A NEED ANALYSIS FOR DEVELOPING AN ARABIC LANGUAGE ENVIRONMENT MODULE: ESTABLISHING VALIDITY AND RELIABILITY

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Abstract. This study represents the first phase of developing a module aimed at creating an Arabic-speaking environment at KUIPs, which employs the Design and Development Research (DDR) method. The study aims to establish the validity and reliability of the need analysis questionnaire. The validity of the content was documented through the responses obtained from six experts in various fields, using the CVI analysis. The original 50-item questionnaire was distributed to the experts to be rated based on its relevance. After the analysis, two items with low content validity index (I-CVI) were removed and 48 items were retained. Later, a reliability analysis was conducted on a pilot test carried out among 30 KUIPs students. The results demonstrated an overall Cronbach's Alpha value of 0.938, indicating strong internal consistency among the items. After a few amendments based on the feedback, the questionnaire is ready to be used for the data collection in the actual study. This need analysis survey holds substantial potential for educators and curriculum developers, providing insights to address the specific needs of the students in KUIPs in improving their Arabic speaking skills.
Keywords: *Arabic language environment, speaking skills, need analysis, module development KUIPs*

Introduction

The increasing importance of Arabic language proficiency in both academic and professional contexts has led educational institutions worldwide to seek innovative strategies to enhance language learning outcomes. At Kolej Universiti Islam Perlis (KUIPs), the need to create a supportive Arabic-speaking environment has become particularly pressing. Traditional classroom-based instruction often fails to provide the immersive and interactive experiences necessary for students to develop fluency and confidence in using the language in real-world situations. In response to this challenge, this study represents the first phase of a comprehensive effort to develop a module designed to foster an Arabic-speaking environment at KUIPs. The Design and Development Research (DDR) method is employed to ensure a systematic and iterative approach to the module's creation, beginning with a robust needs analysis. This phase is crucial as it establishes the foundation upon which the entire module will be built, ensuring that the content is not only relevant but also aligned with the actual needs of the students. A key aspect of this study is the focus on establishing the validity and reliability of the needs analysis questionnaire, which serves as the primary tool for gathering data on students' needs. Validity, particularly content validity, ensures that the questionnaire accurately reflects the domain of interest-in this case, the factors that contribute to an effective Arabic-speaking environment. The involvement of experts in the validation process is crucial, as their feedback helps refine the questionnaire, ensuring that it covers all relevant aspects of the construct being measured.

Reliability, on the other hand, refers to the consistency of the questionnaire in measuring what it is intended to measure. A reliable instrument is essential for ensuring that the results of the needs analysis can be trusted and used to inform subsequent phases of module development. This study's pilot testing among KUIPs students and the resulting high Cronbach's Alpha value underscores the reliability of the questionnaire, providing confidence in the robustness of the data that will be collected in the actual study. By focusing on the validity and reliability of the needs analysis questionnaire, this study lays a strong foundation for the development of an Arabic-speaking environment module at KUIPs. The findings from this phase will guide the design and implementation of the module, ultimately contributing to the enhancement of Arabic language education at the institution.

Literature review

Arabic language environment

It is well established in the applied linguistic field that the environment has a deep influence and impact on the issues of teaching and learning the Arabic language. It has been reported that the decline in Arabic language subject achievements is attributed to the environmental aspect itself. According to previous studies mentioned by Zawawi and Mohamed (2013) as well as Mat and Soon (2010), most students perceive Arabic as a foreign language, and its practical use in society is not widespread in Malaysia. This perception leads Arabic learning students to struggle with speaking the language (Mat and Soon, 2010). A study conducted by Zawawi and Mohamed (2013) on the other hand explains that students are more likely to succeed if they receive continuous support, guidance, encouragement, and motivation from their environment, particularly from the individuals around them. Abdul and Maat (2019) in their research signal that the learning environment, shaped by social relationships, influences students' cognitive and metacognitive achievements. The social relationships in question involve the integration of various aspects, including physical, social, and economic factors (Chee and Abdullah, 2021).

