

Research on the Construction of Evaluation Index System for College Students' Views on Marriage and Childbearing

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Abstract: With the social changes and cultural development, the marriage and childbearing patterns in China have undergone obvious changes. As the main body of future marriage and childbearing, college students' mastery of their marriage and childbearing concepts and fertility preferences is of great practical significance for optimizing college students' marriage and childbearing values and population structure. This study refers to the theoretical frameworks such as the Marriage Attitude Scale (MAS), the Love Attitude Index System to establish the Reference Love Attitude Scale (LAS), and the personality classification scale Chinese Adjective Big Five Personality Scale Short Version (BFFP-CAS-S), etc. It uses the Analytic Hierarchy Process (AHP) to screen scientific indicators and assign weight values, and constructs an evaluation index system for college students' marriage and childbearing concepts. By constructing a scientific and reasonable index system, we can better understand the marriage and childbearing concepts of college students, and provide strong support for the formulation of relevant policies and publicity education.

Keywords: Marriage and childbearing concept; Index system; AHP; Questionnaire survey

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1. Introduction

The Central Committee of the Communist Party of China and the State Council clearly stated in the Medium and Long-Term Youth Development Plan (2016-2025) that it is necessary to strengthen the education and guidance of young people's views on marriage, love, and family, incorporate marriage and love education into the university education system, strengthen young people's awareness of respect, integrity, and responsibility towards emotional life, and guide them to establish civilized, healthy, and rational views on marriage and love. As the main members of young people, the establishment of marriage and childbearing concepts among college students is an important issue that cannot be ignored.

At present, the graduates of Chinese universities are mainly post-90s and post-00s, and most of them are only children. After the implementation of the "three-child" policy, whether the fertility willingness to have children and other fertility concepts of college graduates will change remains to be further studied. College students are the main force in the future marriage market, and they are in the transitional stage between "love" and "marriage". Their views on marriage and childbearing are directly related to their future marriage choices and ultimately determine their childbearing behaviors. With the development of social economy and the impact of new-era thoughts, traditional marriage concepts have been

seriously challenged. Contemporary college students commonly have ideas such as premarital cohabitation and divorce, leading to late marriage and childbearing, and even new phenomena such as "DINK" (Double Income No Kids) [1-4]. Therefore, constructing an investigation index system, studying the current situation of college students' views on marriage and childbearing and their influencing factors, and providing theoretical guidance for establishing correct views on marriage and childbearing are application issues of great practical significance.

2. Research status at home and abroad

Existing research on views on marriage and love is relatively extensive both domestically and internationally. However, academic literature on views on marriage and childbearing remains limited, with even fewer studies focusing on college students. After reviewing most relevant literature from home and abroad, it is evident that domestic research on college students' views on marriage and childbearing primarily involves conceptual definition and structural construction of these views. This includes classification of marriage and childbearing perspectives, questionnaire design, and descriptive analysis of current trends. Mainstream analytical frameworks categorize influencing factors into three dimensions: individual, family, and societal levels. Specifically, regarding individual-level influences, scholars such as Yu Lichao explored the structure of college students' views on love and marriage from seven dimensions: love motivation, marriage propensity, marriage values, marriage autonomy, marriage role perceptions, marital loyalty, and sexual decision-making [5]. For family-level impacts, Li Xinran conducted research on the influence of family upbringing factors on the views on love and marriage among only-child college students [6]. Concerning societal-level effects, Wang Zhao examined the impact of dating and matchmaking shows on college students' views on love and marriage [7], while Dou Hongmei et al. analyzed the influence of WeChat Official Accounts on these views [8].

