



Structural equation modelling-An analysis on roles played by and conflicts faced by working Women

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Abstract

The working young woman of the present day on entering the work after marriage has challenges like pregnancy leading to maternity and the ever demanding role of being a mother to her children. Added on to this is the responsibility of looking after the elderly like the parents-in law and her own parents. This has resulted in a situation where women entering the workforce today are laying more emphasis on the importance of work and family balance; hence there is a need to examine the phenomenon of the work-family conflict of Indian working women. The time constraints women face along with other challenges creates conflicts in their roles, as care providers for children and as well as providers of family income, and this has serious implications on the welfare of their children. So to analysis the level of conflict and how it affects the growth children the study have been attempted.

Keywords: work family conflict, family work conflict, parenting, child growth

1. Introduction

Women of the present day consider career as an integral part of their identity. Owing to the importance given on women’s education, more and more young women from all walks of life graduate from various career oriented degrees every year. Among this homogenous population of women graduates, considerable number of women enters the population of work force. While some women choose very challenging careers like that of pilots, scientists, engineers etc., many of them choose teaching as their profession. This is mainly because women seem to have a passion for teaching and secondly for its flexible work culture. But still women have not subtracted any of her responsibilities due to her employment, so there is a need for analysis of how she manages her various roles.

2. Objectives of the study

- To develop a model framework to evaluate the impact of the determinants of Work Family conflict, Family Work Conflict, Child Growth and Parenting among the women faculties working in Arts and Science Colleges.

3. Statement of the problem

4. Hypothesis of direct effect

- Effective Family Work Conflict and Work Family Conflict is positively related to Parenting
- Effective Family Work Conflict and Work Family Conflict is positively related to Child Growth
- Effective Parenting is positively related to Child Growth
- Effective Family Work Conflict and Work Family Conflict is positively mediated by Parenting leading to Child Growth

5. Statistical Tool

Structural Equation Modelling (SEM)

Structural Equation Modeling has its roots in path analysis,

which was invented by the geneticist Sewall Wright (Wright, 1921). It is still customary to start a SEM analysis by drawing a path diagram.

To conduct the analysis using structural equation modeling (SEM) the exogenous variables considered are Family Work Conflict and Work Family Conflict that has been compared to find the relationship with endogenous in the first level is the intermediate Parenting and finally, the impact of these three factors on the Child Growth are considered.

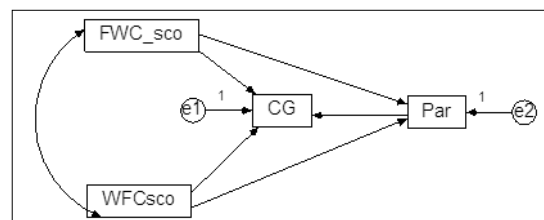


Fig 1.1: Final default model

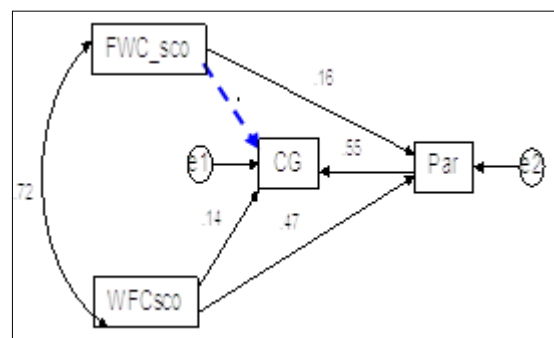


Fig 1.2: Final model

Hypothesis of Direct Effect

- Effective Family Work Conflict is positively related to Parenting
- Effective Work Family Conflict is positively related to

Parenting

- Effective Family Work Conflict is positively related to Child Growth
- Effective Work Family Conflict is positively related to Child Growth
- Effective Parenting is positively related to Child Growth

The standardized direct (unmediated) effect of efficiently handling perceived on is 0.466. That is, due to the direct (unmediated) effect of managing on, when goes up by 1, goes up by 0.466. This is in addition to any indirect (mediated) effect that may have on. The standardized direct (unmediated) effect of on is significantly different from zero at the 0.01 level (p=.002 two-tailed).

The standardized direct (unmediated) effect of efficiently handling perceived on is 0.163. That is, due to the direct (unmediated) effect of managing effect on, when goes up by 1. goes up by 0.163. This is in addition to any indirect (mediated) effect that may have on. The standardized direct (unmediated) effect of on is significantly different from zero at the 0.05 level (p=.020 two-tailed).

The standardized direct (unmediated) handling FWC /WFC having effect of perceived on is 0.554. That is, due to the direct (unmediated) effect of efficient in that on, when goes up by 1 standard deviation, goes up by 0.554. This is in addition to any indirect (mediated) effect that may have on. The standardized direct (unmediated) effect of on is significantly different from zero at the 0.01 level (p=.002 two-tailed).

The standardized direct (unmediated) effect of managing perceived on is 0.144. That is, due to the direct (unmediated) effect of effect on, when goes up by 1, goes up by 0.144. This is in addition to any indirect (mediated) effect that may have on the standardized direct (unmediated) effect of on is significantly different from zero at the 0.01 level (p=.003 two-tailed).

The direct (unmediated) effect of managing perceived on is 0.015. That is, due to the direct (unmediated) effect of on, when goes up by 1, goes up by 0.015 which is found to be very low and insignificant. This is in addition to any indirect (mediated) effect that may have on. The standardized direct (unmediated) effect of on is not significantly different from zero at the 0.05 level (p=.881 two-tailed).

