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Research Article

Designing an Empowerment Service Management Model for People with Disability under the Welfare Organization of Iran

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Abstract

Introduction: This research has focused on designing the empowerment service management model for people with disabilities covered by Iran's Welfare Organization.

Methods: The research's statistical population included experts and professionals who provide empowerment services for people with disabilities in the country's welfare organization. Due to the heterogeneous population, whose distribution varied across groups and classes, the probability sampling method with classification was employed. The validity and reliability of the research tool were checked by face validity and content validity. To assess reliability, Cronbach's alpha was used, yielding a value of 0.974.

Results: The data were analyzed using structural equation modeling via the covariance method with AMOS 24 software. According to the findings, the proposed model comprises 34 items and six factors: planning, financial resources, resource generation, employment, coordination, and control.

Conclusion: The results showed that the present study could fill the gap resulting from the lack of suitable models in the field under investigation. It is one of the first efforts in designing and providing an empowerment service management model to support the disabled in Iran, contributing to the enrichment of the research literature.

Keywords: Empowerment Service, Management, Modeling, Disabled, Welfare Organization

Introduction

One of the key reasons for dealing with the issue of disability is the increasing number of disabled people, especially in developing and poor countries, due to the lack of awareness of disability prevention methods and the lack of sufficient facilities or improper use of existing facilities [1]. According to the last report of the World Health Organization (WHO), it is estimated that about 15% of the world's population experiences some disability.[2] Moreover, the number of disabled people is increasing due to other reasons such as population growth, aging, the prevalence of chronic diseases, accidents, and the improvement of advanced medical services leading to survival and long life, so it is estimated that in the next 35 years, the prevalence of moderate and severe disabilities in many developing countries will increase from around five to seven percent [3 & 4]. Disability is the deprivation and inappropriate condition of a person, resulting in a defect and disability, which prevents the person from performing the role expected of them according to their age, gender, social, cultural, and natural conditions [5]. In a general definition, the WHO considers a person with a disability to be someone who, due to a physical or mental disorder, cannot continue their personal, economic, and social routine life

independently, by their age and environment, without the use of special equipment and care [6]. At the end of 2015, the number of disabled people in Iran was announced as more than eleven million people [7].

People with disability face extensive barriers to accessing services such as health care, education, employment, and social services, and the origin of these barriers is related to ineffective government laws, policies, and strategies [5]. Considering the ever-increasing number of people with disability around the world and the various challenges faced by these people, responding to the needs of disabled people in the direction of their empowerment and social acceptance as ordinary people of society is an undeniable priority, necessitating serious planning and policymaking for equal rights [7]. Therefore, providing optimal rehabilitation services to people with disabilities is always a key concern of the health system in every country. An effective service delivery system should provide appropriate services to support vulnerable individuals in establishing justice [8].

In Iran, the empowerment of people with disability is carried out through the welfare organization. Currently, approximately 4 million and 526 thousand people are covered by the welfare organization, and its services are provided in three sections: empowerment services for people with disabilities, individuals exposed to social harm, and women heads of households, as well as preventive services. [9]

To achieve its goals in empowering people with disabilities, the welfare organization is facing numerous issues and challenges. It has tried to draw the best possible perspective for the clients under the organization's support; however, these programs are often not fully realized due to weak planning and lack of executive guarantee, and sometimes, it has been limited to a slogan, raising expectations in the target community and ultimately weakening the empowerment component. Accordingly, many people covered by this organization do not have a strong belief in participating in and cooperating with the empowerment programs. Due to many reasons and the lack of proper planning in the government and non-government sectors, people with disabilities, as the most significant minority in the country, cannot have a stable and decent job despite having a lot of work capacity. Most people with disability do not have a full share of jobs in society and cannot easily get even the jobs they can do. To help the welfare organization move in a direction that emphasizes the importance of monitoring, policymaking, training, and coordination in empowering people with disabilities, the current research aims to provide a management model. The construction of an empowerment service management model for individuals with disabilities covered by Iran's Welfare Organization has been the primary focus of this study.

