Some Contributions to the Theory of Incompletely Specified Models

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Abstract – This paper study of the situation is such that the solutions of the problem of Some Contributions to the Theory of Incompletely Specified Models are necessarily optimized by the same value of . Two sided tests of Specified Models are optimized by roughly the same value of that optimizes the estimation problem. However, tests of Specified Models need not have this property. It appears that recommendations for selecting the level of significance of the preliminary test depend upon the type of inferences on θ one is desirous of making. The problem to be analyzed here is that of using a preliminary test to determine whether a one parameter or a two parameter exponential distribution should be assumed as the Theory of Incompletely Specified Models for subsequent inferences and how this decision affects the properties of such inferences. It is a well-known fact that if one makes a test of theory using the same set of data used in performing some preliminary test, the power and size of that test are generally different from the power and size of a test made independently of any preliminary test for Specified Models.

Keywords: Contributions, Theory, Incompletely, Specified Models, Solutions, Problem, Preliminary Test, Parameter, Performing, etc.

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INTRODUCTION

Some Contributions to the Theory of the Extensive interest and effort has been given to the subject area of Incompletely Specified Models. Any approach thought to be useful in the determination of Specified Models of industrial equipments and mechanisms has received considerable attention and a great many studies have appeared in the various technical Specified Models (Galichon, Henry, 2008. Chernozhukov, *et. al.,* 2007. Galichon, Henry, 2006. Khan, Tamer, 2006). These studies have in general dealt with parameter estimation under the assumption of some specific underlying Specified Models or with the testing of some statistical theory under the same general assumption. Certain methods and Some Contributions have become study of contention among the various practitioners. Proponents have arisen for several Some Contributions and each develops the methods of reliability estimation, acceptance sampling procedures and other hypothesis testing under the assumption of the advocated Contributions of Incompletely Specified Models (Maccheroni, *et. al.,* 2006). In many instances, the situations of interest do not provide sufficient data to perform tests having even moderate levels of sensitivity to distinguish Some Contributions form of Incompletely Specified Models. Nor is there generally any a priori theoretical reasoning which singles out one specific Some Contributions from among several conceivably feasible ones. Some of the more frequently discussed continuous Some Contributions are: the exponential, the Weibull, the gamma, the log-normal and the extreme value Contributions for Specified Models. Under special conditions it can be shown that the exponential Some Contributions is a Specified Models of the Weibull, the gamma, and the extreme value of Some Contributions (Sarhan, 2005). Another way of stating this fact is to say that under a set of special conditions the exponential, the Weibull, the gamma, and the extreme value Some Contributions are equivalent for Specified Models. The problem of determining the Some Contributions characteristics to be studied therefore becomes the problem of Incompletely Specified Models the Some Contributions assumptions to be adopted. There is much which needs to be done in the subject area of Contribution to the Theory of Incompletely Specified Models specification (Raj, 2007).

REVIEW OF LITERATURE:

Literature providing background for this study is to be found in distinct subject matter areas. Since the problem concerns the use and effect of preliminary tests, the area of the Theory of Incompletely Specified Models preliminary tests of significance will be examined first. The second area of concern will be that of life testing with particular emphasis placed on the use of the exponential distribution. The first theoretical investigation involving preliminary tests of significance was that of Bancroft investigated the bias, variance and mean square error of a variance estimator obtained after performing a preliminary test of the equality of two variances.

$$y = \beta_1 x_1 + \beta_2 x_2 + e$$

With this estimator being dependent upon a preliminary test of significance on the estimator of β_2 to decide whether or not to retain the variable x_2

Asano (Chooichiro, 2005), (Bechhofer, 2008), (Bennett, 2004), (Bozivich, *et. al.,* 2007). has recently studied the application of generalized procedures, including Hunts Berger's (36) weighting procedure, to problems encountered in biometrical and pharmaceutical research. The preliminary tests considered by Asano seem to be much more concerned with a prescribed set of switching constants than with significance levels.

A later study by **Bancroft (10)** studied the biases in estimation of variance due to the omission of several independent variables in the multiple regression equation analysis.

Hosteller (11) studied the effect of using a preliminary test of significance to decide when to pool two sample means in estimating a population mean.

Bennett (12) extended the studies of Hosteller and Kitagawa to situations where preliminary tests were performed for both homogeneity of variance and equality of means prior to estimating the mean or testing hypotheses about it.

Paull (13) and Bechhofer (7) studied certain special situations in analysis of variance models using preliminary tests of significance to decide when to pool various error mean squares in order to increase the study of freedom in subsequent tests of significance.

Bozivich, Bancroft and Hartley (9) extended the work of Paull and Bachhofer to cover all important degrees of freedom combinations occurring in the analyses of variance considered.

CONCLUSION:

The situation is such that the solutions of the problem of Some Contributions to the Theory of Incompletely Specified Models are necessarily. Also, that any point estimation of parameters following a preliminary test may be biased even though such estimation made independently of any preliminary test is unbiased. Comparisons will thus be made between using a preliminary test to specify the model to be used for inferences concerning θ (i.e., whether to assume a one or a two parameter model) and arbitrarily adopting a one or a two parameter distribution. In comparison of estimation procedures, the bias and the mean square error of the resulting estimators of θ will be computed and compared. In the study of tests of theories, the size and power of the overall testing procedure will be compared with the size and power of the tests which do not involve preliminary testing for Specified Models. And the effect on subsequent inferences still remains to be solved.

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