To increase student achievement, the improvement of the learning environment should take account of various aspects. These include the importance of student interaction with their peers and feedback during the learning sessions (Abdul and Maat, 2019; Dorman and Fraser, 2009). The study conducted by Ahmid et al. (2018) suggests that student's motivational beliefs can be enriched through the interaction and communication between teachers and students. The quality of effective teaching and learning can be assessed based on the overall involvement of students in learning sessions and the teacher's skill in managing it (Tama, 1989; Slavin, 1987; Gage, 1984). Social environment involvement, especially feedback and responses by teachers, peers, and the school, influences their willingness to actively participate in activities conducted at school (Ayub et al., 2018). Research by Lei et al. (2018) and Sidik et al. (2018) explains that one of the key factors affecting students' academic achievement is their active involvement in the various activities conducted. Active student participation in these activities creates a space and social relationships that indirectly impact learning and language mastery. As a result, they acquire additional knowledge and valuable experience compared to passive students.

Need analysis

In the context of the Design and Development Research (DDR) method, a needs analysis is a very crucial first phase that involves identifying and understanding the specific needs, problems, or gaps that the research or development aims to address. This phase is essential for ensuring that the resulting design and development in the second and third phases is relevant and effective for the target group. In the education research context, needs analysis can be used to obtain information on the skills mastered by the students and the skills they seek to upgrade and improve (Pranoto and Suprayogi, 2020). Procedures involved in a need analysis include data collection on the perspective of students' desires, needs, hopes, beliefs, and viewpoints (Lee, 2016). Detail information such as materials, method, and class environment can also be acquired in setting learning goals and targets (Boroujeni and Fard, 2013). According to McKillip (1987), a need analysis can be systematically structured based on several models, namely: (a) discrepancy model, (b) marketing model, and (c) decision-making model. The discrepancy model focuses on identifying the gap or discrepancy between the current state and the desired state in a system, organization, or program. The marketing model on the other hand uses marketing principles to understand and influence behavior in the context of needs assessment and program planning. Meanwhile, the decision-making model focuses on the systematic process by which decisions are made, especially when it comes to planning and program evaluation. This study employed the discrepancy model to understand current practices and challenges faced by KUIPs students in using Arabic in oral communication. Information obtained from this analysis will help identify the gap in the study and consequently be used in the design and development of the Arabic language environment module.

Validity

The goal of content validation is to reduce potential errors in the early stages of instrument development and to enhance the likelihood of achieving strong construct validity in subsequent stages (Shrotryia and Dhanda, 2019). In selecting content validation, the minimum acceptable number of experts is two, but most of the recommendations propose a minimum of six experts (Yusoff, 2019). Two types of content validity index (CVI) are CVI for individual items and CVI for scale. To generate the CVI, experts were asked to evaluate the content of the need analysis questionnaire. The CVI calculated for each item is abbreviated as (I-CVI) and the overall scale as (S-CVI). To prevent a neutral point, a four-point scale evaluation form was used: (1) not relevant; (2) somewhat relevant; (3) quite relevant; and (4) highly relevant. *Table 1* shows the number of experts and its implication on the acceptable cut-off score of CVI (Yusoff, 2019). The cut-off CVI score for two experts is at least 0.80; for three to five experts is 1; for six to eight experts is at least 0.83; and for nine or more experts is at least 0.78. Since six experts were involved in this study, the cut-off CVI score used is at least 0.83.

Table 1. *The number of experts and its implication on the acceptable cut-off score of CVI.*

Number of experts	Acceptable CVI values
Two experts	At least 0.80
Three to five experts	Should be 1
At least six experts	At least 0.83
Six to eight experts	At least 0.83
At least nine experts	At least 0.78

Source: Yusoff (2019).

