

Article

The Impact of English Learning Motivation and Attitude on Well-Being: Cram School Students in Taiwan

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Abstract: As English is a global language, it is important for students to learn it effectively and efficiently. Learning English from English cram schools is very popular in Taiwan. Most students have studied in English cram schools for some period of time of their English learning experience. The present study concerns about how English cram school learners' English learning attitudes related to their learning motivation and learning well-being in Taiwan. By using the quantitative research methodology, an empirical research model has been proposed and 277 valid questionnaires were collected. The research results show that learning motivation has a significant impact on learning attitude and learning well-being. Then, the English learning attitude provides mediated effects between learning motivation and well-being. Learning attitude is the key to English learning well-being. Furthermore, a participant's gender has a significant moderating effect between learning intrinsic motivation and attitude. According to research findings, some suggestions such as using e-learning tools were provided for teachers and educators of the cram schools in Taiwan.

Keywords: English cram school; learning motivation; learning attitude; learning well-being

1. Introduction

Language is a communication tool; people use it in everyday life. The advanced development of the internet and communication media makes the world a global village. It is a fact that English becomes an international standard language in both business and academic fields [1,2]. Grosjean [3] pointed out that more than half of the people are bilingual. English language learning is a vital topic for formal education and business opportunity in almost all countries. Parents hope their children can master English communication skills as soon as possible. However, since Taiwan is an EFL (English as a Foreign Language) country, students rarely have the opportunity to practice English outside of school. Some students lost their motivation to continue to learn English [4].

English cram schools are very popular in Taiwan. According to a Taiwan government statistic website (<https://bsb.kh.edu.tw/>), there are over 3500 English cram schools in Taiwan right now. Most students went to English cram schools to spend more time learning English outside of the formal school system [5]. According to recent report from Central News Agency [6], over 70% of Taiwanese parents choose to send their children to English cram schools. Whether it is before entering elementary school or after graduating from university, people go to English cram schools for multiple reasons. First, people like to have certain English professional certifications to prove their English abilities. These certificates are useful for school applications or job interviews. English cram schools provide sorts of training programs for English professional certification tests. Second, since Taiwan is an international

business-oriented country, business English has a huge demand. Business English training provides simulated scenario content from business environments, including business conversations, business letters, office vocabulary, etc. Moreover, studying abroad still is a popular choice for Taiwanese students. Before going abroad, English cram schools provide short-term courses for them to quickly master practical English skills. Finally, English is a subject of the university and high school entrance examination, therefore students go to English cram schools for more English learning and training [7]. Scholars need to pay more attention to English cram schools learning since it plays an important role in English education in Taiwan. Gardner [8] pointed out that there are two critical success factors of English learning. One is language learning ability and the other one is learning attitude. Since attitude affects intention and behavior, scholars have mentioned that learning attitude is one of the key fundamentals of learning English [9,10]. Moreover, according to self-determination theory (SDT), motivation can be divided into intrinsic and extrinsic motivation. Motivation starts up learners' willingness to take harder learning tasks or activities. Additionally, motivation is one of the factors for learners to adjust themselves [11]. The learners who have higher intrinsic learning motivation have been proved to gain higher scores on average than the learners who have not [12]. Then, well-being also becomes more and more accepted by social researchers [13]. With higher learning well-being, English learners would have higher satisfaction. However, English learning well-being is rare to be discussed yet for empirical studies. In short, English learning is difficult since people do not use it besides for English classes in Taiwan. People go to English cram schools to increase their English abilities for certain purposes. Teachers and educators of cram schools need to know if the learners' learning attitude are strong enough to gain their English learning well-being, and if intrinsic or extrinsic motivation is significantly impacting learners' learning attitude.

The main purpose of this study is to investigate English learners' intrinsic motivation, extrinsic motivation, learning attitude, and learning well-being of English cram schools in Taiwan. Along with a literature analysis, a questionnaire will be proposed to measure the level of each construct from a survey investigation. A standard statistical data analysis will then be processed to verify the research hypotheses. Since the demographic variables of learners may have significant differences in learning conditions, these variables will be examined as moderating variables for all proposed relationships among research constructs. At last, the research results and practical suggestions will be provided for supporting English teaching and learning.

2. Background and Literature Review

2.1. Self-Determination Theory

Self-determination theory (SDT) majorly divided motivation into intrinsic motivation and extrinsic motivation in order to understand the reasons causing people's behaviors [14]. First, intrinsic motivation comes from inside an individual, involving in a certain activity which makes the individual enjoyable, interesting, and satisfying [15]. Then, Fang described the achievement as a major sense of intrinsic motivation [16]. When an individual accomplishes an activity, the achievement perception should bring confidence and satisfaction [17]. Additionally, intrinsic motivation can be defined simply as doing something because it is inherently interesting or enjoyable [18,19]. On the other hand, extrinsic motivation can be defined as when an individual who implements an activity because of perceived external pressure. Extrinsic motivation is controlled by the company or other authority, and it is non-self-determined [20]. According to Ryan [18], extrinsic motivation is a vital construct that provides various causes about why people involve in particular behaviors, such as external reward or punishment. Moreover, extrinsic motivation is the reason to implement an activity since it may lead to valuable outcomes [21].

