



On Residual Tsallis Entropy via Doubly Truncated Mixture Distribution

Jalayeri, S.^{1*}, Mohtashami Borzadaran, G.R.¹ and Khorashadizadeh, M.²

¹ Department of Statistics, Ferdowsi University of Mashhad

² Department of Statistics, University of Birjand

Abstract: In this paper, we first study doubly truncated Tsallis entropy of mixture distribution and introduce the doubly truncated cumulative residual Tsallis entropy (*ICRT*) of mixture distribution. We have expressed several properties and characterization of this measure. In addition, their monotonicity is denoted and the upper (lower) bound for them is obtained.

Keywords: Doubly truncated (interval) Tsallis entrop of mixture distribution, Doubly truncated (interval) cumulative residual Tsallis entropy of mixture distribution (*ICRT*), Hazard rate, Reversed hazard rate, Mean residual life.

*Email: samirajalayeri@gmail.com