

S 112 (M 44a)

Lijst van statistische begrippen en termen

Herziening van Prof. Forbes' lijst, door

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BEGRIIP	TERM		
	Engels	Frans	Nederlands
1. A finite set of objects of one kind. (The objects forming a population are called its "elements". Usually a population is defined with regard to some definite characteristics of its elements, which are to be investigated. The term 'objects' is meant to include also abstract objects — e.g. mathematical entities —, events — e.g. births —, etc. The elements of a population may be subsets of another population which have some given common characteristic, e.g. all subsets of some given size)	<u>Population</u>	<u>Population</u>	<u>Populatie</u>
2. The number of elements of a population	<u>Size</u>		<u>Omvang</u> Uitgebreidheid
3. A property which elements of a population may have (A combination of properties may also be considered as a property)	<u>Characteristic</u>	<u>Caractère</u>	<u>Kenmerk</u>
4. A system of characteristics, such that every element of a population has exactly one of them (E.g. the different colours — or colour combinations — an element of a population may have are properties, forming the category "colour"; the different lengths — or intervals of length — an element of a collection may have are characteristics forming the category "length".)	<u>Category</u> <u>Categorical system</u>	<u>Catégorie</u> <u>Système catégorique</u>	<u>Kategorie</u> <u>Kategorisch systeem</u>
5. The fact that different elements of a population may have different characteristics, belonging to the same categori- <i>cal system, considered as a property of this categori- cal system.</i>	<u>Variability</u> <u>Fluctuation</u>	<u>Variabilité</u> <u>Fluctuation</u>	<u>Variabiliteit</u> <u>Fluctuatie</u>

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6. A quantitative category (E.g. Length; volume; number of children born in a marriage; dates of birth and death of a deceased person)	<u>Quantity Variable</u>		<u>Grootheid Variabele</u>
7. The number of elements of a population having a certain characteristic	<u>Frequency</u>	<u>Fréquence</u> <u>Fréquence absolue</u>	<u>Frequentie</u>
8. The ratio of the frequency of a characteristic to the size of the population abbreviation:	<u>Frequency quotient</u> <u>Relative frequency</u> fq	<u>Quotient fréquentiel</u> <u>Fréquence relative</u> qf	<u>Frequentie-quotient</u> fq
9. The set of frequency quotients of the characteristics of a category on a population If the category is a quantity	<u>Frequency distribution</u> <u>Frequency function</u>	<i>fonction relative</i> <i>fonction</i> <i>lyst van alternatieven</i>	<u>Frequentie verdeling</u> <u>Frequentie functie</u>
10. The sum of the frequency quotients of the frequency distribution of a quantity corresponding with those of its values which do not exceed a given value (considered as a function of this value)	<u>Cumulative frequency function</u>		<u>Cumulative frequentie functie</u>
11. A choice from a population of one of its elements by a method depending wholly or partly on the characteristics of this element	<u>Selection</u>	<u>Sélection</u>	<u>Selectie</u>
12. A choice from a population of one of its elements by a method which does not depend on the characteristics of this element (If the method of choosing is independent only of some characteristics of the elements of the population, the choice is random with respect to these characteristics only)	<u>Random choice</u> <u>Choice at random</u>	<u>Choix aléatoire</u> <u>Choix aselecte</u> <u>Choix par hasard</u>	<u>Aselecte keuze</u>
13. Repeatedly choosing an element at random from the same population (A set of elements obtained in this way may be called a "random sample obtained with replacement")	<u>Random sampling</u> <u>(with replacement)</u>		<u>Aselect trekken</u> <u>(met teruglegging)</u>

