INTISARI

Indikator fertilitas seperti *Crude Birth Rate* (CBR), *Total Fertility Rate* (TFR), *General Fertility Rate* (GFR), *Gross Reproductive Rate* (GRR) untuk mengukur kinerja pengendalian penduduk setiap tahun di level kabupaten/kota sejak otonomi daerah sering kali tidak tersedia. Pengembangan aplikasi sistem informasi fertilitas Smart Fert sebagai alat untuk menghitung indikator fertilitas yang valid, praktis, mudah diaplikasikan, sesuai dengan input data yang tersedia sangat layak untuk dibuat.

Tujuan penelitian ini adalah mengembangkan aplikasi sistem informasi Smart Fert untuk menghitung indikator fertilitas yang valid, diuji dengan membandingkan dengan perhitungan dari hasil Sensus Penduduk 2010, menjelaskan hubungan antar variabel penerimaan aplikasi sistem informasi Smart-Fert dan menyusun model penerimaan aplikasi Smart Fert bagi SKPD Kependudukan dan KB di Kabupaten/Kota di Provinsi Jawa Timur

Penelitian ini merupakan *desain research methodology* dengan tujuan *explanatory* yaitu penelitian yang bertujuan untuk menguji hipotetis penelitian, dimana hipotesis yang diuji adalah (1) adanya kesesuaian antara hasil olahan smart fert dengan perhitungan data Sensus Penduduk 2010, (2) menguji asosiasi antara variabel dan (3) mengembangkan model penerimaan sistem informasi fertilitas Smart-Fert bagi SKPD Kependudukan dan KB di Provinsi Jawa Timur.

Hasil penelitian menunjukkan bahwa hasil perhitungan fertilitas dengan aplikasi Smart Fert tidak ada beda signifikan dengan hasil perhitungan Sensus Penduduk 2010. Hasil asosiasi antar konstruk ditemukan terdapat 5 asosiasi jalur yang memiliki nilai signifikan yaitu 1) konstruk eksternal terhadap kegunaan, 2) konstruk eksternal terhadap kemudahan, 3) konstruk internal terhadap kegunaan, 4) konstruk internal terhadap kemudahan dan 5) konstruk kegunaan terhadap minat menggunakan Smart Fert. Model prediksi secara keseluruhan yang dilihat dari nilai *goodness of fit (GoF)* sebesar 0,62 sehingga bisa dikatakan model prediksi yang mempengaruhi minat menggunakan Smart Fert tersebut dinilai kuat.

Dengan demikian aplikasi smart fert dapat dipakai sebagai alat penghitung indikator fertilitas yang valid, praktis, mudah diimplementasikan untuk mengukur kinerja pengendalian penduduk di tingkat kabupaten/kota. Perlunya pelatihan teknik fertilitas yang berkesinambungan dan integrasi indikator fertilitas dalam perencanaan pembangunan daerah baik rencana jangka panjang maupun jangka menengah kabupaten kota di era otonomi daerah.

Katakunci:
Perhitungan Indikator Fertilitas, Aplikasi Smart Fert, Pengendalian Penduduk

ABSTRACT

Fertility indicators such as Crude Birth Rate (CBR), Total Fertility Rate (TFR), General Fertility Rate (GFR), Gross Reproductive Rate (GRR) to measure the performance of population control each year at the district level since regional autonomy are often unavailable. Smart Fert fertility information system application development as a tool to calculate fertility indicators that are valid, practical, easy to apply, in accordance with the available data input is very feasible to make.

The purpose of this research is to develop the Smart Fert information system application that produces valid fertility indicator, tested by comparing with the result of 2010 Population Census data, explaining the association between the decision variable of acceptance Smart Fert Information System application and compile the acceptance model Smart Fert application for SKPD staff of Population and Family Planning Districts / Cities in East Java.

This research is design research methodology with research explanatory that is aimed to test hypothetical research, where the hypothesis tested is (1) the compatibility between smart fert process with using 2010 Population Census data, (2) test the association between the variables, and (3) develop the technology acceptance model of Smart Fert for the SKPD staff of Population and Family Planning Districts / Cities in East Java.

Results of this research showed that fertility calculation result with Smart Fert application was not significantly different with result of 2010 Population Census data. Thus Smart Fert application can be used to calculate fertility indicator every year. Through t-test to distinguish between knowledge of fertility calculation technique before training with post-training knowledge on population and family planning program implementers in 38 districts / cities in East Java, the result is very significant (Sig = 0,000). The result of association between construct found there are 5 association of lane which have significant value that is 1) external construct to perceived usefullness, 2) external construct to perceived ease to use, 3) internal construct to perceived usefullness 4) internal construct to perceived ease to use and 5) construct usefullness to attention in using smart Fert. The overall prediction model seen from the value of goodness of fit (GoF) of 0.62 so it can be said prediction model that influences interest in using Smart Fert is considered strong.

Thus smart fert application can be used as a valid, practical, easy-to-implement fertility indicator tool to measure the performance of population control at the district / city level. The need for sustainability capacity building in fertility measurement, integration of fertility indicators in regional development planning, both long-term and medium-term plans of city districts in the era of regional autonomy.

Keywords:
Fertility Indicator Measurement, Smart Fert Application, Population Control