Reliability testing

In quantitative research, reliability refers to two situations (i) the consistency of a measure despite repeated several times and (ii) a measure of stability at all times (Kirk and Miller, 1986). In this study, Cronbach's Alpha is used to obtain the reliability index of the instruments. Cronbach's Alpha calculates the average of all possible split-half reliability coefficients to obtain an inter-item correlation coefficient. It is used for multi-item scales to measure the internal consistency among the items (Cohen et al., 2002). *Table 2* shows the interpretation of the alpha coefficient as suggested by Cohen et al. (2002). If the alpha coefficient is above 0.90, the item is very highly reliable. If the alpha coefficient is between 0.80 to 0.90, the item is highly reliable. If the alpha coefficient is between 0.70 to 0.79, the item is reliable. If the alpha coefficient is between 0.60 to 0.69, the item is marginally or minimally reliable. Finally, if the alpha coefficient is below 0.60, the item is unacceptable and low reliable.

***Table 2**. Interpretation of Alpha Coefficient.*

Alpha coefficient	Interpretation
>0.90	Very highly reliable
0.80-0.90	Highly reliable
0.70-0.79	Reliable
0.60-0.69	Marginally/ minimally reliable
<0.60	Unacceptably low reliably

Source: Cohen et al. (2002)

Materials and Methods

Respondents

Questionnaires prepared for the validity tests were distributed to the experts from the same field of the study as suggested by Taherdoost (2016). Hence, six experts were chosen to validate the study, which were: 2 experts in Arabic linguistics, 2 experts in Arabic instructional design, and 2 Experts in Arabic Language who also hold senior administrative roles in KUIPs. *Figure 1* illustrates the panel of experts involved in the validation of the questionnaire content. Among these six experts, one is an associate professor in Arabic Language specializing in linguistics, one expert in Arabic applied linguistics with doctorate degrees, two university lecturers specializing in Arabic instructional design with doctorate degrees, an Associate professor in Arabic Language who holds a senior administrative position at KUIPs, and an Arabic Language lecturer with a doctorate degree who hold a senior administrative role at the Faculty of Islamic Studies in KUIPs. Content validation can be conducted using either a face-to-face or remote approach as suggested by Yusoff (2019). In this study, researchers utilize an online platform for content validation. The questionnaire and validation form were sent to the six experts via email, along with clear instructions to facilitate the process. By systematically following up, the responses from all experts were collected within two weeks. This method proved to be time and cost-efficient for the validation process. For the reliability test, the research team executed a pilot study for the developed needs analysis questionnaire. The pilot study involved 30 students in KUIPs. The purpose of selecting students from KUIPs as the respondents is to acquire a consistent result from

the real study which will be conducted later. Among the participants, 12 of them (40 percent) are male and 18 of them are female (60 percent). 16 of them are from Fakulti Pengajian Islam (FPI), and 14 of them are from Fakulti Al-Quran dan Sunnah (FQS). 9 students are from the Bachelor of Hadith, 15 are from the Bachelor of Islamic Studies, and 6 are from the Bachelor of Quranic Language and Sunnah.

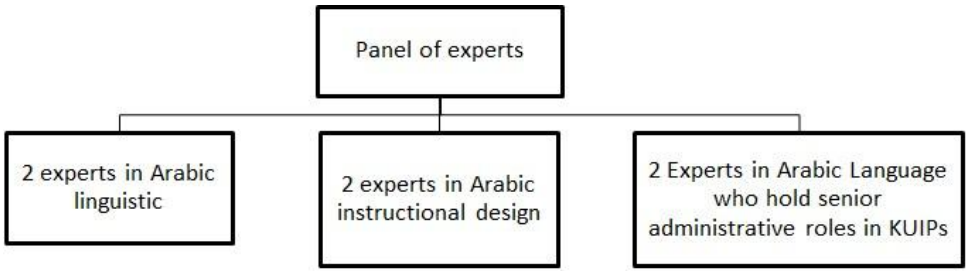

Table 1. *Panel of experts involved in validating the need analysis questionnaires' content.*