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14. Any subset of a population (A sample is thus a special case of a population; therefore the definitions 2,3, 4,5,6,7,8,9 and 10 apply to a sample also)	<u>Sample</u>	<u>Echantillon</u>	<u>Steekproef</u>
15. The population consisting of all samples from a given population, having one or more characteristics in common (Special cases: all samples from a population which have a given size; all samples of a given size in which some other characteristics occur in given ratio's. The term 'sample space' is sometimes also used in somewhat different senses, e.g. in relation to sampling without replacement, probability fields, etc.)	<u>Sample space</u>		<u>Steekproef-ruimte</u>
16. A sample chosen at random from a given sample space	<u>Random sample</u>	<u>Echantillon aléatoire</u>	<u>Aselecte steekproef</u>
17. A sample chosen at random from a given sample space of samples in which some characteristics occur in given ratio's	<u>Stratified random sample</u>	<i>gelede</i>	<u>Aselecte steekproef</u>
18. To choose a sample from a population If the sample is taken at random	<u>To sample</u> <u>Random sampling (without replacement)</u>		<i>steekproef trekken</i> <u>Bemonsteren</u> <i>Aselecteren</i> <u>Aselecteren (zonder teruglegging)</u>
19. A fixed set of rules for obtaining qualitative or quantitative data (The set of rules may comprise the random choice of an element of a population, e.g. of the time or place, making the observation)	<u>Observational conditions</u> <u>Experimental conditions</u>	<u>Conditions d'observations</u>	<u>Waarnemingsvoorwaarden</u> <u>Experimentele omstandigheden</u>
20. The actual obtainment of qualitative or quantitative data under given observational conditions	<u>Observation</u> <u>Experiment</u>	<u>Observation</u> <u>Experience</u>	<u>Waarneming</u> <u>Experiment</u>

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21. A single datum (actually) obtained as a result of an observation (An observed value need not be quantitative, but may also be a qualitative character. A characteristic of an element of a population — qualitative or quantitative — may furnish an observed value)	<u>Observed value</u> <i>observed characteristic</i>	<u>Valeur observée</u>	<u>Waargenomen waarden</u> <i>waargenomen kenmerk</i>
22. A set of observed values (Mathematical representation: a vector, a function, etc. The set may also consist of one element only: an observed value is a special case of an observation)	<u>Observation¹⁾</u> <u>Observational result</u> Complex of observations	<u>Observation¹⁾</u>	<u>Waarneming¹⁾</u> <u>Waarnemings-uitkomst</u> Waarnemings-complex <i>waarnemingsgroep</i>
23. A set (or sequence) of observations obtained under given constant or partly varying observational conditions	<u>Series</u>	<u>Série statistique</u>	<u>Waarnemingsreeks</u>
24. A set of observations made (experiments executed) under conditions which do not depend on the results <i>characteristics</i> to be observed	<u>Independent observations</u> <u>Independent experiments</u>	<u>Observations indépendantes</u> <u>Expériences indépendantes</u>	<u>Onafhankelijke waarnemingen</u> <u>Onafhankelijke experimenten</u>
25. Observational results obtained in independent observations	<u>Independent²⁾ observations</u> <u>Independent observational results</u>	<u>Observations²⁾ indépendantes</u>	<u>Onafhankelijke²⁾ waarnemingen</u> <u>Onafhankelijke waarnemings-resultaten</u>
26. A population of independent observations — some or all of which may be fictitious — which have been — or could be — performed all under the same observational conditions (For mathematical simplicity a finite but very large collection is usually replaced by an infinite one, supplied with an appropriate method for determining limits of ratio's: probability field, collective etc.) <i>or model values for</i>	<u>Collection</u> <u>Fundamental set</u> <i>used as a mathematical model or the which (also) is called a collection, if it is</i>	<u>Collection</u> <u>Catégorie d'épreuves</u>	<u>Collectie</u>

¹⁾ The use of the term 'observation' in two different meanings (cf. 20) will usually not lead to misunderstandings. If this might be the case, one of the alternative terms mentioned should be used.

²⁾ Cf. 22, footnote ¹⁾.

