). However, personal problems were positively related to firm performance for female entrepreneurs in Morocco (Welsh et al. 2017a). No relationship between the two variables was found in Egypt (Welsh et al. 2018), Japan (Welsh et al. 2014b), and Turkey (Welsh et al. 2017a).

In some countries, we found significant links between the two BFI dimensions themselves (the bottom side of the PIE triangle in Fig. 1). Family moral support was negatively related to personal problems of female entrepreneurs in Sudan (Welsh et al. 2013). In Turkey, however, this relationship was positive (Welsh et al. 2016b). Family moral support was also found to positively moderate the relationship between personal problems and the performance of firms headed by female entrepreneurs in South Korea (Welsh et al. 2014a). In Japan, a mirror image of the South Korean results was found (Welsh et al. 2014b). It was established that personal problems negatively moderate the relationship between the family total support (i.e., moral, financial, organizational) and firm performance. In Morocco, personal problems are negatively related with family organizational support (Welsh et al. 2017c). In our ongoing research of female entrepreneurs in Austria, we find that the relationship between family financial support and firm performance is mediated by the woman entrepreneur's personal problems. We also find that the relationship between family affective support and firm performance is mediated by the interference element.

Our previous research focused, in part, on direct effects of the country context on the relationships among the BFI dimensions and firm performance. For example, Welsh et al. (2016a) were one of the first to consider family support (i.e., moral, financial, organizational) and personal problems of female entrepreneurs in the context of the country's level of economic development. Also, Welsh et al. (2017a) showed, based on data from Morocco and Turkey, that the country's level of economic development moderates the relationship between the BFI dimensions (the family instrumental and affective support, and the interference element) and firm performance. Similarly, in our PIE model, we assign an important role to circumstances in which female entrepreneurs operate in various countries.

## Implementation of the PIE model

Estimation of all possible relationships within the PIE triangle requires a longitudinal research design in which temporal relationships between the variables of interest are carefully established (Kline 2015). Following such a design, the BFI enrichment and interference components would first be measured as antecedents of firm performance. Then, at a certain future point in time, firm performance itself would be measured and analysed as a criterion variable based on the BFI constructs. Finally, these BFI elements would be measured again for the same respondents, at a future point in time. Based on such data, one could then estimate not only standard models with firm performance as the variable dependent on the BFI dimensions but also the reciprocal models with the BFI dimensions as the outcome variables based on firm performance.

Unfortunately, such a longitudinal design is not readily available to most researchers due to time and cost constraints that plague studies of women's entrepreneurship at the individual level of measurement. In view of these impediments, we propose the following adaptation of a standard cross-sectional design as a substitute now for the longitudinal approach.

Instead of performing consecutive stages of the longitudinal design, separated in real time, we propose to relate questions measuring the BFI dimensions and firm performance within a cross-sectional design at different points in time. Specifically, the

survey instrument instructs the respondent to consider three points in time: the launch of the business venture, the mid-term of the business venture, and the current time. Regarding the venture start, one would measure only the two BFI dimensions—enrichment and interference. We label these two constructs ENR1 and INT1, respectively. Next, one would ask the respondent to focus on the mid-stage of her business venture, and measure the same two BFI elements again (ENR2, INT2), as well as firm performance (FP1) at that time. Finally, the same questions would be repeated regarding the current. Thus, the enrichment and interference components as well as firm performance would be measured as ENR3, INT3, and FP2, respectively.

This temporal separation of the BFI dimensions and firm performance would capture family–firm relations, timewise, along any side of the triangle in any direction and configuration. For example, one could move along the right-hand side of the triangle downward from FP1 to INT3 and accomplish what so far has not been explicated in the literature: to model interference through firm performance. Similarly, one could move down along the left-hand side of the triangle and model enrichment (ENR3) through the same FP1. Alternatively, one could envisage a mediation analysis by linking FP1 through INT3 to ENR3, with INT3 serving as the mediator. Or, as we mentioned earlier when introducing Shelton (2006)'s model, family support might serve as a mediator between work–family conflict and firm performance. Our PIE-related approach would permit such analysis. In this case, one would estimate a mediation model set up as a sequence  $INT1 \rightarrow ENR2 \rightarrow FP2$ , with ENR2 serving as the mediator.

Our idea of a temporal allocation of the questions within a cross-sectional survey instrument is not new. It is based on similar approaches where the variables have been measured at different points in time in cross-sectional studies involving mediation analysis (Laspita et al. 2012; Stenholm and Renko 2016). The PIE triangle, when submerged in such three-period time horizon, may guide researchers through any kind of the relationships within its tripartite structure.

