

# HYBRID PERSONALIZED ARABIC LANGUAGE LEARNING

Rania A Batainah (Corresponding Author) Personalized Education Research Group, Faculty of Education, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, MALAYSIA bat.raina@yahoo.com

Rosseni Din

Personalized Education Research Group, Faculty of Education, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, MALAYSIA rosseni@ukm.edu.my

Atef F Al Mashakbh Personalized Education Research Group, Faculty of Education, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, MALAYSIA ateffaresm@gmail.com

## ABSTRACT

Student-personalized learning environment can be met with (i) sensitive approaches for teaching and learning, (ii) increased student communications in the learning environments, and (iii) adequate time to handle student inspected weaknesses. Within these needs, this study aimed to validate the instrument used in the process of designing, developing and implementing the HPALL module. The HPALL module has three major themes: (i) socialized learning environments, (ii) flexible delivery method, and (iii) personalization of learning environments. The HPALL module was used to deliver the Arabic as a foreign language courses for Malaysian students at Al al-Bayt University. The module was subsequently tested. Data collected from 157 Malaysian students were keyed into SPSS version 21. Subsequently, Smart PLS 2.0 was used to test the hypothesized influence of hybrid learning construct on personalized learning. The results showed (i) evidence of a five-dimension measurement model for hybrid learning has a positive and significant effect on personalized learning at the (.01) level of significance ( $\beta = 0.767$ , t = 18.402, p < .01), and (iv) HPALL is reliable and valid model for Malaysian students.

Keywords: Personalized Learning; Hybrid Learning; Arabic as a Foreign Language

# INTRODUCTION

Learning Arabic as a foreign language is extremely important for Muslims all over the world in order to understand the Holy Book. Many Malaysian students come to Jordan, especially to Al al-Bayt University, to learn Arabic and Islamic principles. The University Language Center offers a diversity of courses in Arabic as a foreign language. These courses cater to all language levels, from beginner to advance. The learning and teaching environments can be classified as instructor-led instruction, where teachers spend their lecture time on the presentation of subject content. Learners, on the other hand, spend lecture time taking down notes.

The teaching of Arabic can be problematic because it has variation (diglossia). Arabic language is a variation language it has three forms of variations, classical Arabic, modern standard Arabic and colloquial Arabic (Ferguson 1959). Thus, choosing a form of Arabic language that can be used in the classroom is problematic (Al-Batal, 1992; Al Mamar, 2011; Al-Shallakh, 2010; Dweik, 1986; Farghali, 2000; Ferguson, 1971; Sakho, 2012; Al-Hawamleh, 2013). In addition to the diglossic problems of the Arabic language, foreign learners of the Arabic language face problems related to pedagogy and curricula. Firstly, there is no theoretical and empirical framework for the design, development and implementation of Arabic as a foreign language programs (Taha, 2007. The second problem relates to the designing of Arabic textbooks and learning materials. The third main problem is the insufficient use of technology in classrooms (Al-Shallakh, 2010; Faryadi, 2012; Madkour & Haridi, 2006; Sakho, 2012; Wang, and Vásquez, 2012).

Before the main research was undertaken, the researcher conducted a small-scale qualitative sub-study for the purpose of identifying some of the issues faced by foreign learners of the Arabic language. Students reported several issues with respect to the present learning environments. These issues may be categorized into three themes: (i) personalization of learning environments, (ii) flexible delivery method, and (iii) socialized learning environments. Using hybrid learning can solve the diglossia problem by integrating technology with teaching to achieve an effective method of learning. Thus integrating hybrid learning to design and develop Arabic as a foreign language programs can establish learning environments for applying the simultaneous approach which contributes to solving the problem of Arabic diglossia within the classroom through the merging of modern standard Arabic and colloquial Arabic at the same time (Al Batal, 1992; Al Mamar, 2011; Sakho, 2012).

