

Development of Psychology Based on Online with Edward Personality Preference Schedule and High Level Indonesian Collective Intelligence Test

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Abstract— Online psychotic are developed to keep up with current technological advancements. Application of Psychotest Development Based on Online with Edward Personality Preference Schedule and High-level Indonesian Collective Intelligence Test, developed for the benefit of the Soegijapranata Center for Applied Psychology. Making the application "Psychotest Development Based on Online with Type of EPPS and High TIKI" is motivated by the director's vision to be able to advance PPT Soegijapranata. In the process of creating an application design, sources were obtained from the director of the Center for Applied Psychology at Uneg Soegijapranata, the design obtained was the number of users, application flow, and mockup design. The goal to be achieved is to change the manual process to use technology. When testing 30 respondents, it was found that the Psychotest Development Application Based Online with EPPS and TIKI Types was quite helpful and made the test process simple.

Keyword— EPPS, Psychological Tests, Online Psychology, Tiki - Tinggi

I. INTRODUCTION

The development of the world today utilizes information technology that is developing rapidly. Information Technology is a technology used to process data, including processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, namely relevant, and accurate information, which is used for personal, business and government purposes

and is a relevant information for decision making [1]. Psychological tests or psychological tests are tests carried out to measure aspects psychologically in this case, the measured tendency is behavior [2]. Psychological tests are conducted to find out various types of individual abilities, namely, knowing mental aspects (psychic), supporting aspects (achievement, ability, and personality).

In general, psychological tests are carried out in writing, but several psychological institutions that use technology to create website-based online psychologies. Based on several psychology expert systems that need to be considered in making a manual test mix into the technology system, consisting of three main modules, namely: knowledge base, working memory and inference engine [3].

Many aspects need to be considered, to develop online psychology. According to Linden in Candiasa (2003) how to identify several educational models that are systemized or computerized, namely: automatic test design adaptive tests, item test writing systems, and multimedia tests [4]. The application "Psychotest Development Based on Online with Epps and Tiki Types" is used as an online test media, and also to print the final report that will be given to participants. The EPPS test (Edwards Personal Preference Schedule), was built to test a series of personality variables drawn from Murray's list of manifest (need) needs (1938) [5]. The EPPS test is included as a personality or

intelligence test. To see one's needs, namely the special needs of someone [6].

The TIKI test - high (High-Level Indonesian Collective Test) has 10 chapters consisting of, counting numbers, part combinations, relationship words, nonverbal abstractions, numerical series, researching, forming objects, exclusion of words, an analogy of words, hidden forms, word formation [7]. Intelligence tests are generally in the form of IQ (Intelligence Quotient), but there are also intelligence tests that do not produce IQ, in the form of a level (Raven). Intelligence / Intellectual Intelligence is the ability of an individual to be able to act in a directed, rational way of thinking and can deal with his environmental conditions effectively [8].

II. LITERATUR REVIEW

Test EPPS

EPPS Test (Edward Personality Preference Schedule) is a personality test that can measure a person's personality level. The EPPS test is developed according to H. A Murray's personality theory, which includes 15 needs that each human has [9]. Edward prepared several items according to those needs. The EPPS test can reveal the tendency of encouragement and the needs of someone [10]. This test is usually used by people who will enter the world of work, in the application to enter work or increase their position.

The instructions in EPPS are done using Testee, which is choosing one of the two statements that exist (A and B). The following aspects can be concluded from the EPPS test EPPS is generally categorized as a power test which is a test that is not limited in time in the process. So, the emphasis on completing tasks is not the time. In doing EPPS tests all items must be answered, if there is only one item that is missed then accurate interpretation cannot be done. EPPS tests can be given individually or classically. The initial background is for counseling and orientation is for normal people (Karmiyati & Suryaningrum, 2005) [11].

