

Revised Kuppuswamy's Socioeconomic Status Scale: Explained and Updated

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Abstract

Some of the facets of the Kuppuswamy's socioeconomic status scale sometimes create confusion and require explanation on how to classify, and need some minor updates to bring the scale up-to-date. This article provides a revised scale that allows for the real-time update of the scale.

Key words

Kuppuswamy's scale, Socioeconomic status, Update

The socio-economic status is widely recognized as one of the important factors affecting the health condition of an individual or a family [1]. Several studies done in health-related fields require assessment of the socio-economic status (SES) and consider it during the data analysis. The Kuppuswamy's Socioeconomic Status Scale is extensively used in urban population, for assessment of the SES [2]. An online tool is available for real-time updating of the scale [3]. Some of the facets of the scale sometimes create confusion and require explanation on how to classify, and need some minor updates to bring the scale up-to-date. These suggested changes have implications on increasing the validity in use of this popular SES tool.

Based upon explanations as per the details given in the original scale and recommendations about the remaining points, this article provides a revised scale that allows for the real-time update of the scale. For the purpose of clarity, there is a symbol '(R)' after each point that is a recommendation, rather than explanation of the original scale. The revised scale will retain its validity until the time of revision of the method of calculation of the Consumer Price Index – Industrial Workers (CPI-IW) or the baseline year for its calculation.

Explanations and recommendations about the components of the scale:

SCORING OF EDUCATION

1. *Education of Head:* The scoring is only for the education of the Head of family, irrespective of whether he/she was the subject or not.
2. *Credit for completed milestone only:* The level of education to be considered should be the maximum level already attained, not the one currently undergoing and not yet completed. For example, a person currently in the second year of a college degree course (of three years

- duration), has not completed the graduation yet. So the allotted score for education should be 5 ('higher secondary certificate') only.
3. *Renaming of categories:* The education scenario has changed since the time of the original scale. So, there is a need for recommending few changes, than just clarifying the existing categories. By and large, the concept of 'intermediate' after high school, has been replaced by 'higher secondary', that is class XII (R).
 4. *'High grade' professional degree:* The original scale mentions that the top most category of education comprises of post-graduation as well as some courses that are actually graduation but qualify to be the top most category if they are 'high grade' professional degrees. The scale mentions few examples of such courses but does not define. This revision recommends that the following professional courses be included in the topmost category and scored as 7: Engineering, Medical, Dental, Architecture, and Chartered Accountancy (R).
 5. *Expanded definition of illiterate:* The current categorization includes all persons less than 7 years of age as 'illiterate'. As per the Census of India definition too, such persons are treated as illiterate, irrespective of their actual capacity to read and write [4]. The current definition has to be the expanded one, to take into account the rare possibility of families 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 unfortunate loss of their parents. Till the time of their legal adoption by a relative or others, they would constitute an 'Electron family'[5]. For this family, the eldest sibling would be the *de-facto* 'head' and education thus need to be scored.

Table I provides a description of the Education categories.

SCORING OF OCCUPATION

1. *Occupation of Head:* Remember that the scoring is only for the occupation of the Head of family.
2. *Retired Head:* In case the Head of family is currently retired, credit may be given while scoring for his/her last job held (R).
3. *How to score:* While scoring an individual, move up the categories from 1 to 10 score (that is from 'unemployed' upwards till 'professional'). Moving up, decide the maximum category to place the individual at and so the score that can be allotted.
4. *Independent scoring:* The scoring of the Occupation is independent of the scoring in the Education category. Consider two hypothetical cases as examples – Case (a) A lawyer who has never been employed ever, after attaining his/her professional degree. There can be several reasons for such a situation. The scoring for occupation should be 1 (for 'unemployed'). Case (b) An architect by education, who is not pursuing the profession fulltime or part time. (S) he has

now opened a cyber cafe shop and is occupied in running this shop. The scoring should be for the third category of '*Arithmetic skill jobs*' as per the actual status.

5. *Name of third category*: This has been a source of some confusion. The original scale simply names this category as 'Clerical, Shop owner, Farm owner etc.' that are just examples of the category. It is explained in the original scale as jobs that require some training in arithmetic and probably also reading and writing. This revision recommends that this category be named as '*Arithmetic skill jobs*'. The term '*arithmetic skill*' is used here in context of need of arithmetic skills in the job (as given in the original scale) (R).
6. *Shopkeeper classification*: Many of the people are likely to have this occupation, and the size of the shop can also vary from a petty kiosk to a large popular store. It bears noting that 'shop keeper' is actually being classified into two, with 'petty shopkeeper'- that is a small-time shopkeeper running only a small shop, being classified lower as a 'semi-skilled worker'.
7. *Ranking the prestige of an occupation*: As mentioned in the original scale, if a person shows greater initiative than routine expected of his/her job, he/she can be placed in a higher category of occupation.

Table II describes the Occupation categories for clarification purpose. Note that just eliciting the profession or designation of the head of the family may not be enough, but details of the person's actual occupation are required in many occasions.

