

The Effectiveness of the 4IR PSH Program Based on the Attention, Relevance, Confidence & Satisfaction (ARCS) Model at Pasir Mas Community College

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Abstract

The Lifelong Learning Program (PSH) 4IR enriches human capital through enhancing training and skills among the local community based on new technologies such as the Internet of Things (IoT), Big Data Analytics, and Simulation & Modelling. However, to what extent the knowledge and skills taught through the PSH 4IR courses can help enhance motivation among participants remains to be seen. This study aims to identify the impact of the effectiveness of the PSH 4IR program based on the ARCS model; attention, relevance, confidence, and satisfaction among participants of the PSH program at Pasir Mas Community College. The methodology used involves a survey questionnaire distributed to 52 PSH 4IR participants who have followed the Artificial Intelligence (AI) Course, Canva Application Course, and Android Application Development Course at Pasir Mas Community College in 2023. The findings indicate that user motivation is high in the relevance and satisfaction elements, while confidence and attention are low based on the ARCS model. Several improvements need to be made to impact the organization of PSH 4IR courses, including diversifying course types and enhancing participant confidence through the course's impact to increase user motivation. Suggestions for future research include expanding the scope of the study to include participants in PISH courses and Entrepreneurship Programs.

Keywords: Lifelong Learning, 4IR, ARCS model, motivation

1.0 Introduction

Community College is synonymous with the Lifelong Learning or Pembelajaran Sepanjang Hayat (PSH) approach that has started since the establishment of Community College in 2001 and has now reached 2 decades since its establishment. The role of Community Colleges through the PSH initiative under the Department of Polytechnic Education and Community Colleges (JPPKK) aims to upgrade the local community's economy and income to indirectly be a catalyst for well-being. According to the speech of the Deputy Minister of Higher Education, YB Dato' Haji Mohammad Yusof Apdal at the Community College Commemorative Convocation Ceremony at the Chancellor's Hall, Universiti Sains Islam Malaysia (USIM) stated that:

"KPT is working to empower Community Colleges to become institutions that are truly capable of empowering the local community. One of the steps taken

is to appoint a Chairman of the Advisory Committee chaired by community area leaders".

Referring to the Malaysian Education Development Plan 2015-2025 – Higher Education, (PPPM-PT 2015-2025) through the PSH system a high-quality PSH system, uniform with the learning community in each organization, will be able to cultivate the practice of lifelong learning as an important element in the culture and way of life of Malaysian society. Salmiah, Wan Noor Elyana & Yuzilawati (2017) stated that PSH has given opportunities to people of various social groups, genders, religions, and education to realize the culture of lifelong learning. The implementation of PSH at Pasir Mas Community College and Pasir Mas Community College Rantau Panjang Branch has been well received and helped in achieving the annual target of the PERSIST System which is a total of 1379 PSH participants exceeding the target of 396 participants in 2023 by contributing 10% in the PERSIST KPI. Along with new challenges, the PSH program has started implementing courses based on Industrial Revolution 4.0 (4IR) at all levels of society. Among the PSH 4IR courses that have been implemented at Pasir Mas Community College in 2023 are the Artificial Intelligence (AI) Course, Canva Application, and Android Application Development. But to what extent is the effect and impact on PSH participants after following and attending PSH courses throughout the past year 2023, does it have an impact on their income, skills, and motivation? To give birth to a generation that is balanced, competitive, and has noble morals, dedication, thoughtful ideas, and vision, the aspect of motivation plays an important role (Nurul Liyana & Mohd Toriq, 2021). Therefore, this study aims to see the effectiveness of the PSH program based on the ARCS model at Pasir Mas Community College.

