



## Mother-in-law Syndrome and Locus of Control as Indicators of Somatisation among Igbo women with fertility challenges

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### Abstract

*This study tested the influence of mother-in-law syndrome and locus of control on somatisation among Igbo women with fertility challenges. The participants consisted of 124 women battling infertility who were drawn from outpatient Gynaecology Departments of Enugu State University Teaching Hospital, Parklane Enugu, Enugu State and Police General Hospital, Amakohia Owerri, Imo State, respectively using a purposive sampling technique. Out of the 124 participants, 34 were businesswomen, while 90 were civil servants. Their ages ranged from 25-60 years, mean age = 36.29, while their marital age ranges from 2-30 years. The study employed four main instruments to collect data: the Mother In-Law Syndrome Index, Enugu Somatisation Scale, and Locus of Control Scale. This study employed a cross-sectional survey design, and binary logistic regression analysis was used for data analysis. Results showed that mother-in-law syndrome increases somatic complaints among women with fertility challenges while locus of control does not significantly predict somatic complaints among married women with fertility challenges. This implies that the negative attitude of mothers-in-law contributes to high somatic complaints among women with fertility challenges, while locus of control does not contribute much to somatisation among women with fertility challenges.*

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## Introduction

Somatisation, currently regarded as somatic symptom disorder according to DSM V, is simply regarded as physical symptoms of psychological origin (Goodman, 2020). It was a term introduced by Wilhelm Stekel in 1924 but was considered a spiritual disorder of evil and demonic possession that was only peculiar to women until the 17th century. This belief and assumption were long-held until Thomas Sydenham identified through his work that it was a psychological disturbance that could also occur in males since it was reported more by women (Smith, et al., 2007, Nduanya, 2018; Kulanski, 2016 & De' Souza, 2021). It is a disorder that is regarded in our society as a defense mechanism and a form of communicating psychological distress, which explains why it is described as a bodily manifestation of psychic conflict. It is commonly expressed and considered the generation of physical symptoms of a psychiatric condition such as anxiety (Woolfolk, et al., 2006). According to DSM V, it is regarded as somatic symptom disorder that causes significant distress, which is reflected in one's thoughts, feelings, and behaviours. Hence according to Black, et al., (2015) and D'Souza, et al., (2021), diagnosis for somatic symptom disorder is made when there is;

- Presence of one or more somatic complaints that causes significant distress to one's daily life
- Excess thoughts, feelings, and behaviour related to the symptoms
- The individual has been symptomatic for more than six months.

Some somatic complaints tend to be peculiar to a particular group of people based on the common stressor they seem to be experiencing. One of such somatic complaints is known as brain fog syndrome. This form of somatization was first observed in Nigeria among students of Igbo and Yoruba origin (mainly medical students). It has been described as a somatisation reaction to studying (Prince, 1960; 1962; 1989, Ebigbo, et al., 2013). It may constitute a defensive process in which somatic complaints express psychological distress, as earlier mentioned. The brain-fog is believed to be a result of brain fatigue such as unpleasant feelings in the head, which includes; pain in the head, crawling sensation in the head, visual disturbances, i.e., blurred vision, cognitive disturbance, i.e., inability to grasp the meaning of spoken and written words, (Prince, 1989, Ebigbo, et al., 2013).

Apart from culture, when an individual focuses so much on bodily symptoms to the extent that it has a debilitating effect on his/her wellbeing, it can bring about somatisation. This amplification of bodily sensation, which entails worries about physical diseases, can focus the patient's attention on common variations in bodily sensations to the degree that they become disturbing and unpleasant. This mechanism is well established in the pathophysiology of panic attacks and has also been documented in the pathophysiology of somatization (Mechanic, 1987; Barsky, et al., 1992; Servan-Schreiber, et al., 2000).

