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Predicting Female Managers' Feelings of Loneliness based on Couples' Communication Patterns and Interpersonal Dependence: The Mediating Role of Spiritual Health

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Abstract: The purpose of this research is to predict the feeling of loneliness of female managers based on couples' communication patterns and interpersonal dependence with the mediator role of spiritual health. The participants were 300 female managers working in the program and budget organization of Tehran (Iran), who were selected by accessible sampling. Research tools included couple communication patterns questionnaire, interpersonal dependence questionnaire, spiritual health questionnaire and feeling of loneliness questionnaire. To examine the hypotheses of the study, structural equation modeling was used in AMOS 24 software. The results showed that there is a significant relationship between communication patterns and feelings of loneliness, between spiritual health and feelings of loneliness and between interpersonal dependence and feeling of loneliness ($p<0.001$). Accordingly, couples' communication patterns and interpersonal dependence significantly predict the loneliness of female managers. Also, the findings showed that communication patterns and interdependence are indirectly related to feelings of loneliness through spiritual health. Based on the findings, it is suggested that in the treatment of managers' feelings of loneliness, sufficient attention should be paid to couples' communication patterns, interpersonal dependence, and their spiritual health.

Keywords: Communication patterns of couples, feeling of loneliness, spiritual health, interpersonal dependence

Introduction

Currently, the decisive role of human resources in the development and progress of countries is not hidden from anyone (Peretomode & Ikoya, 2019). Female human resources having half of the capacity of human resources (factor of development) and half of the population (target of development) are considered as a factor for creating and expanding development (Karimi et al., 2020). The more active and effective the presence of women in the society leads to the more advanced and developed the country, but the extent of the role and participation of women in any society, especially in the economic, social and cultural fields, is largely dependent on the approach and attitude of that society towards women (Aleemran & Aleemran, 2019).

Looking at the current situation of Iran's labor market, the overall appointment of female managers has seen a 36% growth in the last two years (Alawi et al., 2018). One of the variables affecting the mental health of people and also working women is the feeling of loneliness (Theeke et al., 2019).

Feeling of loneliness is a disturbing and troubling experience that leads to severe psychological and physical problems (Santas et al., 2016). The feeling of loneliness is related to depression, suicide,

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substance abuse, feelings of despair and misery and exacerbation of physical diseases (Amidi Mazaheri et al., 2016).

One of the important variables affecting the feeling of loneliness is communication patterns in couples. Actually, marital relationship is a process during which husband and wife exchange feelings and thoughts with each other in the form of speaking and listening, pausing, facial expressions and different gestures (Honarvaran et al., 2011). One of the ways to understand the existing structure in the family is to pay attention to the communication pattern of couples (Fatehizadeh & Ahmadi, 2005).

Interpersonal dependence is one of the other variables affecting people's feeling of loneliness. Interpersonal dependence is an important psychological variable, which is defined as a personality problem in interpersonal relationships, which manifests as a person's obvious need for affection, support, and guidance, even in situations where a person is able to function autonomously and face challenges alone (Bornstein, 2011). In addition, it seems that each of the mentioned psychological variables affect people's feelings of loneliness through some mediating variables such as spiritual health (Ramazani & Bakhtiari, 2019). The existence of spirituality in people gives them the ability to gain a more integrated perspective in the context of their organization, family and society (Pandey, 2017)

According to research results, organizations that have employees with more spirituality are 400 to 500 percent better than other similar organizations in terms of increasing net income, improving the rate of return on investment, and increasing productivity (Starc et al., 2019). Neal (2018) has stated the reasons for the need for spirituality in the organization include the need to think about the meaning and purpose of life and work, review and self-examination, and have a commitment to the future. With spirituality, managers and employees can achieve peace of mind and inner satisfaction in addition to improving productivity. On the other hand, no meaning for work can be deeper than working for God's pleasure.

According to the mentioned materials, since it is possible that psychological and communication factors play a role in the performance of female managers, the present research was aimed to predict feeling of loneliness in female managers based on couples' communication patterns and interpersonal dependence with the mediator role of spiritual health.