While foreign studies started earlier and focused on the construction of index systems for the study of marriage and childbearing concepts, as well as marriage and childbearing attitudes, sexual attitudes, sexual morality, etc. In 1998, Hill developed the Favorableness of Attitude Toward Marriage Scale ^[9], which mainly aims to understand whether an individual's attitude toward marriage is positive or negative; Muench and Landrum drew on the scale developed by Long and designed the Marriage Attitudes Questionnaire ^[10]. Hudson et al. revised Adler's Sex Attitude Scale to generate the College Students' Sex Attitude Scale ^[11]; Rachel Saul Lacey et al. developed the Sex-Moral Attitudes Scale in 2004 to measure individuals' attitudes and views on premarital sex, homosexuality, and extramarital sex. Victor and Andrey studied how family organization characteristics in non-industrial societies form the basis for promoting marriages with romantic love ^[12].

3. Evaluation indicators and weights of college students' views on marriage and childbearing

With the development of science and technology and the economy, college students' views on marriage and childbearing have been impacted by multiple aspects such as technological innovation, rapid economic development, and foreign ideological trends, leading to different understandings and ideas about marriage and childbearing. In order to accurately understand and grasp the current situation of college students' views on marriage and childbearing, and positively guide college students to establish correct views on marriage and childbearing, this study constructs a system bounded by internal and external dimensions, including 4 first-level indicators and 9 second-level indicators.

3.1. Selection of evaluation indicators

By sorting out the literature, querying and analyzing college students' attitudes towards marriage and childbearing, the study summarizes the influences of two dimensions: the internal dimension and the external dimension. With reference to theoretical frameworks such as the Marriage Attitude Scale (MAS), the Love Attitude Scale (LAS) established based on

the Love Attitude Index System, and the personality classification scale "Chinese Adjective Big Five Personality Scale Short Version (BFFP - CAS - S)", the "marriage concept" with secondary indicators of "marriage cognition", "marriage emotion" and "marriage intention" was determined; the "fertility concept" with secondary indicators of "fertility cognition" and "fertility intention"; the "personal background" with secondary indicators of "family environment" and "study life"; the "school measures" with secondary indicators of "curriculum design" and "activity organization", totaling 4 first - level indicators, 9 secondary indicators and 21 items.

3.2. Evaluation index weight assignment

To make the indicators more scientific, systematic and comprehensive, this study adopted the Delphi method for expert evaluation. According to expert opinions, index screening and optimization were carried out, and meanwhile, weights were assigned to indicators at all levels.

First, the indicator system is divided into four layers: the target layer, the criterion layer, the first-level indicator layer, and the second-level indicator layer. The specific layering is shown in **Figure 1** below.

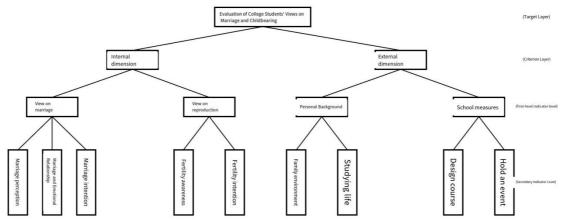


Figure 1. Hierarchical Structure of the Evaluation System for College Students' Views on Marriage and Childbearing

Next, on this basis, a preliminary evaluation matrix was constructed to determine the relative importance of each indicator in the same layer. In the hierarchical structure of this evaluation system, the target layer is closely related to the dimension layer, the dimension layer is closely related to the first-level indicator layer, and the first-level indicator layer is closely related to the second-level indicator layer. Therefore, 7 judgment matrices can be constructed, including the target layer-dimension layer, internal dimension-first-level indicator layer, external dimension-first-level indicator layer, and 4 first-level indicator layers. Taking the "marriage view" first-level indicator layer-second-level indicator layer as an example, its judgment matrix is shown in **Table 1** below.