1.1 Problem Statement

Based on the Report of the Economic Planning Unit in the New Economic Model, to achieve the status of a developed country, the aspect of workforce development consisting of groups that are not highly skilled is feared to be an obstacle in achieving the target (Mohd Faizullah, Badaruddin & Norlida, 2014). According to Mohd Zaky (2021) in the speech of the World Bank's Global Worker Protection and Employment Practices Economist, Dr. Amanina Abdur Rahman, Malaysia needs a driver in the labor supply source that is underutilized, especially among women and youth. According to Burn (2020), the driving force behind an industry is through work and employment. Every individual needs to be motivated to meet the needs of life to continue to achieve success and have the opportunity to develop themselves and their goals. According to Mohd Faizullah, et al (2014), the level of knowledge of the PSH course participants that the course participants participated in has a significant difference compared to the skill level but does not have a significant difference according to the participant's community college. This shows that the implementation and management of PSH should go hand in hand as a facilitator in providing training facilities and capable teaching staff should not be taken for granted. Therefore, individual motivation in following the PSH course based on 4IR should be strong to face challenges starting with

oneself, family, society, and then the country.

1.2 Research Objectives

The main objective of this study is to see the effectiveness of the PSH 4IR program based on the ARCS model of attention, relevance, confidence, and satisfaction. The specific objectives of the study are:

- i. To find out the attention level of the participants towards the PSH 4IR course.
- ii. To find out the level of relevance (relevance) of the participants to the PSH 4IR course.
- iii. To find out the level of self-confidence of participants towards the PSH 4IR course.
- iv. To find out the level of satisfaction (satisfaction) of the participants towards the PSH 4IR course.

2.0 Literature Review

2.1 Motivation

According to Keller (2016), the level of motivation can be assessed through four main aspects, namely attention, relevance, confidence, and satisfaction through the formation of concepts, theories, and synthesis of motivation. Therefore, the process of evaluating the level of motivation of PSH course participants is through the ARCS model as a study design (Table 1).

Table 1: Motivational Strategy Work Design

Category	Aspects of Analysis of PSH Course Participants
Attention	Course content Benefits Focus
Relevance	Importance of the subject Very useful course
Confidence	Belief in the course gives success Confident
Satisfaction	The joy of learning Course satisfaction Relevance to goals Good teaching method

According to Long & Chei (2021), attention refers to the extent to which the lesson stimulates students' interest and curiosity. Relevance focuses on the material and instruction's relevance to the student's goals during the learning

process. Self-confidence is about increasing students' competence to achieve their educational goals. Finally, satisfaction assesses the extent to which students are satisfied with the course and their achievements. This model aims to assess students' motivational appeal to instruction and help to improve course designs that increase their engagement and academic performance (Robb & Sutton, 2014).

2.2 Lifelong Learning

The activities contained in the PSH program are aimed at improving knowledge, skills, and competence in aspects related to personal, social, or work since the implementation of PSH in 2010 at Community College (Salmiah et al, 2017). The PSH course offered by 104 Community Colleges involving 93 Main Community Colleges and 11 Branch Community Colleges is a short and modular course concept targeted at the local community among the youth, the elderly, single mothers, school students, *tahfiz* and *pondok* institution students, People Disability (OKU) and indigenous people. This shows that PSH opens space for all ages from school students to the elderly to gain knowledge and skills in the field of interest (Najdiah, Raudhah & Norfadzilah, 2020). Course participants only pay RM5.00 as government revenue and some additional costs are set based on the type of course chosen. The results and output of the participants can be brought back after the end of the theoretical and practical course. For example, in the sewing course, the participants will be exposed to the theory first and then the instructor will explain step by step the practical sewing process.

2.3 Reinforcement of Lifelong Learning

Referring to Wilayahku Editor (2023), the strengthening of PSH through the Community College PSH Action Plan 2021-2025. From 2021 to 2025, the implementation of community college PSH will be guided and focused on five PSH missions, namely:

2.3.1 PSH Mission 1: Developing a Digitally Literate Community Along with 4IR

One of the indicators as a developed country is through exposure to the public about digital literacy through PSH era 4IR so that it can be applied in daily practice. Through this initiative, the community will be more digitally literate and achieve a new direction mission in the PSH approach.