Material and Methods

The current a basic study in terms of aim and in terms of method, it is a correlational study using structural equation modeling. In the current study, the studied population included all female managers working in the program and budget organization of Tehran during the months of January to March in 2019. The sampling method in this research was purposeful. Sample size considering that the minimum appropriate sample size in the structural equation model is calculated based on the parameters (Kline, 1998). Therefore, according to the number of parameters of this model and also in order to increase the statistical power and manage the possible loss of participants, the sample size was calculated at least 300 people. The inclusion criteria in the present study were the informed consent of the subjects to participate in the research, having a management position at the moment, being female, being married,

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and the exclusion criteria were the lack of informed consent to answer the questions of the questionnaires and suffering from acute psychological diseases.

Tools

Revised Russell Loneliness Scale (UCLA): This scale was developed by Russell et al. (1980) and included 20 questions with a 4-point Likert scale. This scale was translated by Mirdrikvand et al. (2016) and used after a preliminary implementation and terminology. The alpha range was obtained from 0.89 to 0.94. In the present study reliability of this scale was calculated as 0.81.

Communication patterns questionnaire: This scale was compiled in 1948 by Christians and Sullaway at the University of California. This questionnaire is a 35-question self-assessment tool designed to estimate the marital relationship of couples. Answers are graded on a 9-point Likert scale from 1 (not possible) to 9 (very possible). Christensen and Sullaway (1984) have reported the reliability of the subscales of this questionnaire with Cronbach's alpha method from 0.50 to 0.78. In Iran, Samadzadeh et al. (2013) in order to determine the reliability of the questionnaire, calculated internal correlation for the subscales of this questionnaire and the figures obtained were: mutual constructive 0.50, mutual avoidant 0.51, expectant man / withdrawing woman and expectant woman 0.53 / A withdrawn man. 0.55. In the current study reliability of this scale was calculated as 0.73.

Interpersonal dependence questionnaire: Interpersonal dependence questionnaire has been widely used to measure interpersonal dependence and includes 48 items and three subscales of emotional reliance on others, lack of self-confidence, and self-expression (Kane & Bornstein, 2018). Reliabilities for the whole scale, 0.732 and for the dimensions of emotional reliance, lack of self-confidence and expressing autonomy were calculated as 0.756, 0.63 and 0.637, respectively (Sharifi et al., 2019). In present research, reliability of this scale was calculated as 0.75.

Spiritual health assessment scale (SHAS): This scale was developed by Gaur and Sharma (2014) which has three subscales and 21 items. This questionnaire is scored based on a 5-point Likert scale. The English version of this scale has shown 0.98.2 alpha reliability, 0.81.14 test-retest reliability and 0.81 internal consistency. The Iranian validity and reliability of the mentioned questionnaire was confirmed by Namvar and Sahraian (2023). In present work, reliability of this scale was calculated as 0.78.

Results

The indices of central tendency and dispersion of the scores of loneliness, spiritual health, interpersonal dependence and communication patterns in the sample group are presented in Table 1.

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Table 1. Indexes of central tendency and dispersion of research variable scores

Variable	Mean	SD	Min.	Max.
Feeling loneliness	56.54	۳,۳۱	22	75
mental health	54.65	۳,۵۲	22	98
Communication patterns	152.21	۶,۲۳	39	281
Interpersonal dependence	121.87	٤,۳۲	٤۹	۱۷۷

Table 2. The results of checking the normality of research variables

Variable	Statistic	Skewness	Kurtosis	P
Feeling loneliness	0.41	0.33	-0.52	0.23
Spiritual health	0.39	0.13	0.10	0.17
Communication patterns	0.36	0.03	-0.16	0.18
Interpersonal dependence	0.55	-0.36	-0.07	0.88

Table 2 reports the value of the significance level using the Kolmogorov-Smirnov test for research variables greater than 0.05. According to the obtained evidence, the distribution of the variables is normal.

