

SOCIOECONOMIC STATUS SCALE-MODIFIED KUPPUSWAMY SCALE FOR THE YEAR 2022

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ABSTRACT

Socioeconomic status is one of the most essential indicators to evaluate the health status and nutritional status of a family. Many composite indexes have been proposed. Few international scales are Hollingshead scale, Nakao and Treas scale, Blishen, Carroll, and Moore scale, In India, the scales can be categorised into those scales applicable in rural, urban or both. The various scales are Rahudkar scale, B. G Prasad scale, Udai Parikh scale, Jalota scale, Kuppuswamy scale, Gaur classification and Bhardwaj scale for children, SC Tiwari and Amrish Kumar and Agarwal scale. Updated modified Kuppuswamy scales is the most commonly and widely socioeconomic status scale in India in urban settings. But due to rapidly growing economic rate, the available scales have been ineffective. Therefore, in this review article the Kuppuswamy scale has been updated for the year 2022.

KEYWORDS- Social Class, Family, Income, Education, Occupations

INTRODUCTION

Socioeconomic status can be termed as the social standing or social class of an individual or a group. It is mostly deliberated as a combination of education, income and occupation.^[1] Therefore it is one of the most essential indicators to evaluate the health status and nutritional status of a family. The socio-economic status may be defined as “a position attained by any individual within a system of hierarchical social structure”.^[2] It has a leading role in providing various health-related services, accessibility issues, affordable costs, acceptance by beneficiaries and overall usage of health services by the people.^[3]

The socioeconomic status also has an influence on

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morbidity and mortality of the community. Most of the time, SES determines patient's and his or her family diagnosis. It allows properly understanding the affordability of health services, amenities and their purchasing capacity, the health seeking behavior. It describes and monitors the social distribution of diseases, health status. and influences health policy. It supervises changes over time or across different regions, social groups and evaluates whether policy targets to diminish health inequalities. It also explains the causal

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mechanisms and statistically adjusts for socioeconomic circumstances when some other exposure is the main focus of interest. [1-3]

For determining the SES either of an individual or a family, many scales have been proposed both internationally and nationally for families living in urban or rural areas. In the United States (four-factor Hollingshead scale, Nakao and Treas scale) and from Canada (Blishen, Carroll, and Moore scale) are utilized. The Hollingshead Four Factor Index of Socioeconomic Status is a widely used survey designed to measure social status of an individual based on four arenas which are marital status, retired/employed status, educational attainment, and occupational prestige. The child parent's education code is rated on a 7-point scale. This is administered to guardians of all child participants, aged 6-17 years old. [4,5] Blishen et al. [6] Scale in the year 1987 provides an occupational socioeconomic index scale. It considers the median income for men and women and the net proportion of well-educated individuals for a given occupation. An SES score was derived for each of the 514 occupational codes from the 1981 Canadian census.

In India, the scales can be categorised into those scales applicable in rural, urban or both. The various scales to state chronologically are Rahudkar scale [7] (1960), B. G Prasad scale [8] (1961), Udai Parikh scale [9] (1964), Jalota scale [10] (1970), Kuppuswamy scale [11] in 1976, Gaur classification [12] (1996) and Bhardwaj scale [13] for children (2001). Lately, Gaur Classification revised in 2012, combined expenditure and debts to asset ratio (2005) with income, education, occupation and living standard. SC Tiwari and Amrish Kumar [14] used seven components that is housing, material possession, education, occupation, economic profile, cultivated land, and social profile in his scale. This scale is applicable in both rural and urban areas and was last updated in the year 2010.

Agarwal et al [15,16] (2005), devised a new scale consisting of 22 items based on caste, material possessions, visits abroad, monthly per capita income, income tax paid, highest education in the family and occupation. Suitable scoring was given to each item, ranging from 3 to 9. The extremum collective score was 100. Based on this score, the socio-economic states of the family were divided into 6 categories, namely upper high (combined score of more than 76), high (61-75), upper middle (46-60), lower middle (31-45), poor (16-30) and very poor (combined score less than 15).

Among several scales for determining socioeconomic status, the most widely and popularly used scales in India include "updated modified Kuppuswamy SES" mostly used for urban regions. But due to high inflation rate, Kuppuswamy scale has not been very useful. For this reason, regular revision is required to serve their intent in insuring the SES of an individual or any family. Hence the aim of was to provide an updated modified Kuppuswamy socioeconomic status scale for 2022.

Modification of Kuppuswamy Scale 2022

The relevance of any income scale usually lies in that particular study period. Due to constant steady inflation and subsequent fall in the price of rupee, the economic criteria lose their importance in the scale. Although various modifications have been proposed in the past, we herein propose another modification to the scale, which takes into account the current price levels.

Scoring of Education (Table 1)

In the modified scale, the educational and occupational factor usually continue to remain the same. The Head of the family is assigned with the scoring for the education, irrespective of whether he/she was the subject or not. Credit for completed degree is only given that is the highest level earned and not the one currently pursuing or not completed.