2.3.2 PSH Mission 2: Improve the Quality of Life and Community Wellbeing

PSH continues to be strengthened through customized programs for the disabled, single mothers, youth, and unskilled workers so that they can build a more sustainable life along with the cooperation of all Ministries.

2.3.3 PSH Mission 3: Increasing Collaboration with Industry

PSH agenda 4IR needs to actively collaborate with industry to reduce skills mismatch with industry needs and produce talent that is ready for the future (future-proof learners) through the implementation of Joint Programmes, Customized Programmes, Private Public Partnerships, and Industry on Campus.

2.3.4 PSH Mission 4: Strengthening Entrepreneurship

The aspect of entrepreneurship can be identified as one of the important components in making the economic transformation process of a high-income country that is centered on innovation, creativity, and the competitiveness of the people a success.

2.3.5 PSH Mission 5: Empowering the PISH Program

The empowerment of the PSH program is through the process of improving the existing policy to be able to meet the current needs as well as expanding the involvement of PISH to the converted group and outreach to the non-Muslim group is also planned to increase cooperation and understanding that is not limited to students of *tahfiz* institutions and *pondok* only. This program aims to produce entrepreneurs among the target group through skills courses based on the entrepreneurial model.

2.4 PSH 4IR

According to Siti Salwa, Shahrulnizam & Ali (2020), starting in 2020, the Department of Polytechnic Studies and Community Colleges (JPPKK) under the auspices of the Malaysian Ministry of Education has outlined the 4th Industrial Revolution (4IR) as an interesting, up-to-date and very good as it meets the needs of today's world. New technologies such as the Internet for Everything (Internet of Things), Big Data Analytics, and Modeling & Simulation (Simulation & Modeling) are among the courses that can be organized at Polytechnics and Community Colleges. According to HR Hub Portal (2019), Minister of Education Dr. Maszlee Malik through the Lifelong Learning Program and Community College Temporary Premises in Simpang Renggam Johor,

"Steps to introduce short-term skills courses into the Fourth Industrial Revolution (RI 4.0) PSH program and the Modular PSH program will be implemented. For example, the community in the era of RI 4.0 has been introduced to smartphones and the need for the internet to such an extent that there are facilities for sharing information and making sales through WhatsApp, Telegram, Instagram, and Facebook applications. This development creates a technology gap and skill requirements that need to be met if we want to continue to compete with developed countries. Therefore, community colleges need to act as educational institutions that provide sufficient skills to the community and the people" (HR Hub Portal, 2019).

2.5 ARCS Model Of Attention, Relevance, Confidence, and Satisfaction

The ARCS model, developed by John Keller in the 1980s, is a framework for designing and assessing motivational elements in learning environments. It is based on four key components: Attention, Relevance, Confidence, and Satisfaction. The model has been widely used to enhance learner engagement, motivation, and overall educational effectiveness. Here's a breakdown of the ARCS components, with insights from recent literature:

2.5.1 Attention

This involves capturing and maintaining the learners' interest. Strategies include using novel, unexpected, or challenging activities to stimulate curiosity. Examples include interactive content, storytelling, or problem-solving tasks that sustain engagement over time (Nurul, 2023 & Drew, 2023).

2.5.2 Relevance

Ensuring the material connects with learners' existing knowledge, goals, and real-world applications is essential. Techniques include linking lessons to student's personal interests, and career aspirations, or demonstrating immediate and future benefits of the content (Drew, 2023)

2.5.3 Confidence

Regarding Nurul (2023) and Drew (2023), this focuses on building learners' belief in their ability to succeed. Clear objectives, achievable challenges, and constructive feedback help learners gauge their progress and develop self-efficacy. Allowing learners to take control over some aspects of their learning also enhances confidence.

2.5.4 Satisfaction

This is achieved when learners feel rewarded for their efforts, either intrinsically (through personal achievement) or extrinsically (via recognition or rewards). Activities should balance challenge levels and ensure fair assessment to maintain motivation (Drew, 2023).