Table 3. Values of standardized factor loads and validity and reliability indices of structures

Variable	AVE	CR
Feeling loneliness	0.52	0.74
Spiritual health	0.63	0.85
Communication patterns	0.64	0.92
Interpersonal dependence	0.71	0.92

The results of the above table show that the average index of variances obtained for all structures is more than 0.5 and the composite reliability index is more than 0.6. Therefore, each of the constructs of the mentioned model has convergent validity and acceptable composite reliability for measuring research variables. In the next table, the divergent validity of the scales of the current research model of the overall measurement is examined.

Table 4. The result of research hypotheses

Hypothis	Effect	Mediator	Indirect effect	CR	p
1	Communication pattern on feelings of loneliness	Spiritual health	-0.13	-4.45	0.001
2	Interpersonal dependence on feelings of loneliness	Spiritual health	-0.11	-4.32	0.42

The findings in Table 4 show that the absolute value of the critical ratio (4.45) of the indirect effect of the communication pattern with loneliness is greater than 1.96 and the significance level is less than 0.05. Therefore, at the 95% confidence level, there is a relationship between the communication pattern and the feeling of loneliness with the mediation of spiritual health in female managers. As a result, the first hypothesis is confirmed. Also, the absolute value of the critical ratio (4.32) indirect effect of interpersonal dependence with loneliness is greater than 1.96 and the significance level is less than 0.05,

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so at the 95% confidence level, there is a relationship between interpersonal dependence and loneliness with the mediation of spiritual health in female managers. As a result, the second hypothesis is confirmed.

Discussion

According to the hypothesis of the research, there is a relationship between the communication pattern and interpersonal dependence with the feeling of loneliness with the mediation of spiritual health in female managers. The obtained results indicated that spiritual health plays a mediating role between the communication pattern and interpersonal dependence with the feeling of loneliness.

Our results are in line with the results of past studies (Amidi Mazaheri et al., 2016; Karimi et al., 2020; Mirdrikvand et al., 2016; Neal, 2018; Ramazani & Bakhtiari, 2019) that indicated a direct and meaningful relationship between religious adherence and the type of communication patterns between couples. In explaining the obtained results, if we consider spiritual health as a psychological construct, in general, it can be said that the spiritual health and the attitude and understanding of man towards God and the concept and image he has of God affect the health and stability of his life, especially his married life. Another point is that the way of looking at God and the image that a person has of God is influenced by the flow of education. According to the above findings, it can be concluded that spiritual health plays an important role in human life, provided that this spiritual health is institutionalized and internal in the family; People who have spiritual health have a more purposeful life and this spiritual health is like a strong barrier against the feeling of loneliness.

In order to explain the research results of this research, we can take help from Amichai-Hamburger and Ben-Artzi (2003) model. According to this model, loneliness caused by social isolation or lack of social support prepares a person for Internet addiction, that is, people turn to the Internet to reduce their loneliness; In other words, the Internet may provide an alternative to the lifeless life of lonely people to build another life for themselves. It is also possible that loneliness occurs as a result of Internet addiction, that is, those who become addicted to the Internet experience negative consequences such as loneliness. Couple turn to the Internet to reduce their loneliness, and as a result, the direction of interaction does not move to his wife and blocks all the paths of interaction, eventually the relationship of this couple will be drawn into conflict. If one of the couple or both of them feels loneliness, they avoid expressing their feelings and emotions and feel that they cannot share their emotions with the other.

According to the results of the present research and the mediating role of spiritual health in the relationship between the communication pattern and interpersonal dependence with loneliness, it is suggested that necessary efforts should be made to improve the spiritual health of women, and spiritual health should be included in their life skills training programs. In addition, considering the role of communication pattern and interpersonal dependence in the feeling of loneliness of female managers, it is suggested that workshops be held to train appropriate communication patterns and ways to improve interpersonal communication for female managers.

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In this research, the results should be used with care that the findings of this research were limited to female managers working in the program and budget organization and all related organizations, so one should be cautious in generalizing the results to other managers of organizations and in other cities. Also, the data of the present study was collected by means of self-reporting tools, which, like all retrospective studies, the answers of the subjects may be biased.

Conflict of interest: The researchers did not report any conflict of interest during the study process.

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