Instruments

The first instrument utilized in this study is the questionnaire developed to analyze the needs of the target group. The objectives of the survey are: (a) to acquire student's perception of their current Arabic speaking level, (b) to evaluate the challenges and the motivations of the students in using the Arabic language in oral communication, (c) to obtain opinions and suggestions on the development of an Arabic language environment module to improve speaking skill. Originally, the questionnaire contained 6 parts, namely (a) demographic data, (b) your perception of your Arabic communication skills, (c) the challenges you faced in speaking Arabic, (d) your motivation to use the Arabic Language in communication (e) Your opinion on the needs to develop a module to enhance speaking skills and (f) your opinion towards the content of the module. The second instrument used in this study is the content validity questionnaire. The objectives of this questionnaire are (a) to measure the content validity of the items in Part B: your perceptions towards your Arabic communication skills, (b) to measure the content validity of the items in Part C: the challenges you faced in speaking Arabic, (c) to measure the content validity of the items in Part D: your motivations to use Arabic Language in communication, (d) to measure the content validity of the items in Part E: Your opinion on the needs to develop a module to enhance speaking skills and (e) to measure the content validity of the items in Part F: your opinions towards the content of the module. The experts were asked to evaluate the items based on their relevance on a 4-point scale from (1) not relevant; (2) somewhat relevant; (3) relevant; (4) highly relevant.

Results and Discussion

Content validity

In this study, six experts were involved in validating the items in the needs analysis questionnaire. Before the calculation of CVI, the relevance ratings by the experts were coded as 1 (rating 3 or 4) or 0 (rating 1 or 2). *Table 3* demonstrates the coded ratings on Part B of the needs analysis questionnaire. The scores of I-CVI for every item in Part B are within the range of 0.83 to 1.00. The Overall S-CVI/Ave is 0.98, and the S-CVI/UA is 0.90. Due to all I-CVI, S-CVI/Ave, and S-CVI/UA meeting the satisfactory level, all

ten items in Part B: your perceptions towards your Arabic communication skills were maintained. *Table 3* reflects the experts' ratings on Part C of the needs analysis questionnaire after it was recoded. I-CVI scores for each item in Part C is in between 0.83 to 1.00, except item number eight which scores 0.67, well below the acceptable values. Thus, the item was removed. The overall S-CVI/Ave for Part C is 0.93. The S-CVI/UA on the other hand only scores 0.70, which supports the need to remove item number eight. Hence, only nine items in Part C: the challenges you faced in speaking Arabic were retained. *Table 3* illustrates the ratings by the experts on Part D of the questionnaire. I-CVI scores in this part range between 0.83 and 1.00. The Overall score of S-CVI/Ave is 0.98 and S-CVI/UA is 0.90. All scores meet the satisfactory level, therefore, no adjustment was made and all items in Part D: Your motivations to use the Arabic Language in communication were maintained in the questionnaire. *Table 3* shows the ratings on Part E of the questionnaire's content. The I-CVI scorefor all of the items in this part is 1.00 with no exception. Consequently, both the S-CVI/Ave and the S-CVI/UA score 1.00 as well. This reflects the complete agreement between the experts. Therefore, all Items in Part E: Your opinions on the need to develop a module to enhance speaking skills were retained in the questionnaire. *Table 3* reflects the experts' rating on Part F of the need analysis questionnaire's content. The I-CVI scores are between 0.83 and 1.00, except for item number one which only scores 0.50. This item was removed from the content. The S-CVI/Ave score for this part is 0.93, and the S-CVI/UA is 0.80. Other than Item number one, all items in Part F: your opinions towards the content of the module were maintained in the content due to the acceptable I-CVI scores. *Table 4* illustrates the results of the Validity Analysis conducted on the questionnaire. From the original needs analysis which consisted of 50 items, two items were removed, namely item number 8 from Part C and item number 1 from Part F. Both items were removed due to their low I-CVI scores. On the whole, 55 items were included in the questionnaire: 5 items in Part A: demographic data, and 48 items in all other parts.