The ARCS model is ideal for 4IR programs because it aligns with modern education's technological and motivational needs to engage learners using interactive and innovative technologies like AI and virtual simulations. Connects learning to real-world applications and future career skills, crucial in 4IR contexts. Builds self-efficacy through clear objectives and feedback, essential for mastering complex 4IR tools. Reinforces motivation through intrinsic achievements and tech-driven rewards, fostering lifelong learning.

3.0 Methodology

Respondents in this study chose PSH 4IR course participants in 2023 at Pasir Mas Community College and Pasir Mas Community College Rantau Panjang Branch. The design of this study is a survey study that uses quantitative methods. Among the PSH 4IR courses that have been implemented are the Artificial Intelligence (AI) Course (Figure 1), Canva Application (Figure 2), and Android Application Development (Figure 3).

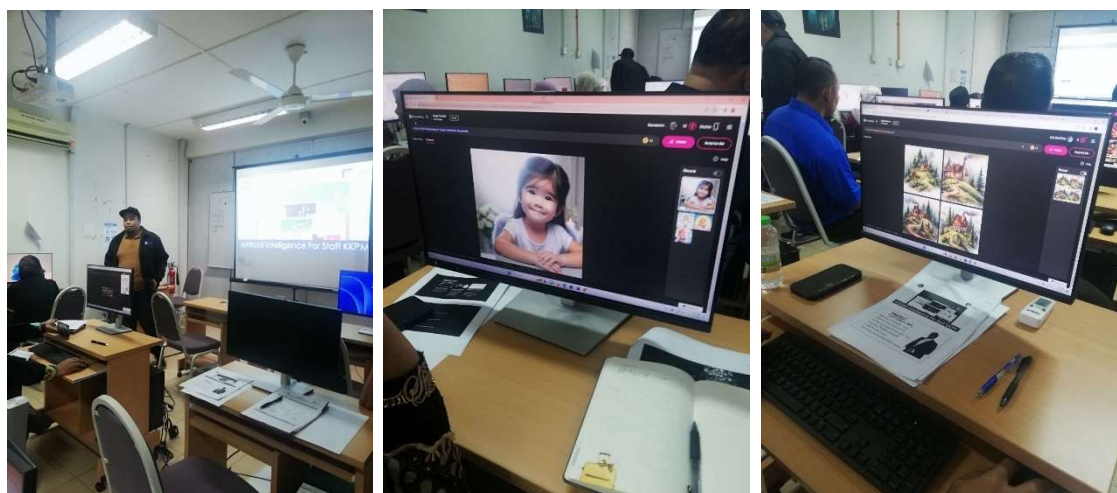


Figure 1: Implementation of Artificial Intelligence (AI) Courses



Figure 2: Canva Application Course Implementation



Figure 3: Android Application Development Course Implementation

The main focus of the researcher is to survey the effectiveness of the implementation of the PSH 4IR course according to the ARCS model. The selection of respondents is based on the total population of PSH 4IR course participants in 2023, which is a total of 60 people. Referring to the Krejcie, R. V., & Morgan, D. W. (1970) table, the appropriate sample size was 52 people. In total, a total of 52 respondents answered the questionnaire using the Likert five scale (1 - strongly disagree, 2 - disagree, 3 - neutral, 4 - agree, and 5 - strongly agree) given using Google Forms. The Statistical Package for Social

Science (SPSS) version 23.0 application was used to analyze the data descriptively. The results will obtain a total mean score to see if the participation of participants in the PSH 4IR program has an impact on the ARCS model. Figure 4 shows the methodological process in this study research process.

