

Revista de Cercetare si Interventie Sociala

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

EFFECTS OF FAMILY CONFLICT AND SOCIAL SUPPORT ON INTENTION TO STAY OF EXPATRIATES IN MEDICAL TECHNOLOGY INDUSTRY

Shu-Ya CHANG, Chan-Fu CHUANG, Huan-Chang LIN, Hsiang-Chen HSU

Revista de cercetare și intervenție socială, 2021, vol. 75, pp. 104-114

https://doi.org/10.33788/rcis.75.6

Published by: Expert Projects Publishing House



On behalf of: "Alexandru Ioan Cuza" University, Department of Sociology and Social Work and HoltIS Association

Effects of Family Conflict and Social Support on Intention to Stay of Expatriates in Medical Technology Industry

Shu-Ya CHANG¹, Chan-Fu CHUANG², Huan-Chang LIN³, Hsiang-Chen HSU⁴

Abstract

Expatriates, during expatriation, would appear inadaptable feelings on work, life, and diet in different environment. Besides, expatriates, in medical technology industry, leaving home might neglect the family to result in imbalance between work and family. In this case, work-family conflict reveals the importance on expatriates. Expatriates in medical technology industry would appear psychosocial stress and conflict between work and life due to expatriation. Taking expatriates' supervisors and expatriates in medical technology industry in southern Taiwan as the research object, total 360 copies of questionnaire are distributed, and the 278 valid copies are retrieved, with the retrieval rate 77%. The research results show that 1.social support presents negative and significant effects on work-family conflict, 2.work-family conflict reveals negative and remarkable effects on intention to stay, and 3.social support appears positive effects on intention to stay. According to the results to propose suggestions, it is expected to provide healthy workplace in medical technology industry to improve expatriates' work-family conflict and turnover.

Keywords: medical technology industry, expatriates, family conflict, social support, intention to stay.

Department of Industrial Management, I-Shou University, Kaohsiung, TAIWAN, R.O.C E-mail: r969@ms76.hinet.net (Corresponding author)

² Department of Marketing & Distribution Management National Pingtung University, Pingtung, TAIWAN, R.O.C. E-mail: chan-fu@yahoo.com.tw

³ Department of Industrial Management, I-Shou University, TAIWAN R.O.C. E-mail: rocky@isu.edu.tw

⁴ Department of Industrial Management, I-Shou University, Kaohsiung, TAIWAN, R.O.C. E-mail: hchsu@isu.edu.tw

Introduction

Along with the 21st century, the socioeconomic status is rapidly transformed in various countries. A lot of enterprises move towards international investment. In order to comply with the world trend, enterprises also rapidly change from early material processing and industrialization into information technology and the business systems are developed towards free economy and multinational enterprises. The environment and competitors encountered by enterprises are no longer restricted to domestic enterprises or single area or country. To acquire the maximal profits, enterprises establish subsidiary companies and search business opportunities as well as customer resource and labor resource with profits in other areas for new opportunities, aiming to expand the business territory. Under the situation, an enterprise would first encounter the problem of selecting suitable talents to maintain the business operation of subsidiary companies. The commonest way is to expatriate experienced employees in the parent company to the subsidiary companies to assist in the task execution as well as precede management for the parent company. The business of medical technology industry presents huge changes; the changes and fierce competition in the business environment require medical technology industry proposing new thoughts for business strategies, where the weight of "human resource" is largely enhanced and the human resource development cost is relatively high. To pursue higher operational performance, internal customers should be satisfied for providing high-quality products and service to further satisfy customers.

The fierce competition among enterprises and the rapid development of new technologies have relative advantage and manpower of countries become diversified. Enterprises have to change old business models and increase corporate competitiveness with new thoughts to create more profits for the sustainable development. A lot of enterprises therefore establish branches to acquire higher product market share and profits. As a result, many enterprises expand market economy outwards. The operation and communication of branches have to go through expatriates, who are regarded as the representatives of the parent companies, to help corporate business and coordinate the allocation of resources in the enterprises. To avoid loss caused by expatriation failure, expatriates' workfamily conflict and job adaptation problems should be emphasized, e.g. cultural variation, life or work pressure encountered by expatriates. Accordingly, expatriates might appear inadaptable feelings on work, life, and diet in different environment and could not achieve the predicted performance. Expatriates therefore might end the expatriation in advance or choose turnover. It would be a major loss for the company and a turning point in expatriates' career. In this case, work-family conflict is extremely important for expatriates. Expatriates in medical technology industry might appear psychosocial stress and family-work conflict. For this reason, this study tends to discuss the effect of work-family conflict and social support on intention to stay of expatriates in medical technology industry. It is

expected to help establish healthy working environment to improve expatriates' work-family conflict and turnover problems.