***Table 3**. The rating of part B, C, D, E and F after the recoded process*.

Items	E1	E2	E3	E4	E5	E6	EIA	I-CVI	UA	S1	S2
B										0.98	0.90
1	1	1	1	1	1	1	6	1.00	1		
2	1	1	1	1	1	1	6	1.00	1		
3	1	1	1	1	1	1	6	1.00	1		
4	1	1	1	1	1	1	6	1.00	1		
5	1	1	1	1	1	1	6	1.00	1		
6	1	0	1	1	1	1	5	0.83	0		
7	1	1	1	1	1	1	6	1.00	1		
8	1	1	1	1	1	1	6	1.00	1		
9	1	1	1	1	1	1	6	1.00	1		
10	1	1	1	1	1	1	6	1.00	1		
C										0.93	0.70
1	1	1	1	1	1	1	6	1.00	1		
2	1	1	1	1	1	1	6	1.00	1		
3	1	1	1	1	1	1	6	1.00	1		
4	1	1	1	1	1	1	6	1.00	1		
5	1	1	1	1	1	1	6	1.00	1		
6	1	1	1	0	1	1	5	0.83	0		
7	1	1	1	1	0	1	5	0.83	0		
8	1	0	1	0	1	1	4	0.67	0		
9	1	1	1	1	1	1	6	1.00	1		
10	1	1	1	1	1	1	6	1.00	1		
D										0.98	0.90
1	1	1	1	1	1	1	6	1.00	1		
2	1	1	1	1	1	1	6	1.00	1		
3	1	1	1	1	1	1	6	1.00	1		

4	1	1	1	1	1	1	6	1.00	1		
5	1	1	1	1	1	1	6	1.00	1		
6	1	1	1	1	1	1	6	1.00	1		
7	1	1	1	1	1	1	6	1.00	1		
8	1	1	1	1	1	1	6	1.00	1		
9	1	0	1	1	1	1	5	0.83	0		
10	1	1	1	1	1	1	6	1.00	1		
E										1.00	1.00
1	1	1	1	1	1	1	6	1.00	1		
2	1	1	1	1	1	1	6	1.00	1		
3	1	1	1	1	1	1	6	1.00	1		
4	1	1	1	1	1	1	6	1.00	1		
5	1	1	1	1	1	1	6	1.00	1		
6	1	1	1	1	1	1	6	1.00	1		
7	1	1	1	1	1	1	6	1.00	1		
8	1	1	1	1	1	1	6	1.00	1		
9	1	1	1	1	1	1	6	1.00	1		
10	1	1	1	1	1	1	6	1.00	1		
F										0.93	0.80
1	0	1	0	1	1	0	3	0.50	0		
2	1	1	1	1	1	1	6	1.00	1		
3	1	1	1	1	1	1	6	1.00	1		
4	1	1	1	1	1	1	6	1.00	1		
5	1	1	1	1	1	1	6	1.00	1		
6	1	1	1	1	1	1	6	1.00	1		
7	1	1	1	1	1	1	6	1.00	1		
8	1	1	0	1	1	1	5	0.83	0		
9	1	1	1	1	1	1	6	1.00	1		
10	1	1	1	1	1	1	6	1.00	1		

Note: EIA=Expert in Agreement; S1=S-CVI/Ave; S2=S-CVI/UA.

***Table 4**. Results of the validity analysis.*

Part	Number of items	Items deleted	Item remained	Justification
B	10	-	10	-
C	10	1	9	Low I-CVI for item No. 8
D	10	-	10	-
E	10	-	10	-
F	10	1	9	Low I-CVI for item No. 1