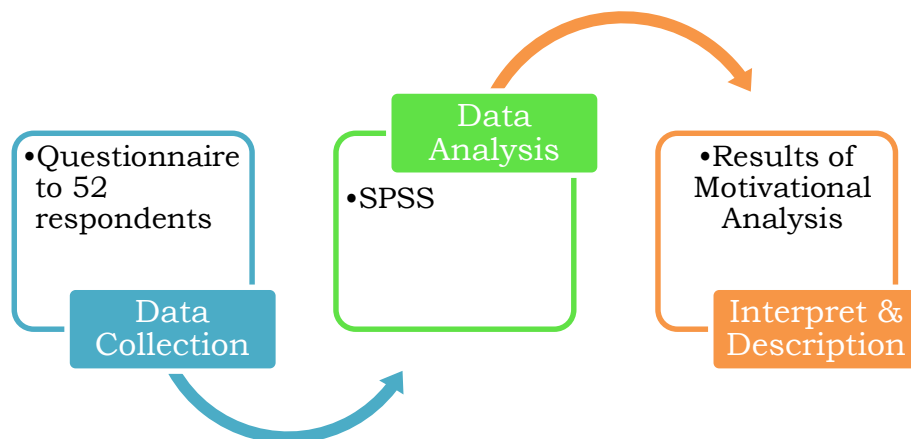


Figure 4: Research methodology

4.0 Results and Discussion

4.1 Reliability Test

To represent reliability or internal consistency, instruments or questionnaire items have undergone a pilot test process using Cronbach's Alpha. According to Taber (2018), a Cronbach's Alpha value of around 0.70 or more is considered reasonable in a research study. Overall Cronbach's Alpha Value for 30 respondents according to item category is more than 0.70, refer to Table 2.

Table 2: Cronbach's Alpha Value by Item Category

No.	Item Category	Cronbach's Alpha Value
1	Attention	0.944
2	Relevance	0.842
3	Confidence	0.724
4	Satisfaction	0.927

4.2 Respondent Demographics

To see the motivation level of the participants, Motivation Analysis was used through achievement and motivation level through the findings of the study. The results of the questionnaire on 52 PSH 4IR participants are shown in Figures 5 and 6 (Demographic information).