Moreover, hybrid learning and personalized learning (PL) through Web 2.0 technologies such as social media motivates students in learning and achieving effective and creative methods of knowledge transfer. Knowing how language is acquired and how a person learns is important (Fayradi, 2012; Fayradi, et al. 2007). Thus personalized learning and hybrid learning can give learners the chance to learn cooperatively and at the same time they can be encouraged to participate in classroom activities without fear, which is not the case at the moment. This can contribute to solving Arabic language pedagogy and curricula problems. Hybrid learning and personalized learning can help learners to acquire more reading strategies, whereby students in the classroom can collect new vocabulary or expressions, recognize new vocabulary or expressions, imitate the pronunciation of Arabic words or expressions, and compare totally different expressions. Also, teachers can create additional ways to communicate within the course and forbid students to translate. Teachers can also design assignments using multimedia (Arabic movies, songs and video clips). Moreover, through personalized learning teachers can design more effective group work activities that, according to Wang et al. (2012), would facilitate and improve speaking skills. Group work allows students to speak the Arabic language spontaneously in their lectures and increase their confidence. This provides opportunities for learners to prepare presentations at school because preparing a speech gives learners the opportunity to speak more accurately than when they have to do so spontaneously. Furthermore, learners within a hybrid learning environment can understand and evaluate what they hear and their capability to listen actively can develop personal communication through decreasing problems, increasing cooperation, and encouraging understanding.

This main focus of this study was to develop a reliable and valid module for the personalization of the learning of Arabic as a foreign language by using the hybrid learning (HL) approach. Before the actual implementation and at the end of the development stage, usability tests were conducted to ensure the product was ready for implementation. At the end of the implementation stage, data were collected to evaluate the degree of contribution that HL makes to personalized learning (PL). To achieve the aim of the study, a conceptual framework of the Hybrid Arabic Language Learning (HL), was designed and further developed based on the relevant literature, particularly the Hybrid e-Training system (HiTs) model (Din, 2010; Din et al., 2011; Din et al., 2012; Din et al., 2013). Moreover, in this study, Personalized Arabic Language Learning was designed and further developed based on the relevant literature, particularly the Personalized Learning approaches of the U.S. Department of Education (2010) and, the U.S. Office of Educational Technology (2010), Miliband (2003), Mashakbh, Din, and Halim et al. (2012, 2013), Felder (2002), Felder & Silverman (1988). To measure PL the constructs the I-OIMI instrument proposed by Mashakhh et al. (2012, 2013) was modified and used. The measure consisted of four subscales representing the four components of PL, namely pace, content, method and objective. Facebook was used as the method to deliver the Arabic language learning courses. After some formative evaluations were conducted and various improvements were made, a revised framework was used to design and deliver HPALL courses during the academic year 2015/2016. The design of the course took into consideration that it would be implemented by using a social network, which would mainly be Facebook. In this study, the Arabic as a foreign language courses used a blended arrangement of face to face instructions, self-learning and Facebook groups communication to ensure that the learners had the opportunity to actively interpret their knowledge using internal cognitive operations through the training of reflective drills embedded into their Facebook groups' timeline.

Thus, this study tested three hypotheses to answer the research questions:  $H_1$ : Personalized learning (PL) is explained by four factors: pace, method, content, and objective,  $H_2$ : Hybrid learning (HL) is explained by the five factors: content, delivery, service, outcome and structure, and  $H_3$ : Hybrid learning (HL) influences personalized learning (PL). Figure 1 illustrate the research framework; there are two unobserved (dependent) variables. These two variables are Personalized Learning (PL) and Hybrid Learning (HL) indicated by the circles. The unobserved variable, PL, is assumed to create variation and co-variation

between the four observed variables represented by the boxes to the right of the circle, represented by arrows from the dependent II variable. The four indicators variables for PL are objective, pace, method and, content. The second dependent variable is HL. As an unobserved variable, HL is also assumed to create variation and co-variation between the five indicators represented by the boxes to the left side of the circle, represented by arrows coming from the dependent HL variable. The five indicators or observed variables for HL are content, delivery, service, outcome, and structure.