Methods

This is an exploratory research study in terms of purpose, a cross-sectional study in terms of time, an applied study in terms of results, and an analytical study in terms of implementation method. In the first part, using review methods, effective factors were identified in the design of the empowerment service management model, and the factors were selected qualitatively. In the second part, the design of the empowerment service management model for people with disabilities at the Iranian Welfare Organization was discussed using a quantitative method, incorporating exploratory and confirmatory factor analysis. Experts in empowering individuals with disabilities, as part of the nation's welfare organization, comprised the statistical population of the study. Two hundred twenty-one participants, including managers and activists who worked in departments that offered empowerment services for individuals with disabilities, were asked to complete the questionnaire to assess its reliability and validity. The sample size of experts should be five to ten times the number of questionnaire items to guarantee the reliability of a newly created questionnaire. For the experts, we used specific inclusion criteria, including consent to participate in the study, at least five years of managerial experience in disability care, and a relevant educational background. The questionnaires were sent to the participants via the internet. This study included 221 individuals, comprising 59% men and 41% women. For the research sampling method, due to the heterogeneous population, with its different distribution across groups and classes, the probability sampling method with classification was employed. The validity and reliability of the research tool were checked by face validity and content validity. Finally, nine of the questions in the questionnaire were not confirmed as valid, so the final number of questions in the

questionnaire was 34 items, compiled on a 5-point Likert Scale. To assess reliability, Cronbach's alpha was used, yielding a value of 0.974. Ultimately, the data obtained from the questionnaire were analyzed by the structural equation modeling method and AMOS 26.

This research was carried out in eight steps:

- The first step: Conducting a comparative study using a review method. To collect data in the library studies department, an information form was used to gather data related to the studied research background. To complete the information forms from the sources needed for this research, the keywords of health system, rehabilitation, disability, empowerment, financing, planning, resource generation, coordination, and employment on the websites of organizations active in the field of empowerment, information banks such as Irandoc, Iranmedex, Google Scholar, Science Direct, Medline, PubMed, Elsevier, WHO website, published official reports and related Persian and English papers from 1990 to 2020 were searched.
- The second step: In this stage, a comparative matrix was established to determine the primary dimensions of the research conceptual model using the matrix's output.
- The third step: In this stage, to understand the views of experts, impressions, and experiences, or to receive more information about their answers to questions, the opinions of experts in the country regarding the factors affecting the empowerment service management for people with disability in Iran, using the method of asking for opinions through a questionnaire. The structure was examined and finally, the initial model of the research was established (shown in Fig. 1).
- The fourth step: Designing the questionnaire and its validation: In this stage, the general structure of the model was validated through expert opinion polls. To poll the experts, a questionnaire was provided to the experts along with a schematic view of the initial proposed model and an explanation of the dimensions of the model. In the end, the components that at least 70% of the experts agreed with were selected, and the other new components proposed by the experts were put back for a final consensus. A general agreement regarding the inclusion of each component in the final model (qualitative stage) was made during two consultation stages (The components determined at these stages are presented in Table 2).
- The fifth step: field study and survey of experts: In this stage, to validate the model from the experts' point of view in the field of "Effective factors on the empowerment service management for disabled people in Iran," the views of policymakers, executive managers, and experts in the rehabilitation department of government organizations related to disabled people were examined.
- The sixth step: pattern extraction: uses the exploratory factor analysis method in this step, to identify the key practical components in the empowerment service management of people with disabilities and to identify the amount of loading of each of the variables on the main components, Varimax and the Kaiser's criterion rotated the principal components from the exploratory factor analysis to the analysis method was used for the adequacy of the sample size.
- The seventh step is confirmatory factor analysis. In this step, the results of the exploratory factor analysis were processed using confirmatory factor analysis with the maximum likelihood estimation method, as implemented in R statistical software. Confirmatory factor analysis was employed to assess whether the proposed model aligns with the desired data.
- The eighth step: Data interpretation and presentation of the research's final model. In this final step, the initial model was compared with the final model, and then the final model was confirmed using the confirmatory factor analysis method and structural equations. Validation of the model was carried out using the structural equation technique and easy analysis, and the final empowerment management model for people with disability under the Iran Welfare Organization was designed.