Reliability

This study adopted Cronbach's Alpha analysis to define the reliability of the questionnaire's content. Ismail et al. (2020) suggested the minimum alpha value for overall items at 0.65, but recommended the value to be at least 0.70 for the study to be reliable. The reliability test was conducted on parts B, C, D, E, and F, leaving the five items in Part A: demographic data. *Table 5* represents the Cronbach's Alpha value for each part, ranging from 0.929 to 0.972. The overall Alpha value for all 50 items in the original content is 0.938 (*Table 6*), thus reflecting a strong internal consistency of each item and subsequently a high reliability of the content. The analysis of [Cronbach's Alpha if item deleted] for all of the items in the original questionnaire also reflects a good internal consistency, with the value ranging between 0.934 and 0.942. The [corrected item-total correlation] value was used to determine the correlation between an item and the total score. The cut-off value used is above 0.2 or 0.3. Thus, any item scores below it are considered as redundant and should be removed from the questionnaire (Ismail et al., 2020). In this study, the value of all items is above 0.3. Therefore, all items were maintained without any amendment.

***Table 5**. Value of Cronbach's Alpha for the need analysis questionnaire of each part.*

Part	Cronbach's Alpha value
B: Perception of Arabic communication skills	0.943
C: Challenges in speaking Arabic	0.929

D: Motivation to use the Arabic Language in communication	0.937
E: Opinion on the needs to develop a module	0.968
F: Opinion towards the content of the module	0.972

Table 6. *The overall Value of Cronbach's Alpha*.

Cronbach's Alpha	N of Items
.938	50

According to Shrotryia and Dhanda (2019), content validity must be conducted to ensure that the items included in the specific content domain are relevant to the measurement context and accurately represent the construct being evaluated. The content validity of the needs analysis questionnaire for the development of the Arabic Language environment module was conducted involving six panels of experts. These experts were asked to rate the items based on their relevance to the objective of the study. The quantification of content validity based on CVI analysis (I-CVI, S-CVI/Ave, and S-CVI/UA) reflects high content validity for most items. The Cronbach's Alpha Value also illustrates the strong internal consistency of the items in the questionnaire. This concludes that the questionnaire's content in general is appropriate to be used to obtain relevant and consistent information to achieve the objective of the study which are: acquiring student's perception of their current Arabic speaking level, evaluating the challenges and the motivations of the students in using Arabic language in oral communication, and obtaining opinions and suggestions on the development of an Arabic language environment module to improve speaking skill. A few amendments were made based on the feedback gained through this analysis. The final version of the questionnaire will be used in the real study targeting students in KUIPs.

This study has a few limitations that should be taken into consideration. Firstly, the data were taken specifically from the students studying in KUIPs. Future research may require another reliability test when utilizing the content on samples from different backgrounds. A validity test is also suggested in the event of adaptation, since the differences in factors such as the types of educational level, institutions, and participants' backgrounds could yield different results regarding the challenges and the needs for an interventional module. Further work is also suggested to be made in adapting the needs analysis to improve other language skills such as reading and writing, taking into note several contributing elements which may impact the outcomes of a needs analysis, including the student's language proficiency levels, learning preferences, challenges, motivations, and interest.

Conclusion

The result of the analysis signals the suitability of the content in the needs analysis questionnaire for the development of the Arabic Language environment module. The items in general obtain high validity and reliability, with only a few questions removed based on the feedback. This questionnaire therefore will be used in the real study aimed to acquire student's perception of their current Arabic speaking level, evaluate the challenges and the motivations of the students in using the Arabic language in oral communication, and obtain opinions and suggestions on the development of an Arabic language environment module to improve speaking skill. Future researchers are

suggested to establish another validity and reliability test when adapting the questionnaire to different participants to ensure better applicability and consistency.

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Conflict of interest

The authors confirm that there is no conflict of interest involved with any parties in this research study.