Figure 1. Research Framework

# METHODOLGY

The research respondents were 157 Malaysians students/learners (85 females; 72 males) registered on the program of Arabic as foreign language at Al al-Bayt University Language Center for the second semester of the 2014-2015 academic year. This research adopted Din (2010) theoretically and empirically-based design and development approach. According to Din (2010: 83) the approach also known as "the iterative triangulation participatory design and validation method or in short the Participatory Design (PD) method". The approach has six main phases: a feasibility study, a needs analysis, system design, system development, training and implementation, system maintenance and model development (Din 2010). Figure 2 shows the six phases of the development process and Figure 3 shows the design process for the personalized Arabic as a foreign language courses.



Figure 2. Instructional Design, Development, Implementation, Testing, Evaluation and Model Development Processes of BPALL as Adapted from Din (2010)



Figure 3. Personalized Arabic as a Foreign Language Courses

To assess the validity of the developed module, this research used a survey questionnaire that was developed and used as the main instrument in this study to empirically check the hypotheses. The results of analyses confirmed that the instrument was reliable for measuring PL and HL. When HL construct was pretested with 40 learners the Cronbach's alpha was found to be 0.981 and in actual implementation with 157 learners the alpha score was 0.918. For PL construct, when the Cronbach's alpha pretested with 40 learners was 0.974 and in actual implementation with 157 learners it was 0.930. As a result, the HL instrument was finalized based on Din (2012) and the PL instrument was finalized by adding six items to measure the learners' objectives. This research used partial least squares-structural equation modeling (PLS-SEM) to analyze the data on the proposed HPALL. Hair, Ringle, and Sarstedt (2011) state that:

...in situations where theory is less developed, however, researchers need an alternative approach to examine structural models if the primary objective is not theory confirmation. Thus, because of its prediction orientation, PLS-SEM is the preferred method when the research objective is theory development and prediction.

## FINDINGS AND DISCUSSIONS

To test the research hypothesis, PLS-SEM analysis was performed. Partial least squares analysis can evaluate a theoretical structural model and a measurement model synchronously (Hair et al., 2011). Moreover, Monecke and Leisch, (2012:1) stated that "PLS path modelling is referred to as soft-modeling-technique with minimum demands regarding measurement scales, sample sizes and residual distributions.". Lastly, Chin, Marcolin, , and Newsted (2003:189) added that PLS is an "approach that can give more accurate estimates of interaction effects by accounting for the measurement error that attenuates the estimated relationships".

This study used PLS-SEM as the main data analysis technique. The results showed that the PLS-SEM procedures supported the conceptual framework. The model predictive power was tested. The results showed that the goodness of fit (GoF) measure for the model was large, indicating an acceptable level of global PLS model validity. The findings of the study supported hypotheses H1, H2, and H3 statistically. The findings showed that (HL  $\rightarrow$  PL), i.e. hybrid learning has positive significant effect on personalized learning at the .01 level of significance (path coefficient  $\beta$ ) = 0.767, t-value (t) = 18.402, and p-value (p) < .01.) This indicates a strong contribution of HL to PL. The results of testing the three hypotheses to answer the research questions are discussed below.

**H1:** Personalized learning (PL) is explained by four factors: pace, method, content, and objective. The study was able to validate the personalized learning components (pace, method, content, and objective) as proposed in the literature. The study offered evidence that PL has construct validity: convergent validity and discriminant validity.

**H2:** Hybrid learning (HL) is explained by five factors: content, delivery, service, outcome and structure. The study validates the hybrid learning components namely: content, delivery, service, outcome and structure as proposed in the literature. The study offered evidence that HL has construct validity: convergent validity and discriminant validity.

#### H<sub>3</sub>: Hybrid learning (HL) influences personalized learning (PL).

There was a strong positive contribution of hybrid learning to personalize learning. In this study, the factor loadings between indicators and respective latent variables were all greater than 0.5, which suggests good convergent validity. To come up with a best fit model, a revised model was produced after deleting three items that had a loading of less than 0.6. These items were Method item number 1 with a load of 0.594, Method item number 3 with a load of 0.592, and Objective item number 2 with a load of 0.587). Table 1, Table 2 and Table 3 showed that all the items load highly and significantly on their measured constructs. Thus, the construct validity of the measurement model or outer model was confirmed. A discussion of these measures is presented in the following paragraphs.