The initial conceptual model derived from the comparative studies of Iran, China, Turkey, India, America, Germany, England, and South Africa was designed as follows:

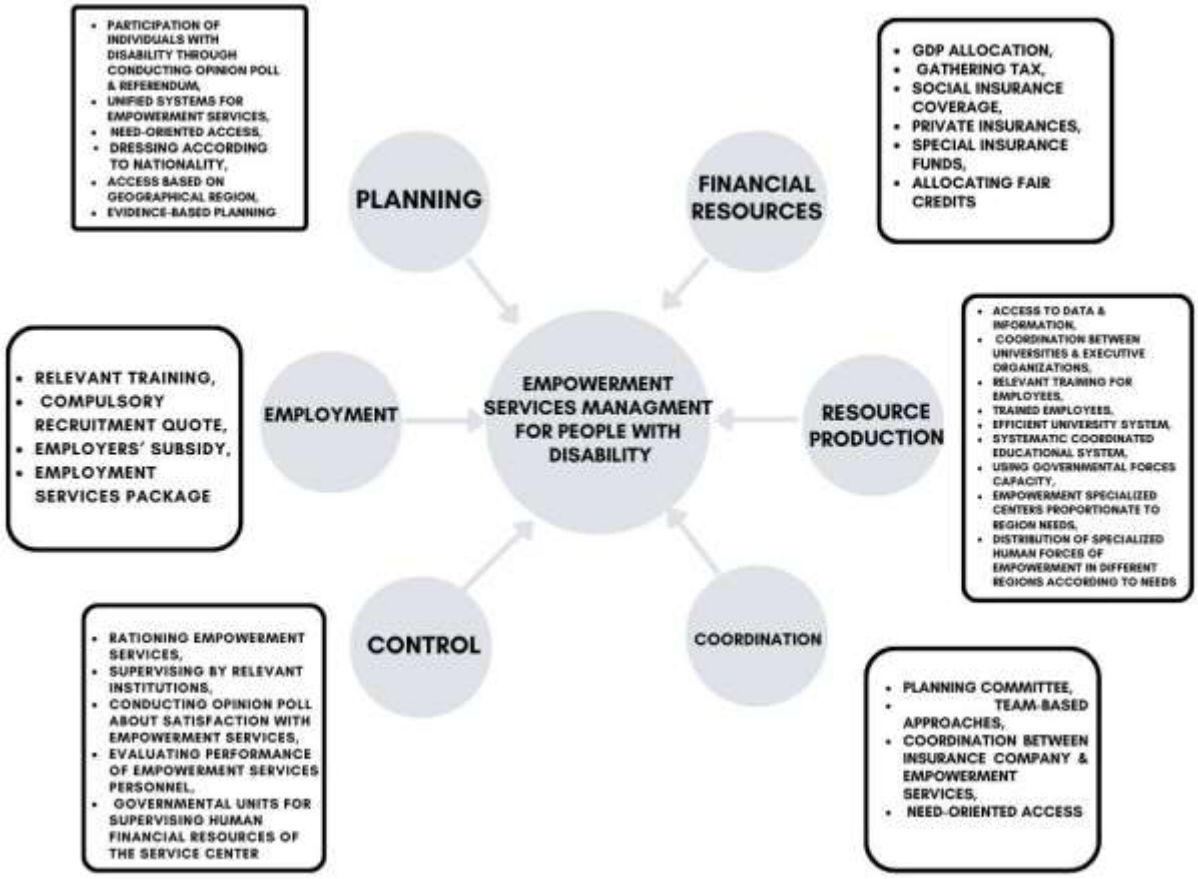

Figure 1: The initial model

Results

The demographic information of the experts participating in the research is presented in Table 1:

Table 1: Demographic information of the experts

Demographic data		Frequency	Percent
Gender	Men	132	59.7%
	Women	89	40.3%
	Sum	221	100
Age	20-30	3	1.4%
	30-40	36	16.3%
	40-50	116	52.5%
	>50	66	29.9%
	Sum	221	100
Education	Associate Degree	7	3.2%
	BS	67	30.3%
	MSc	89	40.3%
	Ph.D	58	26.2%
	Sum	221	100
Management experience (mean ± S.D)		5.959±8.186	

The structural equation modeling method was used to test the proposed model. In the first step, the KMO index was examined to verify the presence of necessary conditions for factor analysis. The KMO index was greater than 0.7, and the results of Bartlett's test were significant at the 95% confidence level; it was concluded that factor analysis was appropriate. In the second step, to investigate univariate normality, the distribution of the existing observed variables in the research model was examined using the skewness and kurtosis indexes. The absolute value of skewness was not more than … for any of the variables. Furthermore, the absolute value of kurtosis was less than 10 for all variables. Therefore, factor analysis had no problem in the case of univariate normality.