It is also important to note that somatisation has primary and secondary gains that probably make people somatise. The Primary gain is when a physical complaint distracts an individual from particular distress. For instance, a woman with a fertility challenge who complains about heat sensation in the head has goal frustration, which could mean inability to conceive and enjoy her marriage. Also, her complaint of needle-like pinching is interpreted as being in a miserable situation that one could do nothing about, for instance, the inability to get a solution to her infertility. Furthermore, the crawling sensation in her belly and all over her body signifies sexual-related problems (Ebigbo 1986; 2014).

Therefore, with somatisation, a woman with fertility challenge shifts her problem from infertility to physical complaints, which relieves her from the distress of trying to conceive. On the other hand, she also enjoys secondary gain as significant people in her life (husband) tend to give her more attention and care for her. These psychological problems, often expressed in the form of somatisation by women who experience infertility challenges, are brought about by many factors above, including mother-in-law syndrome. This is a significant variable that is likely to contribute to somatic complaints among women with fertility challenges in our traditional African society, particularly the Igbo society. It has to do with negative attitudes of mothers-in-law towards their daughters-in-law with fertility challenges. It has also been noted that the significant person who troubles a childless woman is her mother-in-law. This has accounted for the desperation of infertile women to get children. This desperation takes different forms, such as engaging in extra-marital affairs and surrogate marriage or surrogate motherhood (Onwe, et al., 2015). Often the pressure to get a child by a couple is often to satisfy the yearnings of one's mother-in-law for grandchildren. Some, if not all mothers in law, always want to ensure the continuity of their progeny and, to satisfy this yearning, may not be so patient with a daughter in-law, who is not forthcoming with children, Onwe, et al., (2015).

Attitudes like these from mothers-in-law might make them equally hostile to daughters-in-law who are not forthcoming with children because they may feel that such daughter-in-law wants to terminate their son's lineage. Some mothers-in-law, whether consciously or unconsciously become sources of stress to young couples, through their attitude (often negative) and suggestions. In Igbo society, some mothers-in-law have been known to encourage their sons to get married to other women who could give them grandchildren or even indirectly encourage their daughters-in-law to go elsewhere and get pregnant if they sense that their sons are sterile. This apparently can be a source of distress to women with fertility issues, which she can express physically in the form of somatisation.

This study also focused on how attributing one's fertility challenge to internal factors (dysfunctional reproductive system), or external (supernatural forces) could lead to somatic complaints. This attribution to either internal or external factors is known as locus of control. Locus of control is the extent to which people feel that they have control over their lives. It can also be seen as orientation or belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our control. In the year 1954, Psychologist Julian Rotter came up with the assertion that rewards and punishments controlled our behavior and that these consequences for our actions determined our beliefs about the underlying causes of these actions. Our beliefs about what causes our actions then influence our behaviors and attitudes. Rotter equally came up with a scale to measure this. It is also important to note that locus of control is a continuum. No one has a 100 percent external or internal locus of control. Instead, most people lie somewhere on the continuum between the two extremes (Cherry, 2013).

Locus of control has been considered pivotal in physical and mental health. Internal locus of control has been implicated in better psychological and physical wellbeing, while external locus of control has been considered responsible for psychological problems, including somatisation (Bagherian, et al., , et al., 2009). In Africa, a study by Oti-Boadi, et al., (2017) on the religious coping mechanism of infertile women of Ghana, women with infertility challenges who have psychological problems including somatisation, do so because they try to internalize their problem. On the other hand, those with positive religious coping strategies, who feel God will take care of their infertility situation, have common somatic complaints. Locus of control among women with

fertility challenges in Nigeria, is often external, infertility has been labeled an act of God, a punishment from unhappy ancestors, or witchcraft (Arogundade, et al., 2013).

In a similar study, it is believed that infertility occurs either when the person has offended the gods or somebody somewhere is operating witchcraft practice against the person. Witchcraft is said to be done by jealous people, for example co-wives, mothers-in-law and neighbours (Audu, 2013).