Literature review

Hu et al. (2019) explained society as social environment connecting with individuals and support as emotional and instrumental support or provision of support through social network to have people feel being loved, concerned, and respected. Wegman et al. (2018) considered that an individual acquired distinct assistance from others' social network; supporters provided emotional and essential assistance through social network exchange for the supported receiving assistance. In other words, an individual received support through the connection with other individuals, groups, and society as well as psychological, material, and financial assistance through social network. Giorgi et al. (2019) mentioned that an individual could cope with threats or challenges through others' direct or indirect social exchange network; when facing pressure, an individual could reduce negative effect resulted from pressure through support, love, and belongingness from others, groups, and organizations, including emotional and instrumental support. Andrade (2018) regarded supervisor support as a resource for expatriates dealing with workfamily conflict. Expatriates received supervisor support in workplace might appear low work-family conflict. International research indicated that supervisor support would reduce expatriates' work-family conflict. Shim & Park (2019) stated that expatriates receiving supervisor support would show lower work-family conflict. In regard to the perceived work-family conflict to the needs and response to social support, Sarwar & Zeeshan (2019) discovered that supervisor and spouse support was a primary factor in solving work-family conflict. Eva et al. (2019) pointed out family as the major support of an individual. Lin et al. (2018) discovered that family support could reduce work-family conflict, and a career woman with the husband's support could reduce the role conflict in the employment. The following hypothesis is therefore proposed in this study.

H1: Social support shows negative and significant effects on work-family conflict.

In the research on work-family conflict, Hsu & Lin (2018) explained work-family conflict as the pressure of connection among roles; when a role hindered the effective participation of another role, the incompatible feeling could result in work-family conflict. Pataki-Bittó (2018) studied individual work-family conflict in an organization, measured the interference effect of individual life role value on work-family conflict, and proposed two types of work-family conflict, i.e. effects of work role conflict, working hour requirement, and job involvement on family,

as work-family conflict (WFC), and effects of family role conflict, family time requirement, and family involvement on work, as family-work conflict (FWC). Germeys & De Gieter (2018) pointed out work-family conflict caused by working pressure as work-family conflict (WFC) and work-family conflict resulted from family pressure as family-work conflict (FWC). Research discovered that, in either type of work-family conflict, people with high negative affect could not cope with family pressure, when simultaneously facing work and family pressure, and would affect the quality of work. In this case, people with high negative affect should deal with pressure with self-regulation, which was regarded as the most effective solution. Helzer & Kim (2019) mentioned that an expatriate, when considering the difficulty in dealing with work-family conflict, might choose to leave the company to protect the limited resources; therefore, work-family conflict was an important variable to enhance expatriates' intention to stay. Bennett et al. (2018) pointed out some empirical research on work-family conflict towards expatriates' intention to stay, which reported the notably negative effects of workfamily conflict on intention to stay. Lambert et al. (2019) discovered, from three different samples, that higher work-family conflict would result in sales clerks' lower intention to stay. Choi et al. (2018) revealed that work-family conflict would induce expatriates' turnover intention. Accordingly, it is assumed in this study that H2: Work-family conflict reveals negative and remarkable effects on intention to stay.

