An inconsistency latent in the hidden-variable interpretation of quantum mechanics is re-examined. A major hypothesis upholding the interpretation has been that the hidden-variable value associated with a physical observable in an individual system does not depend on which other observables have simultaneously defined values in the said individual system. This non-contextuality has been shown to be internally inconsistent as already evident in the Bell-Kochen-Specker theorem. The present authors propose an experimental test of the BKS theorem. They rephrase the BKS theorem in a manner suitable for the case of a single spin-1 particle. The whole experimental scheme depends upon how one states the hidden-variable interpretation. The authors state that if a hidden-variable theory applies one and the same value to an arbitrary physical observable common to any individual system of an ensemble, a measurement of the observable in any one of the systems determines the value applicable to any systems constituting the ensemble. This paraphrasing of the hidden-variable interpretation is shown to be inconsistent with quantum mechanics. This is a weaker version of the original Bell theorem.

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