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27. A frequency quotient on a collection (or its limit if the collection is infinite) <i>model value</i>	<u>Probability</u>	<u>Probabilité</u>	<u>Waarschijnlijkheid</u> <i>Kans</i>
28. The result which would be obtained by observing a single datum corresponding to the elements of a collection (The 'single datum' may also be called a 'category', because a collection is a special case of a population. A category on a (general) population becomes a variate if the observation of the characteristic in question includes a random choice - from the population - of the element to be observed. In fact, a population becomes a collection, if a method of random choice is attached to it. If the observed characteristic is determined by one, two, three, etc. numbers - or consists of one, two, three, etc. separate characteristics - the variate is called a 'monovariate', 'bivariate', 'trivariate', 'multivariate'. The use of the term 'variate' need not be confined to the monovariate case)	<u>Variate</u> <u>Random</u> (or stochastic) quantity (or variable)	<u>Variat ?</u> <u>Quantité</u> (ou variable) <u>aléatoire</u> <i>meer kwantitatieve gew.</i> <i>niet overeenkomende kenmerken ook variat</i>	<u>Variaat</u> <u>Stochastische</u> <u>grootheid</u> (of variabele)
29. A function, the values of which are variates	<u>Random function</u>	<u>Fonction aléatoire</u>	<u>Stochastische functie</u>
30. A process, varying over a collection	<u>Stochastic process</u>	<u>Processus aléatoires</u>	<u>Stochastisch proces</u>
31. The cumulative frequency function of a variate on a collection	<u>Distribution function</u>	<u>Fonction de répartition</u>	<u>Verdelingsfunctie</u>
32. The derivative of a distribution function (if it exists)	<i>Probability</i> <u>Distribution density</u> <u>Frequency function</u>	<u>Densité de répartition</u> <u>Densité de probabilité</u> <i>Quantité aléatoire</i> <u>homogène</u>	<i>Waarschijnlijkheid</i> <u>Verdelingsdichtheid</u> <i>Kansdichtheid</i>
33. Variates having the same distribution function <i>probability</i>	<u>Isomorphic variates</u>		<u>Isomorphe variaten</u>
34. A distribution function, the density of which for any real x equals $(2\pi\sigma^2)^{-\frac{1}{2}} \exp(-\frac{1}{2}\sigma^{-2}(x-\mu)^2)$ <i>with definite</i> for appropriately chosen real constants μ and $\sigma > 0$	<u>Normal distribution</u> <i>Normal (μ, σ) distribution</i>	<u>Distribution normale</u>	<u>Normale verdeling</u> <i>Normale (μ, σ) verdeling</i>

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35. A normal distribution for which $\mu=0$ and $\sigma=1$	<u>Normal (0,1) distribution</u>	<u>Distribution normale (0,1)</u>	<u>Normale (0,1) verdeling</u>
36. A constant determining a collection or a distribution function among a given set of collections or of distribution functions	<u>Parameter</u>	<u>Paramètre</u>	<u>Parameter</u>
37. A law which to every sample of every size (or to those subject to some definite conditions) determines a real number or a set of real numbers (not depending on the population (collection) from which the sample is taken) (A numerical statistic is a sequence of variates, depending on the sizes of the samples)	<u>Statistic (quantity)</u> <i>A function of the observations made on a sample, not depending on unknown parameters or unknown quantities. (The function may be defined for all samples of all sizes and then subject to some definite conditions. The values may be real numbers or sets of real numbers. A statistic may be a sequence of variates, depending on the sizes of the samples)</i>	<u>Quantité statistique?</u>	<u>Statistische grootheid</u>
38. A statistic which, <i>for a given sample size</i> if the sample size tends to infinity, converges in some specified sense to one of the parameters determining the collection from which the samples are taken	<u>Estimator</u>	<u>Estimateur</u>	<u>Schatter</u>
39. The value which an <i>estimator</i> statistic takes on a given sample <i>assumes for</i>	<u>Estimation</u>	<u>Estimation</u>	<u>Schatting</u>
40. The arithmetic mean of a quantity on a population If the population is a collection	<u>Mean</u> <u>Average</u> <u>Expectation</u>	<u>Moyenne</u> <u>Espérance</u>	<u>Gemiddelde</u> <u>Verwachting</u>
41. An estimator, the expectation of which for every sample size (exists and) equals the estimated parameter <i>to be</i> (The mean of isomoirous variates is an unbiased estimator of their expectation)	<u>Unbiased estimator</u>	<u>Estimateur sans biais</u>	<u>Zuivere schatter</u>
42. An estimator, the expectation of which for increasing sample sizes (exists and) tends to the estimated parameter	<u>Asymptotically unbiased estimator</u>	<u>Estimateur asymptotiquement sans biais</u>	<u>Asymptotisch zuivere schattinger</u>

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43. Any real number(s) such that as many among the values of a quantity on a population exceed it as are exceeded by it (If the size of the population is uneven, the median is the value which the quantity assumes on the middle element, when arranged according to increasing size of the quantity; if the size is even, any number between the two middle values. In the latter case sometimes the middle of that interval is taken. If the population is a sample, the term 'sample median', if it is a collection, the term 'collection median' may be used)	<u>Median</u> <i>the elements are</i>	<u>Médiane</u> <i>kan gevonden</i>	<u>Mediaan</u>
44. The difference between the largest and the smallest value of a quantity on a population If the population is a collection (If the population is a sample the term 'sample range' may be used).	<u>Range</u> <u>Domain</u>	<u>Etendue</u>	<u>Breedte</u>