Cheng et al. (2018) defined intention to stay as expatriates' definite will to continuously work for the enterprises. Tsai et al. (2019) pointed out intention to stay as the performance of workers' job satisfaction to further appear turnover or retention idea and behavior. Tseng et al. (2019) stated that an organization, in addition to absorbing external talents, had to consolidate internal talents, and reducing expatriates' turnover rate as the pursued goal. Intention to stay was classified into following types. (1) Functional retention: An enterprise assessing workers' excellent performance and development potential expected to retain the human capital in the enterprise. (2) Non-functional retention: An enterprise assessed workers' bad performance and adopted other methods for the improvement, e.g. appraisal interview, on-job training. (3) Organizational retention: Workers continuously worked in the same enterprise. (4) Professional retention: Workers continuously worked in the professional field to extend the expertise. (5) Voluntary retention: Workers voluntarily chose to continuously work for the enterprise. (6) Non-voluntary retention: Workers, being restricted to external factors, chose to continuously work for the enterprise. Meier & Cho (2018) studied cram school teachers and indicated that the more social support would cohere to belongingness with relatively higher intention to stay. Lin & Lin (2019) studied elementary school teachers with administrative duties and pointed out the higher social support received would relatively present higher intention to stay. Leng *et al.* (2018) mentioned that the positive benefits resulted from well-applying various supports could reduce distinct pressure and enhance intention to stay. As a result, it is assumed in this study that

H3: Social support presents positive effects on intention to stay.

Methodology

Indicators

- 1. Work-family conflict. Referring to Liao et al. (2019), the following dimensions are proposed for work-family conflict in this study: (1.1) Work factor: The possible factors contain workload, working hour, working pressure. Workload refers to pressure caused by work requirements exceeding individual burden on time and strength; (1.2) Family factor: Family factors include number of children, parental responsibility, family needs, role conflict, time requirement, parents' request, and number of infants and family members being cared.
- 2. Social support. Referring to Hsu et al. (2019), the following dimensions are proposed for social support in this study: (2.1) Instrumental support: support for daily affairs, support for care, material support, and support for going out; (2.2) Emotional support: referring to asking the case whether there is someone to listen to the thought, whether there is some to take care of him/her, and whether there is someone to respect the opinions when making decisions.
- 3. Intention to stay. Referring to Chen & Huang (2019), retention is regarded as the positive side of turnover, and factors in turnover and retention are mutually matched. From above theories of turnover, factors in intention to stay are classified into three dimensions: (3.1) Internal factor: job satisfaction, job characteristics, role conflict, benefits, organizational climate, and promotion & development; (3.2) External factor: unemployment rate, employment opportunity, and company's financial condition; (3.3) Personal factor: An individual comprehensively analyzes and balances personal interests, preference, ability, and characteristics, combines time characteristics, ensures the optimal career goal according to personal vocational aptitude, and makes effective arrangement to realize the goal.

Research sample and object

Along with the aging generation in the world, needs and challenge in aging society are enhancing, and many chronic diseases and degeneration problems are increasing, such as teeth, bone, or spine degeneration, to have orthopedics and implant products become the product with the highest growth rate in global medical device and drive the development of minimally invasive surgery medical device involves in cross-

domain integration technology, covering device mechanism design, image technology, special material development, software development technology, and system integration. Aiming at expatriates' supervisors and employees in medical technology industry in southern Taiwan, total 360 copies of questionnaire are distributed, and 278 valid copies are retrieved, with the retrieval rate 77%.

Reliability and validity test

Confirmatory Factor Analysis (CFA) is an important part in SEM that the measurement model should be tested before the two-stage modification during CFA. When the measurement model fit is acceptable, the second-step SEM is preceded. The dimension analysis with CFA in this study shows the factor loading in .65~.86, the composite reliability in .75~.90, and the average variance extracted in .60~.70, conforming to the standards of 1.factor loading higher than .5, 2.composite reliability higher than .6, and 3.average variance extracted higher than .5. The dimensions therefore present convergent validity.

Results

Structural model analysis

Structural model analysis covers goodness-of-fit analysis and overall explanatory power of research model. Referring to scholars' opinions, 7 numerical indicators are applied in this study to test overall model fit, including chi-square (χ 2) test, χ 2-degree of freedom ratio, goodness of fit index, adjusted goodness of fit index, root-mean-square error, comparative fit index, comparative hypothetical model, and independent model chi-square difference. The overall result analysis is organized in *Table 1*.