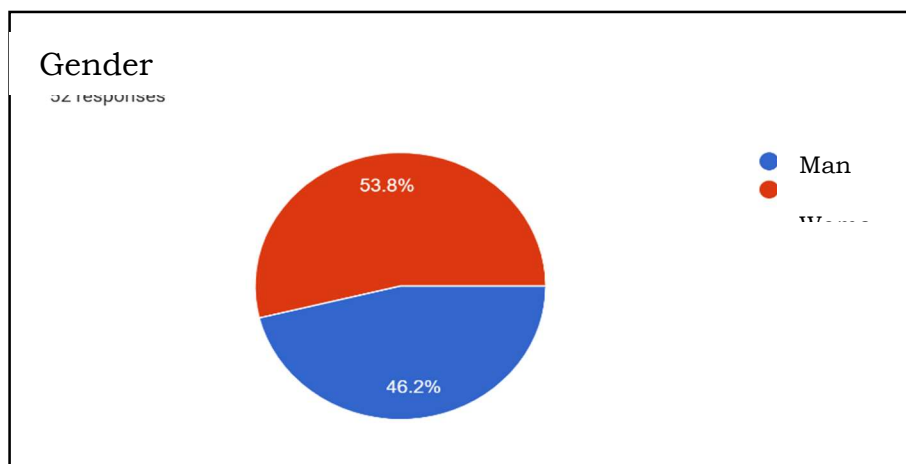


Figure 5: Participant Gender Information

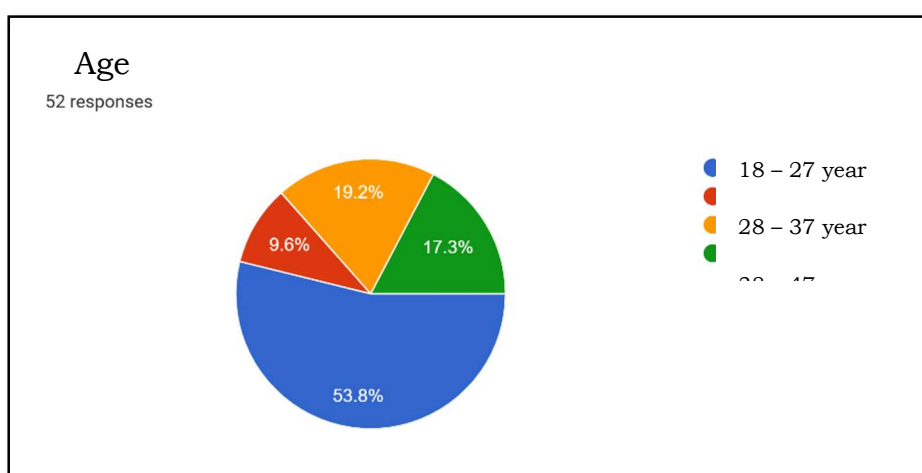


Figure 6: Participant Age Information

4.3 Results Based on Category

The following are the results of the study for item categories based on the ACRS model regarding Tables 4, 5, 6 & 7. A table of interpretation mean typically summarizes how different ranges of mean values are categorized or interpreted within a specific context (Table 3). Here's a generalized example used in Likert scale research or performance evaluation:

Table 3: Interpretation Mean

Mean Range	Interpretation
1.00 - 1.80	Strongly Disagree / Very Poor
1.81 - 2.60	Disagree / Poor
2.61 - 3.40	Neutral / Fair
3.41 - 4.20	Agree / Good
4.21 - 5.00	Strongly Agree / Excellent

Table 4: Mean Value for the Element of Attention

	Mean	Standard Deviation
A1: I am satisfied with this course	4.63	0.525

A2: The content of this course interests me	4.56	0.539
A3: This course benefits me	4.69	0.506
A4: I focus throughout the course	4.69	0.506
Average Mean	4.64	
Interpretation	Strongly Agree / Excellent	

Table 5: Mean Value for the Element of Relevance

	Mean	Standard Deviation
R1: This course is very important for me	4.81	0.398
R2: To achieve my goals, I must do well	4.71	0.457
R3: What I learn in this course will be useful to me	4.77	0.425
Average Mean	4.74	
Interpretation	Strongly Agree / Excellent	

Table 6: Mean Value for the Element of Confidence

	Mean	Standard Deviation
C1: When I took this course, I believed I could succeed if I worked hard.	4.71	0.457
C2: I feel confident that I will succeed in this course.	4.69	0.506
C3: The subject matter of this course is too easy for me	4.56	0.698
Average Mean	4.65	
Interpretation	Strongly Agree / Excellent	

Table 7: Mean Value for the Element of Satisfaction

	Mean	Standard Deviation
S1: I am often interested in the course advertisements that are offered	4.58	0.637
S2: I enjoy studying for this course.	4.65	0.480
S3: I feel that this course gives me a lot of satisfaction.	4.69	0.544
S4: The students in this class seem curious about the content of the lesson	4.75	0.437
S5: I am satisfied with the learning and teaching of this class	4.79	0.457
S6: I feel satisfied with what I got from this course	4.79	0.457
S7: The content of this course is related to my goals.	4.71	0.536
S8: The instructor uses a variety of interesting teaching methods	4.73	0.528
Average Mean	4.71	
Interpretation	Strongly Agree / Excellent	

4.4 To find out the attention level of the participants towards the PSH 4IR course.

The results of the analysis in the element of attention of the participants towards the PSH 4IR course show that elements A3 and A4 are at the highest mean level which is 4.69 this course has benefited me and also, I focus

throughout the course. While element A2 which is the content of this course interests me, it has the lowest mean value which is 4.56.

4.5 To find out the level of relevance of the participants to the PSH 4IR course.

The results of the analysis through the questionnaire show that the level of participants' relevance to the PSH 4IR course is at a high level for element R1, which means that this course is very important to me with a mean value of 4.81. While the R2 element is low with a mean value of 4.71 that to achieve my goal, need to do well.