REFERENCES

[1] Abdul, N.S.B., Maat, S.M. (2019): Pengaruh persekitaran pembelajaran terhadap kesedaran metakognitif dalam kalangan pelajar sekolah menengah. – International Journal of Education and Pedagogy 1(1): 12-21.
[2] Ahmid, M.H., Abdullah, M.K., Johari, K. (2018): Pengajaran guru dan kepercayaan motivasi pelajar dalam pembelajaran bahasa Arab di sekolah menengah. – Malaysian Journal of Social Sciences and Humanities (MJSSH) 3(3): 136-147.
[3] Ayub, A.F.M., Yunus, A.S.M., Mahmud, R. (2018): Pengaruh Guru, Rakan Sebaya dan sokongan keluarga terhadap keterlibatan Matematik dalam kalangan murid Sekolah Menengah: The influence of Teachers support, Students' Cohesiveness and parental involvement toward Mathematics engagement among Secondary School students. – Jurnal Pendidikan Sains dan Matematik Malaysia 8(1): 1-12.
[4] Boroujeni, S.A., Fard, F.M. (2013): A needs analysis of English for specific purposes (ESP) course for adoption of communicative language teaching (A case of Iranian first-year students of educational administration). – Life 1: 35-44.
[5] Chee, T.T., Abdullah, M.S. (2021): Kesepaduan sosial dalam kalangan pelajar universiti. – Advances in Humanities and Contemporary Studies 2(2): 24-33.
[6] Cohen, L., Manion, L., Morrison, K. (2002): Research methods in education. – Routledge 656p.
[7] Dorman, J.P., Fraser, B.J. (2009): Psychosocial environment and affective outcomes in technology-rich classrooms: Testing a causal model. – Social Psychology of Education 12: 77-99.
[8] Gage, N.L. (1984): Educational psychology. – Houghton Mifflin 809p.
[9] Ismail, R., Yunus, J., Awang, M. (2020): Analisis data dan pelaporan dalam penyelidikan pendidikan. – Tanjung Malim: Penerbit Universiti Pendidikan Sultan Idris 227p.
[10] Kirk, J., Miller, M.L. (1986): Reliability and validity in qualitative research. – Sage 1: 87p.
[11] Lee, C.L. (2016): Principles and Practices of ESP Course Designâ€" A Case Study of a University of Science and Technology. – International Journal of Learning, Teaching and Educational Research 15(2): 94-105.
[12] Lei, H., Cui, Y., Zhou, W. (2018): Relationships between student engagement and academic achievement: A meta-analysis. – Social Behavior and Personality: An International Journal 46(3): 517-528.

[13] Mat, A.C., Soon, G.Y. (2010): Situasi pembelajaran bahasa asing di Institut Pengajian Tinggi: Perbandingan antara bahasa Arab, bahasa Mandarin dan bahasa Perancis. – Asean Journal of Teaching and Learning in Higher Education 2(2): 9-21.
[14] McKillip, J. (1987): Need analysis: Tools for the human service and education: Applied social research methods series. – SAGE Publications 144p.
[15] Pranoto, B.E., Suprayogi, S. (2020): A need analysis of ESP for physical education students in Indonesia. – Premise: Journal of English Education 9(1): 94-110.
[16] Shrotryia, V.K., Dhanda, U. (2019): Content validity of assessment instrument for employee engagement. – Sage Open 9(1): 7p.
[17] Sidik, I.F., Awang, M.M., Ahmad, A.R. (2018): Sokongan persekitaran sosial di pelbagai jenis sekolah menengah dalam meningkatkan kemahiran insaniah pelajar. – Jurnal Pendidikan Malaysia SI 1(1): 67-76.
[18] Slavin, R.E. (1987): Cooperative learning and the cooperative school. – Educational Leadership 45(3): 7-13.
[19] Taherdoost, H. (2016).: Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. – International Journal of Academic Research in Management (IJARM) 5(3): 28-36.
[20] Tama, M.C. (1989): Critical thinking: Promoting it in the classroom. – ERIC Clearinghouse 4p.
[21] Yusoff, M.S.B. (2019): ABC of content validation and content validity index calculation. – Education in Medicine Journal 11(2): 49-54.
[22] Zawawi, N.S.A.M., Mohamed, Z. (2013): Peranan Ibubapa Membantu Meningkatkan Kecemerlangan Akademik Anak-Anak. – Johor Bahru: Universiti Teknologi Malaysia 6p.