As stated ab initio, the issue of infertility is a global issue that afflicts married couples who desire children. The statistics of women who have this issue globally and nationally give one a great deal of concern together with its associated psychological distress. The researcher in essence, is looking at the issue of somatisation among Igbo women who are having infertility challenges through the lens of Igbo society vis a vis mother-in-law syndrome, perceived womanhood, locus of control, and spousal support. However, the present study aims to investigate how mother-in-law syndrome and locus of control in contemporary Igbo society contribute to somatisation among Igbo women with infertility challenges.

### **Objectives**

To this extent, the overall objectives of this study therefore include;

1. To determine the influence of mother-in-law syndrome on somatisation among Igbo women with infertility
2. To determine the influence of locus of control on somatisation among Igbo women with infertility.

### **Hypotheses**

1. There would be a significant influence of mother-in-law syndrome on somatisation among Igbo women with infertility.
2. There would be a significant influence of perceived womanhood on somatisation among Igbo women with infertility.

### **Methods**

#### **Study setting**

This study comprises 125 female participants within the age range of 25-60 years and a mean age of 36.29 with fertility challenges. They were randomly selected from outpatient Gynaecology clinics of Teaching and General Hospitals in Enugu (ESUT Teaching Hospital Parklane) and Imo States (Police General Hospital, Amakohia), South East Nigeria. This is because gynaecology outpatient clinics in various teaching and general hospitals, avails one an ample opportunity of seeing women from different socioeconomic backgrounds with fertility issues, who have undergone and are still undergoing treatment. This is contrary to focusing mainly on fertility clinics, where a more significant percentage of people who go there, are of higher socioeconomic status due to the high cost of seeking fertility treatment.

These two states represent a broad spectrum of Igbos of southeast Nigeria for the following reason: Enugu State is a metropolitan city and the capital of the old eastern region and the former capital of Anambra State. In addition to this, Ebonyi State was also carved out of Enugu State. It also shares boundaries with Anambra, Abia, and Ebonyi states. These factors make Enugu State a state representing Igbos from different states of the southeast, particularly those from Anambra, Ebonyi, and even Abia States. Also, as a metropolitan city, it represents people from diverse socioeconomic backgrounds and people from different parts of the country. Imo State is also chosen because it is a metropolitan city and people from different southeastern Nigeria reside there.

It has also been observed that many indigenes of Abia State, which is a neighboring state it shares boundary with, equally reside there.

### **Sampling**

Homogenous purposive sampling was used to select participants for this study. This is a sampling technique where participants for research are selected based on similar characteristics (Saunders, et al., 2012). Participants for this study already have one thing in common, which is infertility. This is the reason the researcher decided to go directly to Gynaecology units of Teaching and General Hospitals in Enugu and Imo states, where women with fertility challenges can be easily identified for the study.

### **Instruments**

Three instruments were used for this study namely, the Mother-in-law Syndrome Index (MISI), Enugu Somatisation Scale (ESS) and Locus of Control Scale. The researcher developed the first instrument, it is an 11 item questionnaire designed by the researcher to measure how mothers-in-law treat their daughters-in-law who are having difficulty with conception. It is in Likert format, with response options ranging from (1) strongly agree, (2) agree, (3) disagree, (4) strongly disagree, which gives respondents the opportunity of describing how they feel mothers-in-law in Igbo society treat their daughters' in-law who is having fertility challenges. Internal consistency form of reliability was employed and a Cronbach Alpha of .92 was obtained. It also has a mean score of 41.8 and SD of 3.9. When correlated with Enugu Somatisation Scale (ESS) by Ebigbo (2014), a divergent scale that measures somatic complaints, it yielded a divergent correlation of -.04 and significant at .01, which indicates that the instrument has negative validity and can be used for this study. Scores higher than the mean show that a woman with fertility challenges feels that her mother-in-law has a negative attitude towards her, which may affect how she somatises as a result of her fertility challenges.