After performing exploratory factor analysis, six factors and 34 items with factor loadings above 0.5 were extracted. After the necessary corrections were

made in the initial conceptual model, to verify the factors extracted from the exploratory factor analysis questionnaire, AMOS confirmatory factor analysis was used. The final and primary form of the "Empowerment Service Management Model for People with Disability Covered by Iranian Welfare Organization" was compiled as Fig. 2 following a review of the model's fit indices, a reexamination of each factor, and expert confirmation of the factors through subject displacement.

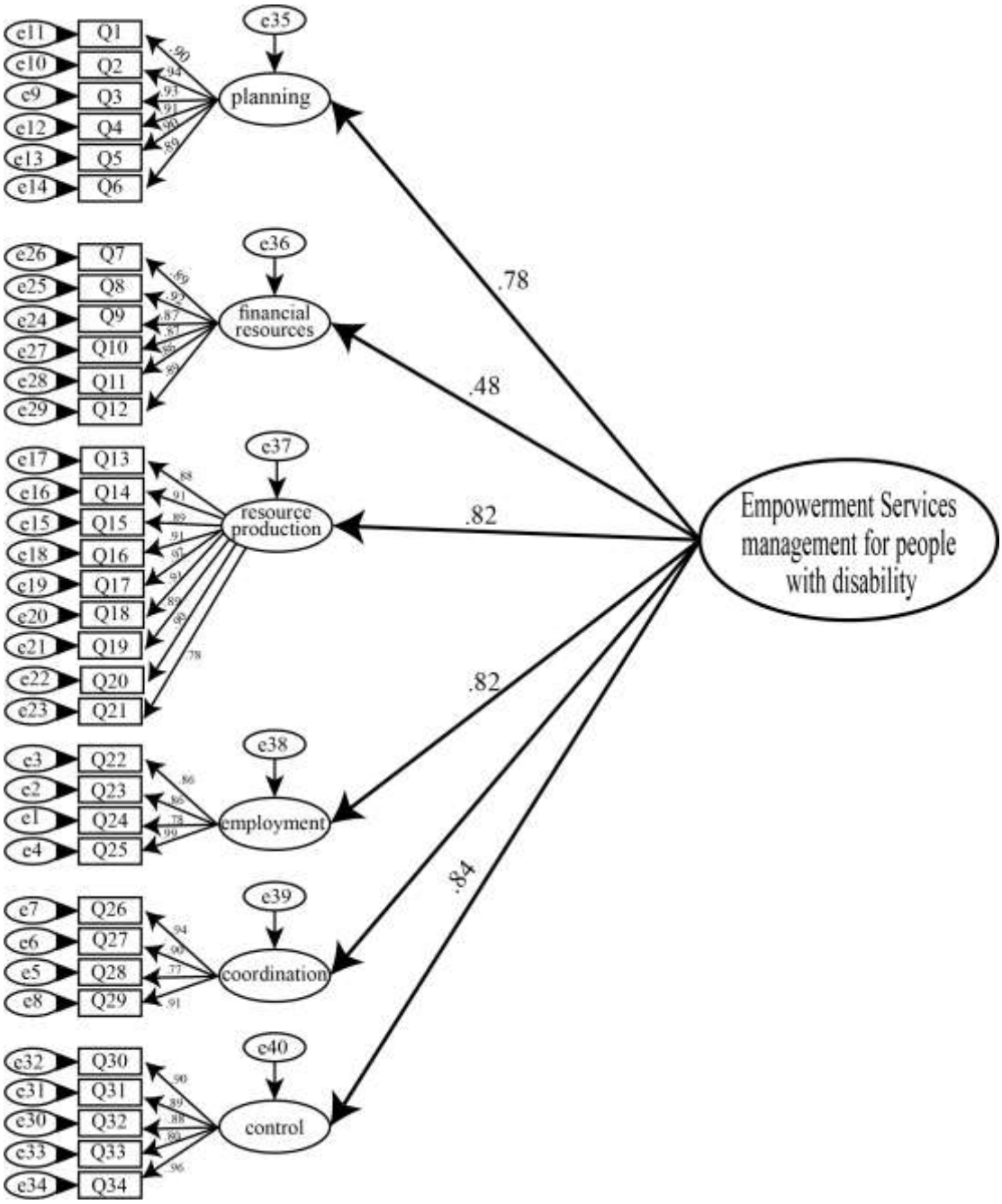

Figure 2: The final confirmed model

Finally, 34 items and six factors were extracted and named based on the similarity of items within each category.