#### **Convergent Validity**

The results showed that the measures that should be related theoretically were also related (Hair, Sarstedt, Ringle, and Mena, 2012). More specifically, each factor proportion of variance was identified. The findings showed that: (i) factor loadings between respective latent variables and indicators greater than 0.5, (ii) Cronbach's alpha coefficients and composite reliability greater than 0.7 for all latent variables, and (iii) average variance extracted (AVE) values greater than 0.5 (Hair, Black, Babin, Anderson, and Tatham, 2006; Kline, 1998; Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Nunnaly, 1978). To examine internal reliability

Cronbach's alpha coefficient was used (Peterson & Kim, 2013). Hair, Anderson, Tatham, and Black (1998) recommend a 0.70 value for exploratory research. Moreover, to calculate the internal consistency of the instrument, composite reliability was measured. An acceptable composite reliability value is 0.70 or greater (Hair et al., 2011; Hair et al., 2009; Hair et al., 2010; Hair et al., 2006). Furthermore, AVE was considered. Henseler, Ringle, and Sarstedt (2015:116) state that: "The AVE represents the average amount of variance that a construct explains in its indicator variables relative to the overall variance of its indicators". A high AVE indicates high convergent validity of the construct. According to Hair et al. (2011), and Bagozzi and Yi (1988), an acceptable AVE for each construct in a model is higher than 0.50.

Table 2 and Table 3 show that the factor loadings between respective latent variables and indicators are all greater than 0.6, which suggests acceptable convergent validity. Also, composite reliability and Cronbach's alpha coefficients are greater than 0.7 for all latent variables, signifying respectable reliability. The tables show that the constructs have alpha values above 0.757, which indicates a high level of internal consistency, except for Method, which has an alpha value of 0.6. It also shows that the composite reliability ranges from 0.79 to 0.944 for all constructs, which is greater than the acceptable composite reliability value of 0.70. Lastly, the table shows that the PL and HL constructs exceed this threshold, with values of 0.502 and 0.661, respectively.

Items	Items Factor Loadings		Items Factor Loadings
Pace1	0.735	PLContent1	0.641
Pace2	0.825	PLContent2	0.719
Pace3	0.801	PLContent3	0.763
Pace4	0.758	PLContent4	0.652
Pace5	0.842	PLContent5	0.627
Pace6	0.735	PLContent6	0.761
Pace7	0.825	Objective1	0.733
Pace8	0.801	Objective3	0.701
Pace9	0.758	Objective4	0.898
Pace10	0.842	Objective5	0.816
Method2	0.670	Objective6	0.898
Method4	0.816		
Method5	0.747		

Table 1. PL Significance of the Factor Loadings

Personalizing the learning and teaching of Arabic as a foreign language provides opportunity for learners interested in developing superior-level proficiency in Arabic. According to Bouchery, Harwood, Sacks, Simon, and Brewer (2011), more-personalized learning environments are becoming widely used by educators who are responding to the e-learning needs of their students. Thus personalized learning can support language learning through empowering learners to construct their skills and enables them to think critically, work in groups and solve problems cooperatively. In the personalized learning approach the teacher is a facilitator and consultant to the students, supporting in their learning process (Saxena, 2013).

In the hybrid learning environments for Arabic as a foreign language developed for this study, learners had the chance to actively interpret their practice using internal cognitive processes through the reflective exercises inserted into their Facebook groups' timeline. In this study, a hybrid combination of face to face, self-learning and Facebook groups' communication were used. Moreover, learners were in charge and in control of their learning. Learners collaborated and socially interacted with others. This enabled them to construct knowledge and realize more significant learning.

Alasraj and Alharbi (2014) found in the teaching and learning Arabic as a second language course that the hybrid learning group scores higher than the traditional learning group. Hence a hybrid learning strategy enables students to achieve greater learning outcomes than the traditional learning strategy. Likewise, Sultan (2011) found that hybrid courses work better in teaching Arabic as foreign language than online learning.