Taking $\chi 2$ -degree of freedom ratio to test model fit, the ratio is the smaller the better; the $\chi 2$ -degree of freedom ratio of this research model appears < 3 (1.62). GFI and AGFI are better close to 1 and do not have absolute standards to judge the model fit, and, GFI > 0.9 and AGFI > 0.8 are acceptable; GFI and AGFI of this research model show 0.95 and 0.87, respectively. RMSEA in 0.05-0.08 reveals good model with reasonable fit; RMSEA of this research model appears .04. The allowable standard of CFI is >0.9; CFI of this research model reveals 0.93. NFI should be at least higher than 0.9; NFI of this research model shows 0.90. Overall speaking, goodness-of-fit indices conform to the standards, revealing the acceptable research result. The sample data of this study therefore could be used for explaining observation data.

From above overall model fit indices, the model structured in this study presents favorable fit with observation data, revealing that the theoretical model could fully explain observation data. In this case, correlation coefficients of social support

towards work-family conflict and intention to stay and the coefficient estimate could be further understood after the model fit test.

Fit Indices	Allowable range	This research model	Model fit judgment
χ2 (Chi-square)	The smaller the better	19.27	
χ2-degree of freedom ratio	<3	1.62	match
GFI	>0.9	0.95	match
AGFI	>0.8	0.87	match
RMSEA	<0.08	0.04	match

0.93

0.90

match

match

>0.9

>0.9

Table 1. Research model fit analysis

CFI

NFI

The research data are organized in *Table 2*. The analysis result shows that two factors of social support (work factor, family factor) could significantly explain social support (t>1.96, p<0.05), two factors of work-family conflict (instrumental support, emotional support) could remarkably explain work-family conflict (t>1.96, p<0.05), and three factors of intention to stay (internal factor, external factor, personal factor) could notably explain intention to stay (t>1.96, p<0.05). Apparently, the overall research model presents good preliminary fit.

In terms of internal fit, social support shows negative and significant correlations with work-family conflict (-0.86, p <0.01), work-family conflict reveals negative and remarkable correlations with intention to stay (-0.83, p <0.01), and social support appears positive and notable correlations with intention to stay (0.88, p <0.01) that H1, H2, and H3 are supported.

Table 2. Overall linear structural model analysis result					
Evaluation item	parameter/evaluation standard		result		
Preliminary fit	work-family conflict	instrumental support	0.73**		
		emotional support	0.72**		
	social support	work factor	0.70*		
		family factor	0.68*		
	intention to stay	internal factor	0.76**		
		external factor	0.71*		
		personal factor	0.77**		

Table 2. Overall linear structural model analysis result

	social support→work-family conflict	-0.86***
Internal fit	work-family conflict→intention to stay	-0.83***
	social support→intention to stay	0.88***

Note: * stands for p < 0.05, ** for p < 0.01, *** for p < 0.001.

Discussion

This study allows medical technology industry understanding expatriates' feelings about work-family conflict, source of expatriates' intention to stay, and the strength of intention to stay. The research results show that medical technology industry, when offering assistance or welfare to expatriates, could not simply consider expatriates' work or family, but should think of both sides, take expatriates' role conflict between work and family into account, and provide proper and appropriate measures to further enhance expatriates' intention to stay. Medical technology industry giving clear goals to expatriates could encourage expatriates, reduce pressure, and have expatriates clearly understand organizational expectation. The feedback of goal achievement would have expatriates more clearly realize the actual performance and reduce uncertainties to reduce expatriates' frustration and role confusion. Role pressure more or less comes from expatriates' uncertainties of goal, expectation, and evaluation method. For this reason, departments in medical technology industry should establish definite systems, supervisors should open the channel for expatriates' communication, and listen to expatriates' opinions to increase the job control and reduce role pressure. Managers in medical technology industry could enhance expatriates' participation and increase the formal communication with expatriates to reduce role confusion and role conflict, enhance expatriates' loyalty and coherence, and decrease turnover rate.

Conclusion

The research results reveal that expatriates' work-family conflict would actually affect the intention to stay. Unreasonable procedures appear in an organization would affect the expatriates' turnover intention. When such expatriates could not balance work and family, the chance to leave the organization would be largely enhanced. In this case, supervisors have to pay attention to the reasonability of the organization as well as concern about expatriates' family to really understand the reason for turnover. Social support could help expatriates in medical technology industry; the enhancing willingness and attitudes toward expatriation would benefit the entire organization. Medical technology industry therefore could enhance the provision of social support for expatriates, such as mutual assistance and

encouragement among colleagues, supervisor-subordinate interview, and provision of assistance or suggestions. An organization could enhance the support for expatriates through listening, concern, provision of real assistance, and giving advice or opinions, such as establishing training courses to increase the skills to listen to and concern about colleagues or subordinates, providing colleagues or subordinates with real assistance, and giving advice, set problem consultation office or similar counseling center to offer assistance for expatriates, hold regular gathering and activity in the organization, increase the opportunities in mutual encouragement and assistance among members with department, work group, or teamwork, and build the organizational culture for mutual encouragement and support among internal members.

