

SOME RESULTS ON THE CONTINUOUS DEPENDENCE OF THE FIXED POINTS IN NORMED LINEAR SPACE

M.O. OLATINWO

Department of Mathematics
Obafemi Awolowo University
Ile-Ife, Nigeria

E-mail: polatinwo@oauife.edu.ng, molaposi@yahoo.com

Abstract. Recently, in Berinde [3, 4], it has been shown that apart from the Picard iteration process, the continuous dependence of the fixed points has not been studied so far for other fixed point iteration procedures. In this paper, we intend to provide some answers to this challenge by investigating the continuous dependence of the fixed points in normed linear space for both Schaefer and Mann iteration processes using a (φ, ψ) -contractive condition. Our results are new extensions of some of the results of Berinde [3, 4, 5], Rus [14, 16] and Zeidler [22].

Key Words and Phrases: Picard iteration process, continuous dependence of the fixed points, (φ, ψ) -contractive condition, normed linear space.

2000 Mathematics Subject Classification: 47H06, 47H10.

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Received: August 8, 2008; Accepted: January 10, 2009.