SCORING OF FAMILY INCOME

1. *Family income, not per capita income*: It should be noted that the income to be assessed is total family income (per month) and not the per capita income. This point has been clarified earlier [3].
2. *Real-time update*: The income categories to be used for the scale can be determined using the interactive online calculator provided at www.scaleupdate.weebly.com.
3. *CPI-IW value to use*: The current or latest value of CPI-IW may not be the one required always. For most cross-sectional studies where an individual would be assessed for SES only once, it would be the latest value available before beginning of data collection. The cut-off point can be considered as the printing of study questionnaires (or final freezing of study tool version, in case of electronic data collection tools). For prospective studies, where an individual is to be assessed at least six months apart, different CPI-IW values can be used for real-time update as applicable (R).

The Revised Kuppusswamy's Socioeconomic Status Scale with real-time update is detailed in the **Table III**. This can be regarded as the latest version of the scale, and the real-time update is dynamic, as per the calculations done using the online interactive calculator at www.scaleupdate.weebly.com

[3]. A critical appraisal of the Kuppusswamy's scale has been shared earlier [1]. However, the scale has withstood the test of time and is still widely used across studies in urban populations. This update is an enhancement for increasing the scale's validity for use in the current times.

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TABLE I EXPLANATION AND EXAMPLES OF CLASSIFICATION OF EDUCATION OF HEAD OF FAMILY

<i>Education category</i>	<i>New name for the category</i>	<i>Salient point</i>	<i>Examples</i>
Profession or honors	Post-graduate or professional degree	Any Post graduation. Any high grade professional education (which may directly be after class XII)	M.A., M.Sc., Ph.D., M.Ed. M.B.B.S., B.E., B.Arch.
Graduate or post graduate	Graduate degree	Any graduation degree (other than high grade professional education)	B.A., B.Sc., B.Ed.
Intermediate or post high school diploma	Higher secondary certificate	Class XII pass	Class XII pass, Class XII with vocational diploma
High school certificate	High school certificate	Class X pass	Class X pass, Class XI pass (didn't complete Class XII)
Middle school certificate	Middle school certificate	Class VIII pass	Class VIII pass, Class IX Pass
Primary school or literate	Literate, less than Middle school certificate	Literate would be as per the definition followed by Census of India. That is, person aged ≥ 7 years who can read and write with understanding in any language.	Any level of literacy below Class VIII (that is, did not get Class VIII pass certificate)
Illiterate	Illiterate	Person aged ≥ 7 years who cannot read and write with understanding in any language. Or, any person aged < 7 years	Person who can only read but not write with understanding in a language.

Recommendation (R): renaming of some of the categories, and specifying 'high grade' professional education.

TABLE II EXPLANATION AND EXAMPLES OF CLASSIFICATION OF OCCUPATION OF HEAD OF FAMILY

<i>Occupation category</i>	<i>Salient points</i>	<i>Examples</i>
Professional	Decision making, formulating policies and execution of policies. Jobs that need creative work. Jobs involving high organizational ability, and control of large number of humans. Or, jobs that involve dealing with large amounts of money. Most require very high general or professional education, but this is not compulsory.	Doctors, Advocates, Engineers, Architects, Directors, Managers, senior administrators, Readers and Professors, newspaper editors, college Principals, Architects, Bank managers
Semi-Professional	Jobs requiring post-high school education. But routine nature of jobs	High school teachers, College lecturers, junior administrators, junior medical practitioners
Arithmetic skill jobs	Jobs that require some training in arithmetic and probably also reading, writing. But jobs that are basically repetitive in nature. 'Arithmetic skill' in context of higher arithmetic skills required for job.	Clerk, accountant, typist, elementary school teacher, farm owner, shopkeeper, salesman, insurance agent, news journalist
Skilled worker	Long training in complicated work	Driver, telephone operator, mason, carpenter, mechanic
Semi-skilled worker	Jobs that require some training	Factory labourer, car cleaner, petty shopkeeper
Unskilled worker	No education or training required	Domestic servant, peon, watchman
Unemployed	Irrespective of education level	Self explanatory

Recommendation (R): giving a name to the third category.

TABLE III REVISED KUPPUSWAMY'S SOCIOECONOMIC STATUS SCALE WITH REAL-TIME UPDATE

(A)	<i>Education</i>	<i>Score</i>
1.	Post-graduate or professional degree	7
2.	Graduate degree	6
3.	Higher secondary certificate	5
4.	High school certificate	4
5.	Middle school certificate	3
6.	Literate, less than Middle school certificate	2
7.	Illiterate	1
(B)	<i>Occupation</i>	<i>Score</i>
1.	Professional	10
2.	Semi-Professional	6
3.	Arithmetic skill jobs	5
4.	Skilled worker	4
5.	Semi-skilled worker	3
6.	Unskilled worker	2
7.	Unemployed	1
(C)	<i>Family income per month(in Rs)</i>	
1.	Real-time updated income categories using www.scaleupdate.weebly.com	12
2.		10
3.		6
4.		4
5.		3
6.		2
7.		1
	<i>Socioeconomic class</i>	<i>Total Score</i>
	Upper	26-29
	Upper Middle	16-25
	Lower Middle	11-15
	Upper lower	5-10
	Lower	<5

Recommendation (R): online interactive calculator for income categories update.