#### *Enugu Somatisation Scale (ESS)*

This is an indigenous psychometric designed by Ebigbo (1981 & 2013), which measures somatic complaints among Nigerians. It is a 65 item questionnaire divided into two parts: the head and body sections. Somatic complaints on the head section measure goal frustration, while somatic complaints on the body measure anxiety and depression. This instrument was standardized with 179, psychiatric patients and 349 normal students of the Institute of Management and Technology (IMT) Enugu (Ebigbo, 2013). The norms are the mean scores for the normal and abnormal samples. For normal males, the norms for the head and body sections are as follows; 3.58 and 7.22, while for the females, the norms for the head and body sections are; 4.12 and 7.73. Then for the abnormal males, the head and body sections' norms are 6.32 and 11.71, while for the abnormal females, the norms for the head and body sections are 8.28 and 13.22. This instrument was restandardised using internal consistency, and a reliability coefficient of .88 and validity score of -.042 was obtained when validated with MISI, which indicates that the instrument is reliable for use in this study.

#### *Locus of Control Index Revised (LOC)*

The Locus of Control is a 13 item questionnaire developed by Rotter (1966). It measures generalized expectancies for internal versus external control of reinforcement. For example, people with an internal locus of control believe that their actions determine the rewards they obtain, while those with an external locus of control believe that their behavior does not matter much and that rewards in life are generally outside their control. Some of the sample items in the scale include; many of the unhappy things in people's life is partly due to bad luck, people's misfortune result from the mistakes they make, one of the major reasons why we have



wars is because people don't take enough interest in politics, there will always be wars, no matter how hard people try to prevent them. Scores range from 0 to 13. A low score indicates internal control, while a high score indicates external control. For restandardisation, internal consistency was done, and a Cronbach Alpha of .86 and a validity score of .31 were obtained when correlated with Norwicki- Strickland Locus of Control Scale (NLCS) (see appendix H:III), which indicates that the instrument is reliable and valid for use in our society. NLCS is a 40 item questionnaire developed by Norwicki and Strickland (1973).

### **Research Procedure**

The researcher met with some doctors and nurses at the gynaecology department of the respective hospitals to explain the relevance of the research so that they would be cooperative during the data collection. Afterward, the researcher met with the study participants and explained to them the relevance of the research. Those who agreed to participate in the research were given a consent form to fill, to ensure that they willingly participated in the research. In addition to this, they were assured of their confidentiality by telling them that their names are not necessarily needed on the questionnaire other than their sincere responses. They were also told that if at any point they wished to withdraw from the research, they were willing to do so. To further maintain their confidentiality, numbers were used to code the questionnaires instead of their names. Ethical Consideration To carry out this study effectively, ethical permission was obtained from the ethical committee of Enugu State University Teaching Hospital, Parklane, and Police General Hospital Amakohia. An informed consent form was administered to the clients before the study in order to obtain their consent.

### **Ethics and Confidentiality**

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### **Design and Statistics**

The design employed in this study is a cross-sectional survey design. The reason for adopting this research design is because comparisons are made on the same subjects. It is the type of design that is employed when a researcher wants to describe the characteristics that exist among a group of people, but not necessarily to determine cause and effect relationships. Hence, it does not involve the manipulation of variables. This type of survey design is often used to make inferences about possible relationships or gather data to support further research (Lavrakas, P.J. 2008). Furthermore, it allows a researcher to look at the numerous and prevailing characteristics in a given population and consider the correlations that may exist at a particular point. The statistics used for this study is binary logistic regression which is an extension of simple linear regression. This statistical technique is used to predict the relationship between predictors and a predicted variable where the dependent variable is binary ([www.statisticssolutions.com](http://www.statisticssolutions.com)>binary-logistic-regression. Retrieved 3/12/19).

Binary logistic regression analyses were employed to predict the probability of a participant developing somatic complaints due to mother-in-law syndrome, perceived womanhood, spousal support, and locus of control.

