Title: Factorization Theorems of Cesàro and Copson Spaces on Time ScalesAuthors: S. H. Saker and R. R. MahmoudPublication date: July 2020Journal name: Journal of Contemporary Mathematical Analysis (Armenian Academy
of Sciences)(ISSN: 1068-3623)(IF: 0.Υ١Λ, Q4)Volume: 55; Pages: 268-280.Publisher: Springer.Received: 19 April 2019; Revised: 23 June 2019;Available online: July 2020.Authors contributions: The authors are contributed equally to this article.Is the research extracted from a scientific thesis? : NoURL: http://dx.doi.org/10.3103/s1068362320040081; DOI: 10.3103/s1068362320040081

Abstract.

In this paper, we prove some factorization theorems of Cesaro and Copson spaces on an arbitrary time scale \mathbb{T} , which offer enhancements of dynamic Copson's and Hardy's inequalities. Our results enhance, among others, the best-known forms of dynamic Hardy's inequality. The main results will be proved by employing the time scales Hölder's inequality and the derived time scales power rule of integration.