Adequate provision of library services in university libraries is necessary for the academic development of the students. This paper, therefore assessed the relationship of locus of control of staff and undergraduate students’ use of a university library in Niger State. The survey research method was used for the study and the sample size was 30 library staff which were selected from 98 library staff while the sample size from16,105 population of undergraduate students was 90. The instruments used for data collection were the questionnaire, observation and interview. Descriptive statistics such as frequency and percentage tabulation were used in analyzing the data. The study revealed that the undergraduate students’ use of library is low and inadequate. The study also revealed that majority of the library staff have internal locus of control which assists them to have positive attitude towards their work. The study equally revealed that majority of the library staff suggested the need for sponsorship to attend conferences as this would lead to staff development. To enhance the level of locus of control of the library staff indicated the need for staff development, provision of sufficient e-resources and stable network services to encourage the library staff to perform the library services adequately.