Secondly, the latest classification includes all persons less than 7 years of age as ‘illiterate’. As per the Census of India, people who are incapable to read and write are treated as illiterate. But a rare possibility of families can be where Head may be less than 7 years of age. A hypothetical example can be of two siblings, both less than 7 years of age, left orphaned due to sudden fateful loss of their parents. Till the time of their legal adoption by a relative or others, they would comprise of an ‘Electron family’. For this family, the eldest sibling would be the de-facto ‘head’ and education thus need to be scored.^[17]

Table 1 Education of the Head

S.No.		Score
1.	Profession or Honours	7
2.	Graduate	6
3.	Intermediate or diploma	5
4.	High school certificate	4
5.	Middle school certificate	3
6.	Primary school certificate	2
7.	Illiterate	1

Scoring of Occupation (Table 2)

The scoring is assigned only for the occupation of the Head of family. In case the Head of family has retired, credit may be given for his/her last job. When an individual is scored, we have to move up the categories that is from unemployed till professional. For example, an engineer who has never been employed ever, after attaining his/her professional degree for any reason, the scoring for occupation should be 1 (for ‘unemployed’).

The original scale in the third category explains about jobs that require some training and reading and writing. This revision recommends that it can be renamed as arithmetic skill jobs. The term arithmetic skill is used here in context of need of arithmetic skills in the job.

For classifying the shopkeepers, the size of the shop can differ from an inferior stall to a big best-

selling store. Thus, they are classified as a lower-ranking shopkeeper. The prestige of a person occupation is scored as person shows greater initiative than routine expected of his/her job, he/she can be placed in a higher category of occupation.

Table 2 Occupation of Head of the family

S.No.	Occupation of the Head	Scores
1.	Legislators, Senior Officials & Managers	10
2.	Professionals	9
3.	Technicians and Associate Professionals	8
4.	Clerks	7
5.	Skilled Workers and Shop & Market Sales Workers	6
6.	Skilled Agricultural & Fishery Workers	5
7.	Craft & Related Trade Workers	4
8.	Plant & Machine Operators and Assemblers	3
9.	Elementary Occupation	2
10.	Unemployed	1

Scoring of Income (Table 3)

In order to carry out and perform the regular revision of the scale, the income scale in the Kuppuswamy SES is revised, “as per changes in the consumer price index (CPI) for industrial workers as projected by the central ministry of statistics and programme implementation on their website.” Consumer Price Index is an index measuring the change in the cost of typical wage-earner purchases of goods and services expressed as a percentage of the cost of these same goods and services in some base period or year. This is also known as cost-of-living index.

Table 3 Total Monthly Income of the Family

S.No.	Updated Monthly Family Income in Rupees (2012)	Updated Monthly Family Income in Rupees (2020)	Updated Monthly Family Income in Rupees (2021)	Updated Monthly Family Income in Rupees (2022)	Scores
1.	≥30375	≥199862	≥123,322	≥184,376	12
2.	15188-30374	99931-199861	61663-123,321	92,191-184,370	10
3.	11362-15187	74755-99930	46129-61,662	68967-92185	6
4.	7594-11361	49962-74755	30,831-46,128	46095-68961	4
5.	4556-7593	29,973-49961	18,497-30,830	27654-46089	3
6.	1521-4555	10002-29,972	6,175-18,496	9232-27648	2
7.	≤1520	≤10001	≤6174	≤9226	1

Current Year Calculation (2022)

The current base year according to Labour Bureau, Government of India is 2012. In 2018, a specific update of Kuppuswamy SES has utilized the latest base year for calculation purposes. This has effectively ascertained precise income slabs. In this article, 2012 has been used as base year for calculating the financial level of families.^[18]

In February 2022, the current inflation rate was 6.07 which has been taken into consideration for calculating the CPI.^[19] When the generated financial scale values of the year 2012 are multiplied with the inflation rate of 6.07 that determines the Kuppuswamy SES scale for February 2022.

$$\text{Inflation Rate} = [(b-a/a) \times 100]$$

where 'b' is the CPI of current year and 'a' is the CPI of last year.

Thus, the updated and modified Kuppuswamy socioeconomic status scales for 2022 can be categorised as upper, upper middle, lower middle, upper lower and lower ranging from a score of less than 5 to 29. (Table 4)

Table 4 Kuppuswamy socio-economic status scale 2022

SI.No.	Score	Socioeconomic Class
1.	26-29	Upper (I)
2.	16-25	Upper Middle (II)
3.	11-15	Lower Middle (III)
4.	5-10	Upper Lower (IV)
5.	<5	Lower (V)

CONCLUSION

Even if the Kuppuswamy scale is most regularly used scale it has some limitations. Those includes consideration of educational status and type of occupation of the head of the family for calculation of socioeconomic status, which is completely unsuitable, taking the current scenario into consideration. Moreover, the scale requires to

be updated regularly. It is based on constantly changing CPI rates, which makes the scale compromising in nature.^[20]

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