## Results

**Table 2: Logistic Regression Analyses for Mother-in-Law Syndrome and Locus Control on Somatisation**

	<i>B</i>	Std Error	Wald Statistic	df	Sig	Odds Ratio Exp(B)	95% Confidence Interval for Exp(B)	
							Lower	Upper
<b>Mother-in-Law Syndrome</b>	.171	.042	16.811	1	.000**	1.187	1.093	1.288
<b>Locus of Control</b>	.031	.074	.171	1	.680 <sup>N.S.</sup>	1.031	.891	1.193

Note:  $N = 124$ , \*\* $p < .001$ , \* $p < .01$ , <sup>N.S.</sup> = Not Significant

As presented in the table above, the result shows that the relationship between mother-in-law syndrome and somatic complaints among married women with fertility challenges was statistically significant at  $P < .001$ . Therefore, the first alternate hypothesis, which states that mother-in-law syndrome would significantly influence somatic complaints among married women with fertility challenges, is accepted. Further perusal of the analysis shows that the odds for reporting somatic complaints among married women with fertility challenges is 1.19 times higher for participants who scored higher on the mother-in-law syndrome scale than those with lower mother-in-law syndrome scores. The table above also shows that locus of control does not significantly predict somatic complaints among married women with fertility challenges at  $p < .05$  level of significance. This implies that the alternate hypothesis, which states that locus of control would significantly influence the somatic complaints among Igbo women, is now rejected. The table above also shows that the odds for reporting somatic complaints among married women with fertility challenges is 1.03 times higher for participants with an external locus of control than those with an internal locus of control.

## Discussion

The study was on Mother-in-Law Syndrome and Locus of Control as indicators of somatic complaints among married Igbo women with infertility. The present study results show the correlations of the above-mentioned variables in determining somatisation among married Igbo women with fertility challenges. Thus, the first hypothesis, which stated that there would be a significant influence of mother-in-law syndrome on somatic complaints among married Igbo women, is accepted, implying that mother-in-law syndrome significantly determines somatic complaints among married Igbo women with fertility challenges. This supports the

Albanian study by Tahiri (2015), which shows that disturbances not just from mothers' in-law but in-laws generally cause women with fertility challenges significant distress.

In the researcher's opinion, it is not surprising that such a negative attitude of mothers-in-law towards their daughters-in-law is obtainable in our contemporary Igbo society, which places high value on children. The extended family practice, which allows in-laws (mothers) to live together, as seen in the traditional Igbo societies, equally makes them influence marital issues of family members. The role of mothers generally in their sons' lives and marital relationships, particularly in our Igbo society, cannot be overemphasized. The pivotal role they play in the lives of their sons is such that sometimes, they decide whom their sons will marry. In most situations, their sons give heed to their mother's opinion and choice regarding marital choice. In some instances, she adheres to certain weird suggestions by her mother-in-law to please her while hoping that it would solve her infertility issue.

The second variable in this study, the locus of control, does not significantly increase somatic complaints among married women with infertility challenges. This is contrary to the study by Bhargava, et al., (2016) and Arogundade, et al., (2013), which shows that internal locus of control is a strong predictor of the severity of somatisation. Hence, the researcher is of the view that this might be because some married women with fertility challenges in this study, do not attribute their infertility challenge to external factors, neither do they feel that they are responsible for it as a result of this, they may feel that since nothing is wrong with them i.e., they have unexplained infertility (which accounts for about 20% of infertility issue), which they feel may be resolved with time.

Low correlation between locus of control and somatisation could also be that with the new innovation in the area of reproductive endocrinology, such as IVF, IUI, Naprotechnology and even Surrogacy, many women with infertility have decided to turn from apportioning blames either to themselves or other external forces as a coping strategy, to explore ways they could benefit from the already mentioned assisted reproductive techniques. This may explain the low correlation between locus of control and somatic complaints among married women with fertility challenges.

### **Implication of the study**

This research has brought the factors that contribute to somatic complaints among married Igbo women with fertility challenges to the limelight. It shows that negative attitude of mothers in law towards their daughters-in-law with fertility challenge, otherwise known as mother-in-law syndrome is a significant contributor to somatisation among married women with infertility. This might enable mothers-in-law to be more empathic in relating with their daughters-in-law with fertility challenges as it might go a long way in helping them deal with the stress of infertility. This outcome might also enable husbands whose wives are having fertility challenges to protect them from their overbearing mothers to prevent them from having somatic complaints.