4.6 To find out the level of confidence of participants towards the PSH 4IR course.

Based on the analysis of the level of confidence, it has been shown that the C1 element is high with a mean value of 4.71, which means that when I take this course, I believe that I can succeed if I work hard. The C3 element is the lowest with a mean of 4.56, which is why the subject matter of this course is too easy for me.

4.7 To find out the level of satisfaction of the participants towards the PSH 4IR course.

The results of the analysis show that the level of participants' satisfaction with the PSH 4IR course is the highest in elements S5 (I am satisfied with the learning and teaching of this class) and S6 (I feel satisfied with what I have gained from this course) which is a mean of 4.79. The lowest mean is the S1 element with a mean value of 4.58 (I am often interested in the course advertisements offered).

The results of this analysis are illustrated in Figure 7 which clearly explains the 4 components of ARCS and the positive and negative elements can be clearly shown.

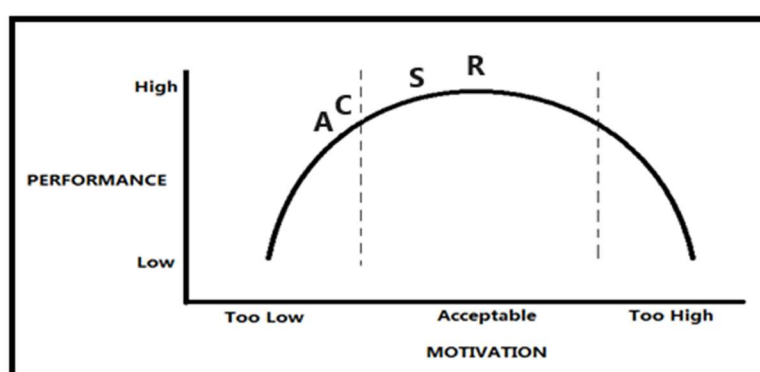


Figure 7: Motivation Analysis Result

Based on Figure 7, shows that two categories in the ARCS model are at a high level, namely relevance, and satisfaction, while the other 2 categories, confidence, and attention, are at a low level concerning the average min. This result supports from previous study from Nurul (2023), Robb & Sutton (2014) and Long & Chei (2021). This can be proven that the course attended by the

participants is very important to them in helping to improve their understanding of the work process as well as the participants are satisfied with the course and the teaching and learning process of the 4IR course.

5.0 Conclusions

Based on the research findings obtained the relevance and satisfaction categories in the ARCS model are high, while confidence and attention are low. This indicates that participants find the course valuable for improving their understanding of the work process and are satisfied with the course and its teaching methods, some recommendations need to be made to improve the management of the PSH 4IR course. Among them are:

- i. The aspect of attention should be particularly focused on PSH 4IR participants, ensuring that the course selection is both interesting and impactful. This will enable participants to directly apply the knowledge to their jobs, thereby enhancing their motivation.
- ii. The aspect of self-confidence (confidence) should be given attention by ensuring that participants do not take each course they follow for granted.

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Author Contributions

Mohd Azian H. @ C. H.: Conceptualisation, Methodology, Software, Writing-Original Draft Preparation; **Azre A.:** Data Curation, Validation, Supervision; **Tuan Mohd Hilme K. T. Y.:** Software, Validation, Writing-Reviewing, and Editing.

Conflicts Of Interest

The manuscript has not been published elsewhere and is not under consideration by other journals. All authors have approved the review, agree with its Submission, and declare no conflict of interest in the manuscript.

Reference

Acharian N (2016) subang-jaya-council-adds-spice-to-recipe-for-success Retrieved January 13, 2016 from <http://www.themalaysianinsider.com/citynews/greater-kl/article/>.

Drew, C. (2023), Arcs model of motivational design in e-learning (John Keller). Retrieved November 24, 2024 from <https://helpfulprofessor.com/arcs-model-of-motivation-keller/>.