## Discussion and conclusion

Our past and ongoing research has tested and validated several associations in the PIE model. We found evidence of links between the family affective and organizational support and firm performance (the left-hand side of the triangle in Fig. 1). We also established a plausible connection between gender-related personal problems (the interference facet of the BFI) and firm performance (the triangle's right-hand side in Fig. 1). We provided some support as to the existence of the relationship between the two BFI enrichment and interference components, either directly affecting each other or through moderation/mediation dependence (the triangle's bottom side in Fig. 1). Finally, we also reported possible influences of the country context on the relationships among the BFI dimensions and firm performance.

We also offer an approach to studying the reverse links from firm performance to the BFI constructs within the PIE triangle. For this purpose, we suggest a modification of a standard, cross-sectional, design that would allow various analyses (including mediation) to be performed based on questions related to different points in time. As we mentioned earlier, it is plausible that firm performance may affect the BFI enrichment and interference dimensions. For example, female entrepreneurs who achieve visible

success in their business endeavors may start being perceived by their family members differently. In some societies, this perception may be positive, in other milieus negative, thus affecting the level of the family support. This may contribute to changing levels of gender-related personal problems leading to several moderator/mediator scenarios. Likewise, a movement along and downward the right-hand side of the PIE triangle may also be envisaged. Personal problems may be affected positively or negatively, depending on the country context, and based upon the level of entrepreneurial success achieved. Subsequently, these problems may exercise a moderating/mediating influence on the relationship from firm performance to the enrichment component of the BFI.

Finally, based on our findings, we argue that no single and universal model of female entrepreneurship can be envisaged. Our discussion shows that the same links between the same variables may become completely opposite in terms of the sign of direction (positive or negative) depending on the country involved. Thus, researchers should take into consideration the new boundary conditions that we have identified, i.e., that the country context matters when conducting research on women's entrepreneurship. Country of origin researchers should always be part of the team to better interpret results considering the country context. We advise great caution when adopting results from studies conducted in other countries as the rationale for someone's hypotheses formulated for another setting. What is valid in one country will not necessarily be true in another system. We argue that the inductive approach to research from data to theory (Locke 2007) may sometimes be a safer approach to adopt. Only when consistent results emerge from a group of countries similar across many criteria, then a higher level of confidence exists to use the findings as the foundation for the deductively hypothesized relationships. We argue that such an approach would be more beneficial in the women's entrepreneurship research conducted in various countries around the world.

## References

- Aldrich, H., & Cliff, J. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, *18*, 573–596.
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Basco, R. (2015). Family business and regional development—A theoretical model of regional familiness. *Journal of Family Business Strategy*, *6*, 259–271.
- Brush, C., de Bruin, A., & Welter, F. (2009). A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, *1*(1), 8–24.
- Daniele, G., & Geys, B. (2016). Family ties and socio-economic outcomes in high vs low income countries. *The Journal of Development Studies*, *52*(6), 813–823.
- Eddleston, K., & Powell, G. (2012). Nurturing entrepreneurs' work-family balance: A gendered perspective. *Entrepreneurship: Theory & Practice*, *36*, 513–541.
- Gomez-Mejia, L., Haynes, K., Nuñez-Nickel, M., Jacobson, K., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, *52*, 106–137.
- Greenhaus, J., & Powell, G. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, *31*(1), 72–92.