	Items Factor		Items Factor
Items	Loadings	HL	Loadings
Delivery1	0.727	Service1	0.713
Delivery2	0.825	Service2	0.794
Delivery3	0.685	Service3	0.884
Delivery4	0.761	Service4	0.751
Delivery5	0.749	Service5	0.800
<b>Delivery6</b>	0.634	Service6	0.884
HLContent1	0.751	Structure1	0.748
HLContent2	0.818	Structure2	0.747
HLContent3	0.779	Structure3	0.758
HLContent4	0.719	Structure4	0.745
HLContent5	0.869	Structure5	0.774
HLContent6	0.869	Structure6	0.726
Outcome1	0.653	Structure7	0.735
Outcome2	0.736	Structure8	0.672
Outcome3	0.734	Structure9	0.675
Outcome4	0.691	Structure10	0.707
Outcome5	0.752	Structure11	0.728
Outcome6	0.681		

Table 2. HL Significance of the Factor Loadings

#### **Discriminant Validity**

According to Hair et al. (2014), discriminant validity assumes that the results show that the measures that are found to be related are also theoretically related. More specifically, items correlate higher between their constructs than they correlate with other items from other constructs that are theoretically supposed not to correlate (Hair et al., 2014). A lack of correlation among the variance of the constructs was found. In this study two evaluation criteria were used to assess discriminant validity: (i) item cross-loadings on various constructs and (ii) interrelations between first-order constructs and square roots of AVEs. To determine discriminant validity the cross-loadings were compared with indicator loadings (Chin, 2010). To realize acceptable discriminant validity, all the cross-loadings should be lower than the indicator loadings (Chin, 2010; Fornell & Larcker, 1981). Also, the correlations between the constructs were compared with the square root of the AVE. According to Fornell and Larcker (1981), in order to assess discriminant validity the correlations among the constructs should be less than the square root of the AVE. Table 4 displays the item loadings on their measured constructs. It can be seen from the table that all the items are well loaded on their constructs, that is to say, all the indicator loadings are greater than the cross-loadings. This suggests that the HPALL module has acceptable discriminant validity. Moreover, the values of the AVE range between 0.502 and 0.661, which indicates that these are acceptable values. Moreover, Table 5 in shows that the square root of the AVE (signified diagonally in bold) is larger than its correlation with the other constructs (signified by the off-diagonal numbers), this confirms that the HPALL module has discriminant validity.

Table 3.	Factor	Analy	vsis	and	Cross	Loading

	Delivery	HL- Content	Method	Objective	Outcome	PL-Content	PACE	Service	Structure
Delivery1	0.727	0.260	0.205	0.160	0.086	0.149	0.282	0.236	0.122
Delivery2	0.825	0.272	0.127	0.159	0.106	0.138	0.104	0.141	0.245
Delivery3	0.685	0.185	0.130	0.151	0.042	-0.001	0.218	0.130	0.132
Delivery4	0.761	0.239	0.103	0.200	0.084	0.086	0.181	0.193	0.271