Recommendations

From the research results and findings, following practice suggestions are proposed in this study.

- 1) Expatriates in medical technology industry have to recognize the role conflict in workplace and family as well as the expectation of supervisors, spouse, and themselves. They should first understand the time and energy needs for work and family and then live within the means, without putting too much requirements on themselves, so as to slow down role conflict and reduce the possibility of unemployment caused by role conflict.
- 2) Supervisor support in medical technology industry could result in lower work-family conflict of expatriates. Timely offering assistance and concern, improving working environment and facilities, providing software/hardware for operation, reinforcing interpersonal interaction with cadres, and keeping good interaction climate would enhance expatriates' identity to the work and fluently completing work, effectively lead subordinates to complete tasks, and further reduce the conflict in the family role to reduce the working pressure overflowing the family.
- 3) Retention and turnover are two sides of a body. Medical technology industry could respond to expatriate's position with required personality to 1.ensure the operation of the position and 2.reduce turnover rate. Moreover, right person in the right place has been an important issue for each enterprise. Medical technology industry seeks for specialists through position requirements and practice evaluation to ensure workers presenting the expertise. Meanwhile, the reinforcement of interpersonal network and having workers perceive concern and care through concern, encouragement, and assistance in either inside or outside the organization are the keys to enhance intention to stay.
- 4) People are the source of the continuous development of medical technology industry. By creating the culture, vision, communication, and learning, expatriates in medical technology industry would be willing to fully engage in the

enterprise. It would not simply lead personal progress of expatriates, but is the leap of the system development of medical technology industry. For this reason, talents are the foundation of stable operation of an enterprise in medical technology industry and would create infinite possibilities in the future.

References

- Andrade, C. (2018). Professional work load and work-to-school conflict in working students: The mediating effect of psychological detachment from work. Psychology, Society, & Education, 10(2), 215-224. DOI: 10.25115/psye.v10i2.1777
- Bennett, A. A., Bakker, A. B., & Field, J. G. (2018). Recovery from work-related effort: A meta-analysis. Journal of Organizational Behavior, 39(3), 262-275. DOI: 10.1002/job.2217
- Chen, C. H., & Huang, C. H. (2019). Effects of working pressure and response behavior on life satisfaction of delivery drivers. Fu Jen Management Review, 26(2), 43-78.
- Cheng, S. Y., Lin, P. C., Chang, Y. K., Lin, Y. K., Lee, P. H., & Chen, S. R. (2018). Sleep quality mediates the relationship between work-family conflicts and the self-perceived health status among hospital nurses. Journal of Nursing Management, 27(2), 381-387. DOI: 10.1111/jonm.12694
- Choi, Y. E., Cho, E., Jung, H. J., & Sohn, Y. W. (2018). Calling as a predictor of life satisfaction: the roles of psychological capital, work-family enrichment, and boundary management strategy. Journal of Career Assessment, 26(4), 567-582. DOI: 10.1177/1069072717723092
- Eva, N., Robin, M., Sendjaya, S., Dierendonck, D. V., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. The Leardership Quarterly, 30, 111-132. DOI: 10.1016/j.leagua.2018.07.004
- Germeys, L., & De Gieter, S. (2018). A diary study on the role of psychological detachment in the spillover of self-control demands to employees' ego depletion and the crossover to their partner. European Journal of Work and Organizational Psychology, 27(1), 140-152. DOI: 10.1080/1359432X.2017.1417259
- Giorgi, G., Arcangeli, G., Ariza-Montes, A., Rapisarda, V., & Mucci, N. (2019). Work-related stress in the Italian banking population and its association with recovery experience. International Journal of Occupational Medicine and Environmental Health, 32(2), 1-11. DOI: 10.13075/ijomeh.1896.01333
- Helzer, E. G., & Kim, S. H. (2019). Creativity of workplace well-being. Academy of Management Perspectives, 33(2), 134-147. DOI: 10.5465/amp.2016.0141
- Hsu, Y. Y., & Lin, C. H. (2018). Impact of rotating night shift work on physical health among nursing staff. Yuan-Yuan Nursing, 12(2), 58-67. DOI: 10.6530/YYN/201807_12(2).0007
- Hsu, S. W., Wang, Paohsi., Huang, S. Y., Lou, M. G., & Liang, Y. (2019). Does employees' job involvement matter? study of organizational climate moderating effect on job involvement, satisfaction and organizational commitment. Journal of Global Technology Management and Education. 8(2), 38-69. DOI: 10.6617/GTME.201912 8(3).0003
- Hu, Y. C., Lin, P. C., Chang, Y. K., Hou, W. H., Kuo, S. Y., Lin, Y. M.,...& Chen, S. R. (2019). Work stress and work-family conflict contribute to nurse managers' job