Table 2.1 Need test EPPS

No	Need	Penjelasan
1	Achievement	Kebutuhan berprestasi
2	Deference	Kebutuhan menyesuaikan diri
3	Order	Kebutuhan teratur, rapi dan sesuai perencanaan
4	Exhibition	Kebutuhan untuk menunjukkan diri
5	Autonomy	Kebutuhan untuk mandiri
6	Affiliation	Kebutuhan berempati
7	Intraception	Kebutuhan perhatian terhadap sesama
8	Succorance	Kebutuhan akan hubungan sosial
9	Dominance	Kebutuhan untuk memimpin
10	Abasement	Kebutuhan berkompromi
11	Nurturance	Kebutuhan memberi perhatian
12	Change	Kebutuhan berubah
13	Endurance	Kebutuhan keuletan dan kegigihan
14	Heterosexuality	Kebutuhan bergaul dengan lawan jenis
15	Aggression	Kebutuhan bertentangan dengan orang lain

Test Tiki – Tinggi

Andrew Bridger (in Azwar, 2008: 4) says that intelligence can be assumed to be like electricity, easy to measure but almost impossible to define [12]. William Stern argues that testing intelligence is largely based on derivation, education or a less influential environment [13]. Intelligence tests are the embodiment of power in human beings, which affects one's abilities in various fields. Spearman made a formula called "general ability" which plays a role in storing and binding back information, arranging concepts, capturing relationships and making conclusions, processing materials and composing a new combination of these materials.

Arsitektur aplikasi berbasis Web

Web-based applications can be designed in a simple or complex way, basically, web-based applications run using the Client-Server mechanism [14]. How the client-server works, from the client-side, does not require sophisticated technology specifications, because most of the process is done on the server. From the server-side, where there is a web server software. This computer is a place to store client data and can be accessed from anywhere.

PHP

PHP stands for "Hypertext Preprocessor", an open-source programming language used for web development and can be embedded into HTML. Most of the syntax in PHP is similar to C, Java, and Perl, but in PHP there are several distinguishing functions from other languages, PHP runs on the server-side, generates HTML, then sends to clients [15]. Currently, PHP can be run on most operating systems such as Linux, Windows, Mac OS X, and others. PHP also supports almost all web servers such as Apache, Nginx, Lighttpd, and others.

III. METHOD

Flowchart

Application "Development of Online Based Psychotes with Types of EPPS and TIKI" Designed based on a flowchart that will be used by 3 type users, namely staff, psychologists and participants.

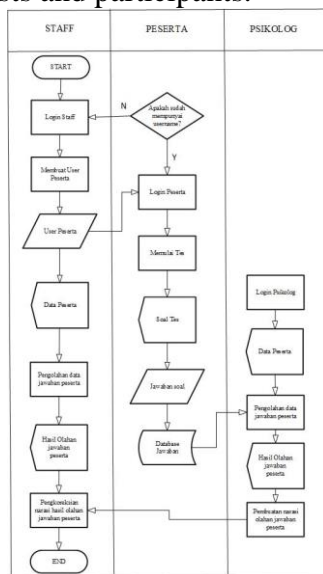


Figure 3.1 Flowchart Application

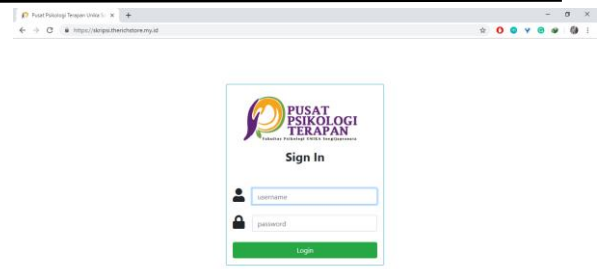


Figure 3.2 Login Page

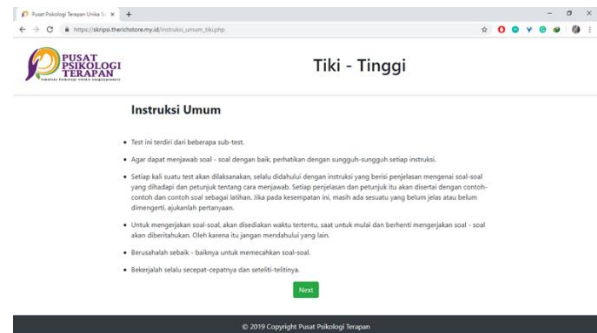


Figure 3.3 Instruction Page

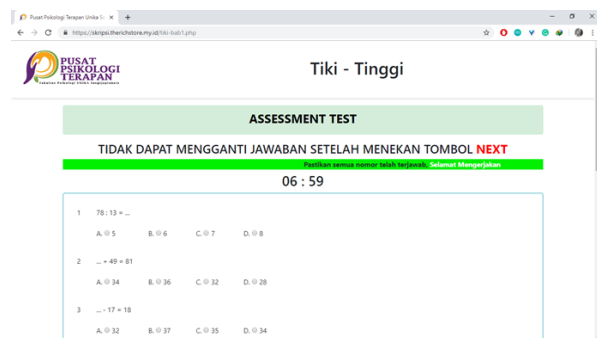


Figure 3.4 question page

In the login view of the psychologist, you can immediately see the results of the test. Furthermore, psychologists match various tests to be able to provide conclusions for user test before starting to work on the problem, given the instruction page to be able to work on the next chapter or test.