6. Hypothesis of Direct Effect

- Effective Family Work Conflict is positively mediated by Parenting leading to Child Growth
- Effective Work Family Conflict is positively mediated by Parenting leading to Child Growth

The standardized indirect (mediated) positive effect of is 0.258. That is, due to the indirect (mediated) effect of on when goes up by 1, goes up by 0.258. This is in addition to any direct (unmediated) effect that may have on. The standardized indirect (mediated) effect of on is significantly different from zero at the 0.01 level (p=.002 two-tailed).

The standardized indirect (mediated) positive effect of on is 0.091. That is, due to the indirect (mediated) effect of on, when goes up by 1, goes up by 0.091. This is in addition to any direct (unmediated) effect that may have on. The standardized indirect (mediated) effect of on is significantly different from zero at the 0.05 level (p=.017 two-tailed).

It is also clear that there is significant covariance between Family Work Conflict and Work Family Conflict (CR=13.509, Sig.0.000) is significant at 1% levels and

hence, it is concluded that the exogenous variables significantly contributes in predicting the parenting and child growth among women faculties working in Arts and Science Colleges. The statistical significance of the model and its fitness summary are as follows:

Model fit summary

Table 1.1: Cmin

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	9	.019	1	.891	.019
Saturated model	10	.000	0		
Independence model	4	915.181	6	.000	152.530

CMIN is a chi-square statistics comparing the default model and the independence model with the saturated model. The above Table 1.1 infers that the default model has been associated as 0.019 percent with saturated model and other side, the independence model has been associated as 152.530 percent with saturated model.

1.1 RMR, GFI

The Root Mean Square residual is the mean absolute value of the covariance residuals, which reflect the difference between observed and model-estimated covariance. Specifically, RMR is the co-efficient which results from taking the square root of the mean of the squared residuals. The closer is RMR is to 0, the better the model fit. The GFI is the goodness-of-fit index and is equal to 1-(chi-square for the default model / chi-square for the null model).

Table 1.2: RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.031	1.000	1.000	.100
Saturated model	.000	1.000		
Independence model	13.583	.517	.195	.310

From the above Table 1.2 it is inferred that the model is good fit by the influence of RMR value which is less than one, ie. 0.031. GFI (Goodness of Fit Index) refers to 100 percent has been fitted in Default model for the proportion of variance-covariance matrix. On the other hand, 51.7 percent fit in Independence model.

1.2 Baseline Comparisons

The NFI, normed fit index, also known as (Δ_1), was developed as the alternative to CFI, comparative fit index, is also known as the Bentler Comparative Fit Index, compares the existing model fit with the null model which assumes the latent variables correlates with the independent variables.

Table 1.3: Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	1.000	1.000	1.001	1.006	1.000
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

From the above Table 1.3, it is noted that the model fit indices are good fit with the evidence of NFI (1.000) and CFI (1.000) which is found to reveal good fit index.

1.3 RMSEA

Root Mean Square Error of Approximation is the popular measure of fit, because it does not require comparison with the null model. It is one of the fit indexes less affected by sample size. There is good model fit if RMSEA less than or equal to 0.05.

Table 1.4: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.000	.000	.054	.944
Independence model	.530	.502	.559	.000

It could be noted from the above Table 1.4 that the RMSEA value is 0.000 which is less than 0.05 and the model resulted as best fit.

It has been found that there is significant direct positive effect of family work conflict in the parenting that reveals when there is minimum level of family conflict among the working women the chance of efficient parenting skills is possibly achieved, whereas the direct negative impact may have the vice-versa effect that predicts the women faculties may be significantly affected with their parenting skills,

The direct positive effect measures the work family conflict when minimum faced by the women faculties there is a statistical significance achieved by work family conflict and parenting skills predicts significant effective parenting skills achieved by the women faculties, whereas the direct negative impact may have the results vice-versa that predicts the work family conflict affects the parenting skills of the women facultie.

The direct positive effect measures the family work conflict is minimum among women faculties there is a statistical significance achieved with the family work conflict and child growth, whereas the direct negative impact will results vice-versa that predicts the family work conflict perceived by the women faculties affects their child growth.

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Similarly, the results are predicted positive and negative results when the parenting becomes the moderator between the FWC, WFC and Child Growth which reveals that the women faculties were facing minimum Family or Work related conflicts that have significantly helped them to achieve better Parenting Skills and Child Growth.

Conclusion

To sum-up, it is evident that, the Family Work Conflict, Work Family Conflict and Parenting has definitely influenced the women faculties working in Arts and Science Colleges that has significant impact in the Child Growth. It is also clear that all the exogenous variables significantly contributed in the prediction of the Parenting and Child Growth through effective handling of Family Work and Work Family Conflicts among women faculties working in Arts and Science Colleges in Coimbatore.

References

1. Greenhaus J, Beutell N. Sources of conflict between work and family roles. *Academy of Management Review*. 1985; 10(1):76-88.

2. Menaghan Elizabeth. "Work Experience and Family Interaction Processes: The Long Reach of the Job." *Annual Review of Sociology*. 1991; 17:419-444.

3. Lorenz Frederick, Ronald Simons, Wei Chao. "Family Structure and Mother's Depression, 1996."

4. Green Berger E, RO'Neil. "Parents' Concerns about Their Children's Development: Implications for Fathers' and Mothers' Well-being and Attitudes about Work." *Journal of Marriage and the Family*. 1990; 52:621-635.

5. Goodyer Ian G. "Family Relationships, Life Events and Childhood Psychopathology." *Journal of Child Psychology and Psychiatry*. 1990; 31:161-192.

6. Lewis S, DN Izraeli, Hootsmans H, (Eds.). *Dual-earner Families: International Perspectives*. Newbury Park, CA: Sage, 46-61.