Delivery5	0.749	0.247	0.102	0.111	0.039	0.067	0.153	0.152	0.235
Delivery6	0.634	0.196	0.108	0.090	0.120	0.088	0.050	0.058	0.136
HL-Content1	0.246	0.751	0.469	0.547	0.461	0.317	0.305	0.545	0.219
HL-Content2	0.369	0.818	0.516	0.591	0.440	0.373	0.325	0.585	0.195
HL-Content3	0.247	0.779	0.508	0.560	0.491	0.322	0.248	0.561	0.323
HL-Content4	0.192	0.719	0.352	0.479	0.449	0.385	0.283	0.476	0.170
HL-Content5	0.245	0.869	0.376	0.563	0.532	0.464	0.315	0.580	0.268
HL-Content6	0.245	0.869	0.376	0.563	0.532	0.464	0.315	0.580	0.268
Method2	0.201	0.369	0.670	0.428	0.238	0.218	0.373	0.487	0.262
Method4	0.151	0.468	0.816	0.592	0.393	0.254	0.431	0.659	0.187
Method5	0.047	0.364	0.747	0.503	0.130	0.228	0.390	0.548	0.028
Objective1	0.175	0.517	0.492	0.733	0.239	0.383	0.448	0.641	0.285
Objective3	0.143	0.457	0.441	0.701	0.159	0.372	0.367	0.617	0.154
Objective4	0.137	0.569	0.608	0.898	0.417	0.406	0.512	0.719	0.213
Objective5	0.226	0.662	0.613	0.816	0.404	0.454	0.538	0.781	0.162
Objective6	0.137	0.569	0.608	0.898	0.417	0.406	0.512	0.719	0.213
Outcome1	0.090	0.384	0.256	0.296	0.653	0.362	0.291	0.359	0.263
Outcome2	0.017	0.427	0.307	0.308	0.736	0.300	0.212	0.339	0.071
Outcome3	0.157	0.477	0.122	0.222	0.734	0.440	0.090	0.244	0.120
Outcome4	0.015	0.386	0.203	0.272	0.691	0.300	0.154	0.314	-0.021
Outcome5	0.121	0.469	0.271	0.327	0.752	0.479	0.296	0.439	0.196
Outcome6	0.039	0.414	0.306	0.326	0.681	0.441	0.184	0.420	0.097
PLContent1	0.056	0.295	0.053	0.272	0.309	0.641	0.079	0.222	0.171
PLContent2	0.080	0.351	0.258	0.378	0.349	0.719	0.273	0.389	0.204
PLContent3	0.141	0.408	0.274	0.391	0.471	0.763	0.227	0.382	0.286
PLContent4	0.099	0.328	0.093	0.254	0.401	0.652	0.245	0.265	0.048
PLContent5	-0.042	0.207	0.259	0.338	0.256	0.627	0.317	0.398	0.074
PLContent6	0.167	0.414	0.281	0.402	0.498	0.761	0.357	0.445	0.209
Pace1	0.170	0.127	0.291	0.275	0.100	0.162	0.735	0.439	0.033
Pace10	0.136	0.426	0.528	0.584	0.342	0.384	0.842	0.729	0.186
Pace2	0.191	0.222	0.392	0.457	0.149	0.262	0.825	0.585	0.137
Pace3	0.225	0.474	0.533	0.644	0.372	0.387	0.801	0.721	0.230
Pace4	0.182	0.124	0.308	0.279	0.135	0.249	0.758	0.477	0.175
Pace5	0.136	0.426	0.528	0.584	0.342	0.384	0.842	0.729	0.186
Pace6	0.170	0.127	0.291	0.275	0.100	0.162	0.735	0.439	0.033
Pace7	0.191	0.222	0.392	0.457	0.149	0.262	0.825	0.585	0.137
Pace8	0.225	0.474	0.533	0.644	0.372	0.387	0.801	0.721	0.230
Pace9	0.182	0.124	0.308	0.279	0.135	0.249	0.758	0.477	0.175
Service1	0.150	0.575	0.563	0.613	0.381	0.435	0.507	0.713	0.210
Service2	0.239	0.546	0.626	0.705	0.431	0.526	0.643	0.794	0.285
Service3	0.186	0.580	0.637	0.735	0.433	0.349	0.628	0.884	0.196
Service4	0.089	0.520	0.567	0.675	0.343	0.425	0.645	0.751	0.146
Service5	0.170	0.550	0.653	0.687	0.405	0.444	0.639	0.800	0.215
Service6	0.186	0.580	0.637	0.735	0.433	0.349	0.628	0.884	0.196
Structure1	0.182	0.324	0.127	0.220	0.220	0.184	0.202	0.225	0.748
Structure10	0.160	0.157	0.061	0.104	0.045	0.197	0.159	0.169	0.707

Structure11	0.204	0.164	0.168	0.240	0.063	0.142	0.207	0.208	0.728
Structure2	0.204	0.297	0.168	0.202	0.129	0.073	0.158	0.189	0.747
Structure3	0.032	0.215	0.172	0.204	0.148	0.210	0.150	0.215	0.758
Structure4	0.233	0.168	0.158	0.142	0.137	0.180	0.128	0.125	0.745
Structure5	0.251	0.281	0.245	0.212	0.206	0.248	0.122	0.216	0.774
Structure6	0.323	0.258	0.175	0.208	0.179	0.260	0.133	0.212	0.726
Structure7	0.284	0.223	0.132	0.186	0.126	0.162	0.115	0.181	0.735
Structure8	0.069	0.132	0.084	0.114	0.125	0.201	0.140	0.158	0.672
Structure9	0.135	0.124	0.166	0.147	0.000	0.067	0.084	0.160	0.675