- Habbershon, T., & Williams, M. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review*, 12(1), 1–25.
- Hisrich, R., Bowser, K., & Smarsh, L. (2006). Women entrepreneurs in Ukraine. *International Journal of Entrepreneurship and Small Business*, 3, 207–221.
- Hsu, D., Wiklund, J., Anderson, S., & Coffey, B. (2016). Entrepreneurial exit intentions and the business-family interface. *Journal of Business Venturing*, 31, 613–627.
- Hughes, K., Jennings, J., Brush, C., Carter, S., & Welter, F. (2012). Extending women's entrepreneurship research in new directions. *Entrepreneurship: Theory & Practice*, 36, 429–441.
- Jennings, J., & McDougald, M. (2007). Work-family interface experiences and coping strategies: Implications for entrepreneurship research and practice. *Academy of Management Review*, 32(3), 747–760.
- Kline, R. (2015). The mediation myth. *Basic and Applied Social Psychology*, 37(4), 202–213.
- Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27, 414–435.
- Locke, E. (2007). The case for inductive theory building. *Journal of Management*, 33(6), 867–890.
- Loscocco, K., & Bird, S. (2012). Gendered paths: Why women lag men in small business success. *Work and Occupations*, 39(2), 183–219.
- Mari, M., Poggesi, S., & De Vita, L. (2016). Family embeddedness and business performance: Evidences from women-owned firms. *Management Decision*, 54, 476–500.
- Memili, E., Welsh, D. H. B., & Luthans, F. (2013). Going beyond research on goal setting: A proposed role for organizational psychological capital of family firms. *Entrepreneurship: Theory & Practice*, 37(6), 1289–1296.
- Memili, E., Welsh, D. H. B., & Kaciak, E. (2014). Organizational psychological capital of family franchise firms through the lens of the leader-member exchange theory. *Journal of Leadership and Organizational Studies*, 21(2), 200–209.
- Peris-Ortiz, M., Rueda-Armengot, C., & Osorio, D. (2012). Women in business: Entrepreneurship, ethics and efficiency. *International Entrepreneurship and Management Journal*, 8, 343–354.
- Powell, G., & Eddleston, K. (2013). Linking family-to-business enrichment and support to entrepreneurial success: Do female and male entrepreneurs experience different outcomes? *Journal of Business Venturing*, 28(2), 261–280.
- Rothbard, N. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46(4), 655–684.
- Shelton, L. (2006). Female entrepreneurs, work-family conflict, and venture performance: New insights into the work-family interface. *Journal of Small Business Management*, 44(2), 285–297.
- Simon-Moya, V., Revuelto-Taboada, L., & Guerrero, R. (2014). Institutional and economic drivers of entrepreneurship: An international perspective. *Journal of Business Research*, 67, 715–721.
- Stenholm, P., & Renko, M. (2016). Passionate bricoleurs and new venture survival. *Journal of Business Venturing*, 31, 595–611.
- Welsh, D. H. B., Memili, E., Kaciak, E., & Ahmed, S. (2013). Sudanese women entrepreneurs. *Journal of Developmental Entrepreneurship*, 18(2), 1–18.
- Welsh, D. H. B., Kim, G., Memili, E., & Kaciak, E. (2014a). The influence of family moral support and personal problems on firm performance: The case of Korean women entrepreneurs. *Journal of Developmental Entrepreneurship*, 19(3), 1–17.
- Welsh, D. H. B., Memili, E., Kaciak, E., & Ochi, M. (2014b). Japanese women entrepreneurs: Implications for family firms. *Journal of Small Business Management*, 52(2), 286–305.
- Welsh, D. H. B., Kaciak, E., & Thongpapanl, N. (2016a). Influence of stages of economic development on women entrepreneurs' startups. *Journal of Business Research*, 69(11), 4933–4940.
- Welsh, D. H. B., Memili, E., & Kaciak, E. (2016b). An empirical analysis of the impact of family moral support on Turkish women entrepreneurs. *Journal of Innovation and Knowledge*, 1(1), 3–12.
- Welsh, D.H.B., Kaciak, E., Memili, E., & Minialai, C. (2017a). Business-family interface and the performance of women entrepreneurs: The moderating effect of economic development. *International Journal of Emerging Markets*, (in press).
- Welsh, D. H. B., Kaciak, E., Memili, E., & Zhou, Q. (2017b). Work-family balance and marketing capabilities as determinants of Chinese women entrepreneurs' firm performance. *Journal of Global Marketing*, 30(3), 174–191.
- Welsh, D. H. B., Kaciak, E., & Minialai, C. (2017c). The influence of perceived management skills and perceived gender discrimination in launch decisions by women entrepreneurs. *International Entrepreneurship and Management Journal*, 13(1), 1–33.

- Welsh, D.H.B., Kaciak, E., Trimi, S., & Mainardes, E. (2017d). Women entrepreneurs and family firm heterogeneity: Evidence from an emerging economy. *Group Decision & Negotiation*. Published online 29 August 2017, 1–21.
- Welsh, D.H.B., Kaciak, E., & Shamah, R. (2018). Determinants of women entrepreneurs' firm performance in a hostile environment. *Journal of Business Research* (forthcoming).
- Wincent, J., & Örtqvist, D. (2009). Role stress and entrepreneurship research. *International Entrepreneurship and Management Journal*, 5, 1–22.