The first factor, planning, included six items. As seen in Fig. 2, among the items related to the planning factor, item No. 1, "Participation of people with disability through conducting surveys in planning," has the highest factor load (0.826), and item No. 5, "Using evidence-based programs in planning," has the lowest factor load (0.822).

The second factor, "financial resources," included six items. Among the items related to this factor, "Tax collection in financing" had the highest factor load (0.892), and "Existence of dedicated insurance funds for empowering services for people with disabilities" had the lowest factor load (0.860).

The third factor, named "resource generation", included nine items. Among the items related to the resource production factor, the item "The existence of an efficient university education system based on practical experiences in the production of resources" has the highest factor load (0.816). The item "Distribution of human resources specializing in rehabilitation in different regions of the country according to the need to provide services in the production of resources" had the lowest factor load (0.755).

The fourth factor, "Employment," included four items. Among the items related to the employment factor, the item "Provision of related training for disabled people for employment them" had the highest factor load (0.788), and the item "Package of employment services for people with disabilities for their employment" had the lowest factor load (0.713).

The fifth factor, named "Coordination," included four items. Among the items related to the coordination factor, the item "Team-based approaches to coordination" had the highest factor load (0.782), and the item "Establishing a planning committee for coordination" had the lowest factor load (0.762).

The sixth factor, "Control," includes five items. Among the items related to the control factor, "The existence of government supervisory units on human resources, finance, and service centers for control" has the highest factor load (0.757), and "Monitoring by disability-related institutions for control" has the lowest factor load (0.718).

As seen in Fig. 2, all the values of the standard coefficients related to the dimensions of the latent variables are higher than 0.3. Therefore, this measurement model has sufficient reliability in the field of latent variables. Moreover, all significant coefficients were obtained outside the range (-1.96, +1.96).

Table 2 shows the results of model fit indices based on confirmatory factor analysis:

Table 2: Model fit indices of the research model

Model fit indices	Results
$\chi 2/df$	1.228
RMR	0.037
GFI	0.858
AGFI	0.838
NFI	0.928
RFI	0.922
IFI	0.986
TLI	0.985
CFI	0.986
RMSEA	0.032

CMIN/DF is 1.228, considered fit. The largeness of the comparative fit index (CFI) of 0.986 and the smallness of the root mean square error of approximation (RMSEA) of 0.032 indicate the fit of the presented model.

Discussion

Empowerment services are necessary, as there is a concrete demand for them from governments, not only from medical professionals but also from the political sphere. Globalization has put pressure on the social cohesion of many countries, and health systems, as a key component of societies, do not function as they should.[10-11] Despite this issue, globally, and particularly in developing and underdeveloped societies, addressing the needs of this population group in the form of empowerment is not well addressed. Therefore, there is limited evidence in the field of design of empowerment service management models for people with disabilities. Therefore, the present study was conducted to address the aforementioned gap. The present study can be considered one of the first efforts in the field of designing and providing an empowerment service management model to support people with disabilities in Iran. Thus, according to the research results, the following points can be mentioned:

Planning should precede any management principle and be considered in conjunction with other key functions.

In general, this function is not designed at the beginning of the program and ends there; rather, it is a continuous process. [12-13] Therefore, this factor has been taken into consideration in the design of the research model. The World Health Organization has recommended the use of the general model of integrated care, and the developed countries have considered this issue important. Although in Iran's health system, integrated care is being implemented in the country's health and treatment system, there are many challenges, including the lack of proper internal and external relationships in various health organizations, problems related to access to elderly information, absence of a plan to involve disabled people in determining their health care program, etc.[14] Therefore, the experts in this research have taken into consideration things like establishing planning committees to provide services to people with disabilities and involving disabled people through surveys when designing the empowerment service management model for people with disabilities

Resource production: In Iran, graduates of rehabilitation fields typically study in educational centers affiliated with universities under the Ministry of Health, Medicine, and Medical Education. The review of the statistical yearbook of the Welfare Organization in 2018 revealed that the average ratio of rehabilitation experts to the number of disabled people covered was 1:20, for example, 1:100 in the field of occupational therapy.[7] Mistretta (2007) demonstrated that when there are insufficient medical professionals in the community, problems related to the community's health level increase.[12] Therefore, it will be effective to train rehabilitation students according to the distribution of centers, the prevalence of disabilities in each region, and the appropriate distribution of workforce by the Ministry of Health, Treatment, and Medical Education.

