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Modeling Spirituality-Inspired Structural Equations of Psychological Capital with the Mediating Role of Body Image among Bariatric Surgery Candidates

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Extended Abstract

Aim

In both economically developed and developing regions of the world, obesity has emerged as one of the most significant public health issues. It is a multifactorial, complex disease characterized by excessive adiposity. Severe obesity, defined as a body mass index of 40 or higher, is a chronic condition linked to a substantial heightened susceptibility to severe and enduring health complications, in addition to compromised psychological well-being. Presently, bariatric surgery stands as the most efficacious intervention for morbid obesity, with varying degrees of success reported by patients. According to the research, approximately 25% of bariatric patients fail to lose a substantial quantity of weight, and others regain weight following an initial successful weight loss. The incidence of reoperative procedures subsequent to inadequate weight loss or weight regain subsequent to primary bariatric surgery is on the rise. Sustaining weight loss over an extended period of time requires careful adherence to postoperative physician instructions, which encompass a healthy diet and regular physical activity. A positive psychological state appears to play a particularly significant role in promoting health behavior adherence (Feig, Golden, & Huffman, 2019).

Psychological capital, being a positive psychological attribute, enhances an individual's capacity to surmount challenging circumstances and attain success. Indeed, the established correlation between psychological capital (including self-efficacy, optimism, hope, and resiliency) and improved outcomes in various medical populations has not been extensively investigated in the context of bariatric patients. The value of psychological capital is susceptible to change. It has been determined that spirituality contributes to the management of chronic diseases such as obesity. Additionally, it is postulated that spirituality significantly contributes to the management of life's challenges and has the potential to enhance one's resilience and positive psychological state. Beyond its direct impact on psychological capital, spirituality may potentially enhance psychological capital indirectly via the promotion of positive body image. As a multidimensional concept that incorporates all facets of how individuals perceive their bodies, body image has consistently caused anxiety among obese individuals. Spirituality has been suggested as a characteristic that may positively influence body image. Consequently, the objective of this research endeavor was to construct a framework for psychological capital that incorporates spirituality as a foundation, with body image serving as a mediating factor among candidates for bariatric surgery (Tylka, 2019).

Methodology

The statistical population for this correlational analysis comprised all candidates who were referred to Rasoul Akram Hospital in Tehran for minimally invasive bariatric surgery in the year 2021. A sample

size of 250 individuals was determined by means of convenience sampling. The Psychological Capital Questionnaire (PCQ), Spiritual Questionnaire (SQ) and the Multidimensional Body-Self Relations Questionnaire (MBSRQ) were the instruments of research. For data analysis, the Person Correlation Coefficient and Structural Equation Modeling using SPSS Version 26 and LISREL Version 8.8, respectively.

Findings

Given the significant impact of psychological capital on patients' adherence to physicians' instructions, investigating the efficacious components of psychological capital may offer a viable approach to improving outcomes for bariatric patients. This research investigation explored the correlation between body image and psychological capital, as well as the mediating function of spirituality in this relationship.

Conclusion

The application of covariance-based structural equation modeling in this investigation consisted of two primary stages: assessing the model's fit and investigating the research hypothesis. The suggested model obtained an optimum fit index from the structural equation analysis indices. This indicates that the informal model, which was constructed to elucidate psychological capital in bariatric surgery candidates through the mediating effect of body image and spirituality, is a suitable model. The results indicated that spirituality ($\beta=0.61$, $p<0.01$) and body image ($\beta=0.38$, $p<0.01$) had a statistically significant positive direct effect on psychological capital. Furthermore, the findings indicated that body image played a substantial mediating role in the association between psychological capital and spirituality ($\beta=0.15$, $p<0.01$). Given the significance of spirituality and body image as predictors of psychological capital in this population, preoperative plans for bariatric surgery candidates should incorporate interventions and trainings designed to improve spirituality and body image.

Keywords: Body Image, Bariatric Surgery, Psychological Capital, Spirituality.

Ethical Considerations

This study is derived from the doctoral thesis of the primary author. Additionally, it has been approved by the Ethics Committee of the Islamic Azad University, Tehran North Branch, under the code IR.IAU.TNB.REC.1401.067.

Financial Support

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Conflict of Interest

There is no conflict of interest among the authors of this research.

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