The negative correlation between locus of control and somatic complaints implies that most women are becoming enlightened and aware of some of the assisted reproductive techniques that were not available to their counterparts some decades ago. Moreover, some of these new technologies that promote fertility, offer hope to some of these women and limit their tendency to blame themselves or anyone for their infertility situation.



The research will also enable psychologists to understand the nature of psychological problems that women battling with infertility are going through, so that they will know how best to assist them to cope with their situation. This study will further help gynaecologists who these women often consult, understand the reason and nature of the psychological (somatisation) problems that women with infertility present alongside infertility issues, and refer them to relevant professionals who would treat these underlying problems while they are undergoing fertility treatment.

Furthermore, this study will enable fertility clinics and departments of gynaecology in various teaching and general hospitals to understand the psychological implication of infertility and therefore seek the services of clinical psychologists who could assist these women to deal with psychological issues of infertility, thereby rendering satisfactory services to them and having wholesome individuals at the end of the day.

This research will also help shed more light on the confusion that bedevils the treatment of somatisation not just among infertile women, but also among somatic patients generally. Health professionals with the knowledge of this study will understand that somatisation is a psychological disorder and should be treated as one instead of relying on assumptions and subjecting patients suffering from such to the torture of incessant medical tests that often yield nothing.

Finally, this study will enable the government to develop policies that will subsidize fertility treatment so that poor couples, who ordinarily cannot benefit from fertility treatment due to its high cost, can so. This research will further provide our legislators insight into developing policies that will protect infertile women, particularly those whose husbands are dead.

### **Recommendation**

Based on the outcome of this research, it is recommended that fertility clinics and gynaecology units of teaching hospitals employ the services of a clinical or counseling psychologist to organize marriage/family therapy for married women who come to seek treatment for their infertility. In addition to the medical treatment that they seek in hospitals, this will enable their spouses and relatives to understand what they are actually going through as a result of their challenge with conception. It is also recommended that couples with a fertility challenge meet a clinical psychologist or a marriage counselor while undergoing fertility treatment to enable them to deal with the psychological implication of infertility as a couple. This will not only help them to be empathic of each other but will also help to strengthen their marriage.

Finally, the researcher recommends that the government subsidize the high cost of fertility treatment so that poor couples experiencing infertility can also benefit from the treatment.

### **Conclusion**

This study shows that mother in-law syndrome and locus of control collectively play in somatisation among married women with fertility challenges. Although there has been some studies on the role of some of the variables in determining psychological problems among women with fertility challenge, such as spousal support, locus of control and perceived womanhood, non at least to the knowledge of the researcher has been able to look at the roles the above mentioned variables collectively play in determining somatisation among women with fertility challenge in South east region of Nigeria. The study shows that mother in-law syndrome which implies the negative attitude of mothers in-law towards their daughters in-law with fertility challenges determines somatisation among the later in a significant manner. This study further shows that locus of control

does not determine somatic complaints among women with fertility challenges, which indicates that most of the women in this study, who somatise, probably do not attribute their infertility challenge to either external factors or even to themselves, which could mean that they do not feel that they are responsible for their infertility situation.

To this extent, the study has established the following assumptions:

- Mother-in-law syndrome which implies the negative attitude of mothers in-law towards their daughters in-law with infertility, determines somatic complaints among subfertile women.
- Locus of control does not determine somatisation among women with fertility challenges.

This study also suggested strategies that could help improve the psychological problems that women with infertility face within themselves, in their respective families and the society at large. It further suggested what government could do to alleviate their plight by developing policies that would ensure that fertility treatment is subsidized. The study further x-rayed the need for health care workers with particular reference to medical doctors, to understand the nature of somatisation, most especially among women and infertility, so that they could refer them to clinical psychologists for early intervention, instead of subjecting them to rigorous torture of medical tests that often yields nothing.

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