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Panichkitkosolkul**, Thammasat University, Thailand. *Dependence and Association Concepts
through Copulas.*

Abstract: In this paper, dependence concepts such as affiliation, left-tail decreasing, right-tail increasing, positively regression dependent, and positively quadrant dependent are studied in terms of copulas. Relationships among these dependent concepts are obtained. An affiliation is a notion of dependence between two positively dependent random variables and some measures of it are provided. It has been shown that the affiliation property is preserved using bilinear extensions of subcopula. As an application, the affiliation property of skew-normal copula is investigated. For illustration of dependent concepts and their relationships, several examples are given. (Received August 30, 2013)