Financing: In Iran, the cost of using rehabilitation services in the private sector is prohibitive. As a result, disabled people are forced to leave the treatment process. Dastyar et al. (2015) found that a lack of awareness and financial pressures affected families' access to speech therapy services.[15] Formulating support and incentive policies, such as allocating subsidies and donor financial aid through separate channels, will be beneficial in expanding these services. Iravani et al. (2021) considered the financing of rehabilitation in Iran to be unbalanced, citing the lack of credits to compensate for the costs, the weakness of the insurance system, and the therapists' market view of rehabilitation.[8] The rehabilitation system in Iran needs to use a combination of different methods of providing financial resources, with the priority of reducing the share of disabled people in direct payment. Although the time trend indicates the improvement of the efficiency of the rehabilitation system, there are still not enough human resources and human capital available.

Employment: items related to the provision of training for the employment of people with disability, compulsory employment quota, employer subsidies for the employment of people with disability and the package of employment services for people with disability are among the main components of the employment factor in the final empowerment service management model provided for people with disability in this research are considered. The welfare organization has developed a comprehensive job creation package for people with disabilities, supporting employment and creating equal opportunities for disabled individuals to acquire skills and provide for their livelihood. This will increase their participation in social life, enhance their self-esteem and self-worth, and ultimately increase their overall life satisfaction. In Germany, individuals with severe disabilities and those facing difficulties in finding employment due to their disability, age, or other reasons, receive an additional employment pension. Employers can receive a salary subsidy of up to 70% for hiring these individuals for three years. [16] Grisé et al. (2019) demonstrated that communication situations, collaborative teams, training employees in the field of mental health and workforce issues, and multi-level participation of people with disabilities strengthen the performance of individuals with disabilities in the workplace.[17]

Coordination**:** The things Among the primary elements of the coordination factor in the final model provided for the empowerment service management for people with disabilities in this research have been team-based approaches to providing empowerment services, the establishment of a planning committee, determining access based on needs, and coordination between insurance companies and units providing services to people with disabilities. Setting up multidisciplinary teams is one of the key strategies to ensure the orientation of primary health care. There is no uniform pattern to these teams. However, they generally consist of a range of skills and professions, including health

workers, nurses, family doctors, pharmacists, nutritionists, social workers, traditional medicine experts, and administrative staff, to respond to the full range of needs of people under their care. [18] In line with the item team-based approaches in the field of coordination, as presented in the current study, this data readily validates team-based approaches as a significant concern.

Control: The performance evaluation items for personnel providing empowerment services to people with disabilities, satisfaction surveys of empowerment services, monitoring by relevant institutions, quotas for empowerment services, the existence of government monitoring units for human resources, and financial services are considered the main components of the control factor in the research model. Increasing health system costs and limited resources to meet growing demands make rationing of healthcare unavoidable. Rationing is considered a strategy to control costs and increase efficiency in utilizing the limited resources of health systems.[19] Evaluating the performance of personnel providing empowerment services is a straightforward way to understand the concept of monitoring and control. This item has been considered as one of the principles of control in the empowerment service management model for people with disability. It specifies to what extent safe health services may lead to favorable health outcomes; hence, according to the reviewed evidence, evaluating the performance of personnel providing empowerment services is a suitable choice.

Conclusion

The fitted and saturated model of the present study revealed that all six dimensions of planning, financing, resource generation, employment, coordination, and control significantly impact the empowerment services for people with disabilities in Iran. Considering that the goodness-of-fit indicator of the model indicates an appropriate fit for the developed model, and the status of people with disabilities and the empowerment services provided to them, paying attention to the important and effective dimensions currently known in their management is not a priority. However, their role in the service system is vital. To ensure the adequate performance of staff at centers offering empowerment services and to identify successful models of service provision for people with disabilities, it is recommended that policies be regularly updated and reviewed, and that frequent and planned visits and surveys of people with disabilities be conducted regularly.

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Conflict of Interest Disclosures:

The authors declare that they have no competing interests.

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Authors' Contributions:

All authors contributed equally in this study

Ethical Statement:

This study has been registered in the ethical committee of Islamic Azad University with the registration number IR.IAU.TMU.REC.1401.044. We collected the data privately, and patients filled out informed consent forms before including the study.

Declaration of Generative AI and AI-assisted technologies

None.

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