Dimension	Marital Cognition (i)	Marital Emotion (j)	Marital Intention (k)	
Marital Cognition (i)	1	C_{ji}	C_{ji}	
Marital Emotion (j)	C_{ji}	1	C_{ji}	
Marital Intention (k)	C_{ii}	C_{ii}	1	

 Table 1. Judgment Matrix Table

This study selects Saaty's nine-level scaling method^[13] to compile the Hierarchical Matrix Questionnaire for Evaluation Indicators of College Students' Marriage and Childbearing Concepts based on the rating system and judgment matrix, and uses an assignment method to score the importance of each indicator in the seven judgment matrices ^[14]. The

questionnaire was distributed to 13 experts who filled in valid questionnaires through online and offline methods, and a total of 13 valid questionnaires were recovered. The AHP calculation formula was used to sort out and calculate the expert scoring data [15-16], the average value was obtained, and then the average value was corrected to obtain the weight value of each indicator. The consistency test was performed on each sorted judgment matrix, and the CR values were all less than 0.1, and the consistency test passed. Therefore, each judgment matrix has satisfactory consistency.

Finally, based on the above single-level weight calculation results, normalization processing is carried out to ensure that the sum of the weights of the indicators at each level is 1, the relative weight of each indicator is calculated, the overall ranking of the hierarchy is carried out, and the weight value of the indicator system is obtained.

3.3. Construction of evaluation index system

Based on the above selection of indicators and assignment of weights, an evaluation index system for college students' marriage and childbearing concepts with certain scientificity and systematicness is obtained, as shown in **Table 2** below.

Dimension	Weight (%)	First-level Index	Weight (%)	Second-level Index	Weight (%)
Internal Dimension	72.464	Marriage View	37.453	Marriage Cognition	17.945
				Marriage Emotion	35.097
				Marriage Intention	46.958
		Fertility View	62.547	Fertility Cognition	34.247
				Fertility Intention	65.753
External Dimension	27.536	Personal Background	34.602	Family Environment	27.933
				Study and Life	72.067
		School Measures	65.398	Curriculum Design	19.685
				Activity Organization	80.315

Table 2. Weights of Evaluation Indicators for College Students' Views on Marriage and Childbearing

4. Conclusion

The concept of marriage and childbearing among college students reflects the values of a group, and it is also the result of personal conditions, as well as the influence of the entire social environment and culture. Only through the joint efforts of themselves and society can college students correctly and rationally understand themselves, and then establish a correct and positive concept of marriage and childbearing [17].

The construction of an evaluation index system for college students' views on marriage and childbearing is a complex and systematic process, aiming to comprehensively and objectively assess the marriage and childbearing concepts of contemporary college students. The construction of this system not only helps to understand college students' attitudes towards marriage and childbearing, but also provides a scientific basis for the formulation of relevant policies and publicity education. When constructing this index system, this study comprehensively considered two dimensions, internal and external, as well as 4 first-level indicators and 9 second-level indicators, including college students' personal backgrounds, family environments, values, social cognition, etc. Through methods such as questionnaire surveys, in-depth interviews, and data analysis, this study screened a series of representative and scientific indicators, deeply studied the weight assignment among indicators at all levels, and constructed an evaluation index system.

This indicator system includes multiple levels and aspects. At the individual level, this study focuses on the impact

of factors such as college students' age, gender, and education level on their views on marriage and childbearing. At the family level, this study examines the shaping role of factors such as family structure, family economic status, and family education methods on views on marriage and childbearing. At the social level, this study focuses on the guiding role of factors such as public opinion, policies and regulations, and cultural traditions on views on marriage and childbearing.

This study expects that through the application of this index system, the commonalities and differences in the marriage and childbearing concepts of college students can be discovered, and the factors and mechanisms influencing the marriage and childbearing concepts of college students can be further explored, so as to provide targeted suggestions for the formulation of relevant policies and publicity and education. For example, by strengthening marriage and childbearing education, optimizing fertility policies, improving the social environment and other means, college students can be guided to form positive and healthy marriage and childbearing concepts. Therefore, the construction of an evaluation index system for college students' marriage and childbearing concepts is a research topic of great significance. By constructing a scientific and reasonable index system, we can better understand the marriage and childbearing concepts of college students and provide strong support for the formulation of relevant policies and publicity and education.

Disclosure statement

The author declares no conflict of interest.

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