- burnout from a correlational study. New Taipei Nursing Journal, 21(2), 27-38. DOI: 10.6540/NTJN.201909 21(2).0003
- Lambert, E. G., Qureshi, H., Keena, L. D., Frank, J., & Hogan, N. L. (2019). Exploring the link between work-family conflict and job burnout among Indian police officers. The Police Journal, 92(1), 35-55. DOI: 10.1177/0032258X18761285
- Leng, Y. C., Liu, D., Kao, C. C., Yang, S. Y., & Huang, P. L. (2018). Nurse retention: Viewpoints on working conditions and work-life balance. Leadership Nursing, 19(2), 12–23. DOI: 10.29494/LN.201806_19(2).0002
- Liao, E. Y., Lau, V. P., Hui, R. T. Y., & Kong, K. H. (2019). A resource-based perspective on work-family conflict: meta-analytical findings. Career Development International, 24(1), 37-73. DOI: 10.1108/CDI-12-2017-0236
- Lin, L. C., Lee, C. W., Hung, H. C., & Shih, N. M. (2018). The influence of people's cultural activities participation and sense of gain on the life satisfaction. Leisure & Society Research, 17, 75-84.
- Lin, T. Y., & Lin, H. C. (2019). Exploring the impact of clinical uurses job stress and self-efficacy on job satisfaction. Journal of Technology & Engineering Education, 5(4), 92-116. DOI: 10.6587/JTHRE.201906_5(4).0005
- Meier, L. L., & Cho, E. (2018). Work stressors and partner social undermining: Comparing negative affect and psychological detachment as mechanisms. Journal of Occupational Health Psychology, 1-14. DOI: 10.1037/ocp0000120
- Pataki-Bittó, F. (2018). Interruptions at Work from the Point of View of IT Professionals. Periodica Polytechnica Social and Management Sciences, 26(2), 121-129. DOI: 10.3311/PPso.11857
- Sarwar, F., & Zeeshan, T. (2019). Bidirectional Work Family Conflict of Expatriates: Framework of Antecedents and Moderators. Journal of Research in Psychology, 1(1), 1-8. DOI: 10.31580/jrp.v1i1.518
- Shim, D. C., & Park, H. H. (2019). Public service motivation in a work group: Role of ethical climate and servant leadership. Public Personnel Management, 48(2), 203-225. DOI: 10.1177/0091026018806013
- Tsai, P. C., Lin, J. H., & Hsu, H. C. (2019). Exploring sleep quality, spiritual health, and related factors in nursesin the intensive care unit. The Journal of Nursing, 66(4), 49-59. DOI: 10.6224/JN.201908_66(4).07
- Tseng, H. M., Chen, H. L., Y. O., & Huang, W. T. (2019). Factors related to nurses' intentions to stay: The interaction between nurses' work environment and personality traits. Taiwan Gong Gong Wei Sheng Za Zhi, 38(1), 42-52. DOI: 10.6288/TJPH.201902 38(1).107082
- Wegman, L. A., Hoffman, B. J., Carter, N. T., Twenge, J. M., & Guenole, N. (2018). Placing job characteristics in context: Cross-temporal meta-analysis of changes in job characteristics since 1975. Journal of Management, 44(1), 352-386. DOI: 10.1177/0149206316654545