- Keller, J.M. (2016), Motivation, learning and technology: applying the ARCS-V motivation model. *Participatory Educational Research (PER)*. Vol. 3(2), pp. 1-13.
- Long, M. & Chei, S.L. (2021) Evaluating the effectiveness of blended learning using the ARCS model. *Journal of Computer Assisted Learning*. DOI: <https://doi.org/10.1111/jcal.12579>
- Mohd Faizullah, M., Badaruddin, I., & Norlida, S. (2014). Tinjauan Terhadap Keberkesanan Program Pembelajaran Sepanjang Hayat (PSH) Di Kolej Komuniti, Kementerian Pendidikan Malaysia. *E-Proceeding CIETVET 2014*, pp 793-800.
- Nurul, H.M.N (2023), Satisfaction with online distance learning: evaluating the attention, relevance, confidence, and satisfaction (arcs) model. *Journal of Creative Practices in Language Learning and Teaching (CPLT)* Vol. 11(3), pp. 86-98.
- Nurul Liyana, M & Mohd Toriq, S (2021). Impak Program Pembelajaran Islam Sepanjang Hayat (PISH) di Kolej Komuniti Dalam Aspek Peningkatan Pengetahuan, Kemahiran dan Motivasi. *E-proceeding Conference Liga Ilmu Serantau 2021*. Pp 70-92.
- Robb, C. A., & Sutton, J. (2014). The importance of social presence and motivation in distance learning. *The Journal of Technology, Management, and Applied Engineering*, 31(2), 1-10.
- Salmiah, M.S., Wan Noor Elyana, W.M., & Yuzilawati, M.Y. (2017). Faedah Penyertaan Program Pembelajaran Sepanjang Hayat (PSH) Kepada Golongan OKU: Kajian Terhadap Guru Peserta Pendidikan Khas Integrasi Di Kolej Komuniti Hulu Langat (KKHL). *Politeknik & Kolej Komuniti Journal of Life Long Learning*, Vol.1, No.1. pp 60-71.
- Najdia, A., Raudhah, N.A.B., & Norfadzilah, M. (2020). Kajian Persepsi Peserta Latihan Khas Kluster Pengkomputeran Berdasarkan Umur dan Pendapatan. *Politeknik & Kolej Komuniti Journal of Life Long Learning*, Vol.4, No.1, pp 30-40.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48, 1273-1296.
- Siti Salwa, K., Shahrulnizam, S. & Ali, S. (2020). Faedah Penyertaan Program PSH: Tinjauan Penerapan Elemen Revolusi Industri ke-4 (IR4.0) di Kolej Komuniti. *Proceeding International Multidisciplinary Conference (IMC 2020)*
- Burns, R. (2020). *Adult Learner at Work: The challenges of lifelong education in the new millennium*. Routledge.

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Sizes For Research Activities. *Educational and Psychological Measurement*, 607-610

Editor Wilayahku (11 Disember 2023). Pembelajaran Sepanjang Hayat. Retrieved January 7, 2024, from <https://www.wilayahku.com.my/pembelajaran-sepanjang-hayat/>

HR Hub Portal (15 April 2019). PSH Akan Dinaiktarf Dengan Manfaat Teknologi. Retrieved January 10, 2024, from <https://hrhub.my/psh-akan-dinaiktaraf-dengan-manfaat-teknologi/>

Jabatan Pendidikan Politeknik & Kolej Komuniti. (2021). Informasi Kolej Komuniti 2023. Putrajaya: Jabatan Pendidikan Politeknik dan Kolej Komuniti. Pembelajaran Sepanjang Hayat Pemangkin Kesejahteraan Komuniti, 25 September 202. Retrieved January 7, 2024, from <https://www.mohe.gov.my/hebahan/sorotan-aktiviti/pembelajaran-sepanjang-hayat-pemangkin-kesejahteraan-komuniti>

Mohd Zaky Zainuddin (2021, 26 April) Malaysia Perlukan Dua Juta Pekerjaan Berkualiti Tinggi. Retrieved January 7, 2024, from <https://www.bharian.com.my/bisnes/lain-lain/2021/04/810870/malaysia-perlukan-dua-juta-pekerjaan-berkualiti-tinggi-bank-dunia>