#### Model Goodness of Fit (GoF)

According to Tenenhaus, Vinzi, Chatelin, and Lauro, (2005: 173) the goodness of fit (GoF) index "is the geometric mean of average communality and average R2 of all endogenous constructs". Tenenhaus, Vinzi, Chatelin, and Lauro, (2005: 173) added that "The GoF represents an operational solution to this problem as it may be meant as an index for validating the PLS model globally". Goodness of fit index threshold values: 0.1 represents small fit, 0.25 represents medium fit, and 0.36 specify high GoF (Wetzels et al., 2009). In this study the GoF index (Wetzels, Odekerken-Schröder, and Van Oppen, 2009) for the model was found to be 0.563, which indicates an acceptable fit.

#### **Prediction Relevance of The Model**

The predictive power of the model was measured by analyzing the variance explained (R2). Variance explained (R2) assessed the quality of the structural model, which demonstrations the variance in the endogenous variable that is explained by the exogenous variables (Cohen, 1988). The minimum acceptable level for R2 is 0.10 (Cohen, 1988). According to Cohen (1988), there are large magnitudes of effect when R = 0.50. Also, medium-sized effects are placed between 0.1 and 0.5. Figure 4 shows that the R2 was found to be 0.588. This value indicates that HL contributes 58.8% of the variance in PL. Therefore, in this study, the R-squared value shows that the level of influence of HL in explaining PL is large.



#### Figure 4. Path Model Results

### **First and Second Order Constructs**

Table 6 shows the first and second order constructs. The table shows that the HL construct was measured by five first-order constructs, namely, Content, Delivery, Service, Outcome and Structure. These constructs explained the HL construct well, as shown by the R2 value that ranges from 0.139 to 0.767. The PL

construct was measured by four first-order constructs, namely, Pace, Method, Content and Objective. These constructs explained the PL construct well, as shown by the R2 value that ranges from 0.393 to 0.802.

	<b>D</b> Squara	
Dimensions	K Square	
HLContent	0.767	
Delivery	0.193	
Outcome	0.471	
Service	0.688	
Structure	0.335	
PACE	0.802	
PLContent	0.393	
Method	0.537	
Objective	0.726	

Table 6.	Variance	explained	(R2)
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#### **Hypotheses Testing**

This study employed the techniques inserted within Smart PLS 2.0 to run bootstrapping. The researcher applied 500 samples. Thus using the bootstrapping technique the t-values and p-values for the path coefficients were produced. The result showed that the path coefficients were statistically significant. The results are provided in Figure 5 shows that HL has a positive significant effect on PL at the .01 level of significance ( $\beta = 0.767$ , t = 18.402, p < .01).

The result of this study is consistent with the literature that has found that there is a strong contribution of hybrid learning on personalized learning. Meyer and Zhu (2013) highlight that it is difficult to separate personalized learning from technology. Meyer and Zhu (2013) add that hybrid learning is a tool for personalized instruction. In other words, the hybrid learning model creates more personalized learning opportunities. The HPALL model is based on the theory of social constructivism which emphasizes the active role of students in building understanding and making sense of information. Accounting for learner diversity in a foreign language program is a major concern addressed by the HPALL model through providing pedagogical, social and technological features for learning environments.

The main focus of this study was to develop a reliable and valid HPALL module to personalize the learning of Arabic as a foreign language by using a hybrid learning approach to create a HPALL Model for Malaysian students at Al al-Bayt University. This study also investigated the contribution of hybrid learning to personalize learning. The most significant theoretical contributions of the study are the development and validation of the hybrid Personalized Arabic Language Learning (HPALL) module in order to create a HPALL model for Malaysian students at Al al-Bayt University. Moreover, this research also synthesizes knowledge on HL and PL for Arabic learning to make it available for curriculum designers, teachers, and policy makers in usable forms, such as the HPALL model. This research study also contributes to knowledge through the development of new resources for learning Arabic as a foreign language and through the development a HPALL questionnaire to evaluate the HPALL model.