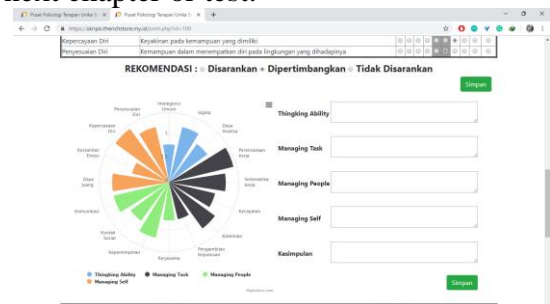


Figure 3.5 Report Page

IV. RESULTS AND DISCUSSION

Profile responden

Of the 30 respondents who participated in the trial application of Psychotest Development Based on Epps and Tiki Types, we can find out the number of respondents based on age, gender, education and experience according to the picture below.

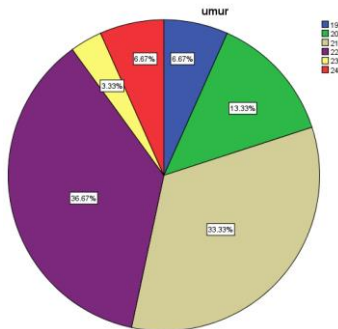


Figure 4.1 Responden by age

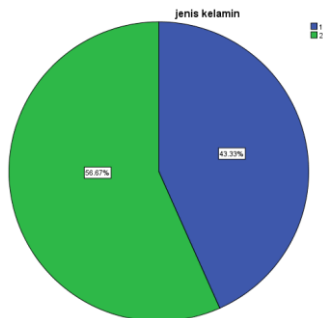


Figure 4.2 Responden by Gender

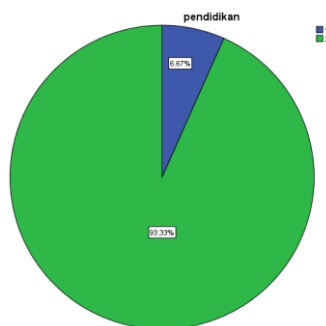


Figure 4.3 responden by Education

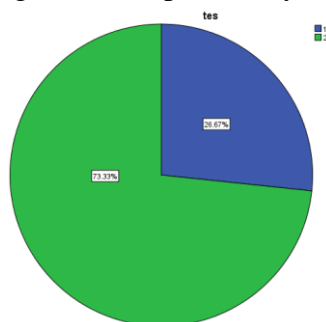


Figure 4.4 Responden by knowing psychotes online

Table 4.1 Table Reliability

Variable	Cronbach's Alpha Based on Standardized Items	Keterangan
Kemudahan (A)	.703	Acceptable
Kebergunaan (B)	.503	Poor
Kenyamanan (C)	.831	Good

Test the reliability of variables A, B, and C, to determine the information in table 4.2 based on, George and Mallery (2003) rules of thumb: " $> .9$ - Excellent, " $> .8$ - Good, " $> .7$ - Acceptable, " $> .6$ - Questionable, " $> .5$ - Poor, and " $< .5$ - Unacceptable" [18]. The Reliability test is a measuring instrument used in research to determine the consistency of test results or questionnaires [17]. The results of the questionnaire for reliability testing for variable A are declared Acceptable because the value of Cronbach's Alpha shows the number, .703, the value of Cronbach's Alpha is obtained by testing similar variables using the Reliability Analyze menu on SPSS. The reliability test for variable B was stated as Poor with the value of Cronbach's Alpha .503. The reliability test results on variable C are declared Good with the value of Cronbach's Alpha .803.

V. CONCLUSION

The conclusion from this research the application of Psychotest Development Application Based on Epps And Tiki Online can be used and easily understood by users. The appearance and process of the application are in accordance with the draft given by the director of the applied psychology center, UniSegijapranata. This statement was obtained from a questionnaire that was attended by 30 respondents. Psychological

tests can be done online. And the results are faster and more accurate than manual methods.

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