The utilization of the universal design of learning approach for hybrid learning environments provides useful guidance for curriculum designers to help them design Arabic as a foreign language learning courses that cater for learners' needs in their skills acquisition. Hybrid learning motivates students through using Facebook as a delivery method, whereby learners can construct their own socialized learning environment. The HPALL model yields various valid learning environments to meet the needs of diverse learners in the 21st century. The HPALL model is an empirically validated multidisciplinary model that can serve as the basis for personalizing Arabic language learning. This research explored how the HPALL model can be made practical through the integration of learning theories into Arabic language learning courses. This study also demonstrated that multiple efforts and paths need to be taken to change and improve the old standardized approach of learning Arabic as a foreign language.



Figure 5. Structure Model Results

This study focused on finding a way to help learners to improve their skills in Arabic as a foreign language through the development of a reliable and valid module for the personalization of Arabic as foreign language learning by using hybrid learning. The HPALL model proposed in this study could be enhanced further by investigating Arabic as a foreign language curricula, additional factors or variables, and further developing the system itself.

As this is the first research study in Jordan which has aimed to develop and validate an instructional model for skills in Arabic as a foreign language in order to make the HPALL model more effective and applicable, more research on the effectiveness of the HPALL model is needed. Therefore the following recommendations for further research are suggested:

- (i) Further studies could be used to validate the instructional model on student samples from other nonnative-Arabic-speaking Asian countries.
- (ii) Future work could measure the effectiveness of the HPALL model in terms of learners' direct achievements, delayed achievements, retention, attitudes, social skills, motivation, and selfconfidence.
- (iii) Future research could also study the contribution of the various demographic individualities of the participants to the success of the HPALL model environment such as time on Facebook, age, sex, computer skill level, English language proficiency level, and internet skill level.
- (iv) Further work could also focus on exploring the role of peer interaction and peer-to-peer message among students.
- (v) Future research could examine additional factors such as time on Facebook and tracked website hits to potentially expose some problem areas (e.g. student e-mail).
- (vi) Future research could examine using Facebook messenger to improve proficiency in speaking skills.

Every society is built around relationships. Bringing the concepts of social networks into learning Arabic as a foreign language is increasing as an educational tool (Yen et al., 2013). Students with no prior knowledge of the Arabic language must acquire a fundamental understanding of writing, listening, reading and speaking to develop efficient communication. In a conventional classroom, there is a very little time to practice writing, listening, reading and speaking because a lot of time is spent on instructions and there are often too many students in the classroom. Traditional language instruction overemphasizes grammar and drills and often underutilizes speaking. Currently, time limitations in language instruction limit the amount of accurate interaction, thus limiting the overall practice of language skills. Also, homework focuses on grammar rather than reliable practicing, and time spent in class often leaves students with little experience of the language (Kehl et al., 2013).

### CONCLUSION

Learning Arabic as a foreign language is crucial for Muslims all over the world in order to understand the Holy Book. Many Malaysian students come to Jordan, especially to Al al-Bayt University, to learn Arabic and Islamic regulations. The University Language Center offers courses for Arabic as a foreign language. These courses cater to all language skills levels, from beginner to advance. The methodology and the data analysis provide empirical support for the conclusion that the proposed HPALL model is practical for Malaysians learning Arabic language skills. The findings in this study show that an integrated learning and teaching environment allows more socialized interaction. Also the modeling of Arabic as a foreign language learning environments based on social constructivism helps to convert the learner from being a passive receiver of knowledge to an active creator thereof. Associating learners with socialized environments in which the teacher and student are partners in constructing knowledge and answering essential questions. This research considered the results of previous research studies to develop and examine the construct validity of the HPALL model for Arabic as a foreign language for Malaysian students at Al al-Bayt University in Jordan. The results of this study contribute to the literature on personalized learning and hybrid learning in the field of Arabic language learning in several ways, but primarily it found that hybrid learning influences the achievement of personalized learning, and second, that an Arabic as a foreign language program can enhance personal language skills acquisition by using Facebook as a delivery method. Overall, the conclusions presented in this study are consistent with the literature on hybrid learning and personalized learning.

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