Scholars have been interested in motivation learning-related research; for example, Besancon [22] studied the influence of the school environment on adolescents' creative potential, motivation, and well-being. Their results showed significant influences between motivation and creativity constructs.

Then, Denault and Guay [15] studied in extracurricular activities as an encouraging opportunity for improving students' school motivation from disadvantaged neighborhoods. Their results demonstrated the motivation effects of the extracurricular activity positively impacting the school context. Moreover, Shannon [23] studied the self-determination theory applied in the intervention on children of low socioeconomic status. As their research, autonomy, support and intrinsic motivation played as singular mediation roles while the intervention indirectly improved moderate-to-vigorous physical activity. Furthermore, Li, et al. [24] were interested in the mediation effects of achievement motivation on perfectionism and the subjective well-being of Chinese university students. The study results showed a positive relationship between perfectionism and subjective well-being. They had proved that there was a partial mediation effect of achievement motivation while perfectionism impacting subjective well-being. Finally, results from a study concerning how intrinsic and extrinsic motivation affect university adaptation and academic performance of university students showed that intrinsic motivation was related to better subjective well-being, including life and academic performance. However, extrinsic motivation was related to fewer influences on these variables [25].

Additionally, intrinsic motivation as a construct has been applied in different fields and research methods; for example, Brom, Starkova, and D'Mello [19] conducted a meta-analysis to study about if adding anthropomorphic faces or pleasant colors could increase intrinsic motivation and other variables. Intrinsic motivation had a robust positive affect. Then, Zhang, et al. focused on if intrinsic motivation, work-related opportunities, and well-being would change bureaucratic corruptibility from public employees in China. They proposed a conceptual framework and tested the relationship among these variables by a survey containing more than 1300 workers. The results showed that intrinsic motivation and well-being had direct coefficients on corruptibility [26]. Moreover, Graves and Sarkis [14] focused on employees' pro-environmental behaviors (PEBs) to explore the factors by leadership and motivation theories. They found that employees' internal motivation was positively influenced by self-reported PEBs. In short, the intrinsic and extrinsic motivation of self-determination theory has been applied in sorts of academic papers for exploring individual' motivation upon target construct.

Although English cram schools are not included in a formal education system, in Taiwan, the scale of English cram schools is too huge to be ignored. The intrinsic and extrinsic English learning motivation is interested to investigate. English learners of cram schools can be described as learners with specific purposes. Those individuals would have confidence and satisfaction along with their achievement of English learning. Therefore, learners with high English achievement would have high learning intrinsic motivation. If the learners perceived that English is difficult, they would not have a high intrinsic motivation to learn English. Nevertheless, young learners of English cram schools may have higher extrinsic motivation since their parents provided reward or punishment. In this study, self-determination theory is suitable to explore intrinsic and extrinsic learning motivation of English learners of cram schools.

2.2. English Learning Attitude

Attitude, as a popular quantitative construct, appears in the theory of planned behavior (TPB). TPB is proposed to explain human behavior by intentions to implement behaviors predicted by attitude toward behavior, subjective norms, and perceived behavior control [27,28]. Attitude can be described as the degree to which an individual has a favorable or unfavorable assessment of the behavior or subject. Learning attitude can be defined intuitively as the attitude toward learning something, which is related to the learner's disposition in learning [29]. Since attitude is a cognitive, sentimental, behavioral tendency, an individual can learn from his/her experience [30]. Additionally, the previous studies found out that the learning attitude would be influenced positively by the relationship with school, teachers, and classmates [31]. The research variables impacted by learning attitude included distraction, perfectionism, emotional instability, sense of instability, obsession, and other variables with student's learning issues. In short, learning attitude is a comparatively steady psychological propensity in learning conditions [32].

Asmali [33] had concluded young learner's attitudes and motivation to learn English as attitude and motivation were two similar constructs and often appearing together. As mentioned, English learning motivation refers to a combination of the desire to learn English. The factors affecting English learning motivation included parental influence, learning context, teacher, and learning conditions. On the other hand, an English learning attitude refers to the degree to which an individual has a favorable or unfavorable assessment of English learning. The previous studies provided factors affecting learner's attitudes, including age gender, language proficiency level, teacher, favorable teaching conditions, and early start learning.

Different types of empirical research were interested in learning attitude. For example, Badri, et al. studied the relationship among children's attitudes toward connection and learning of social networking, school performance, and the social effects of social networking [34]. Moreover, Chang investigated student's learning attitudes/beliefs and their behavioral regulation on writing projects. The study results showed that most of the participants thought positively about English writing to improve their skills, pride in their ability, and enhance their future [35]. Furthermore, Hwang, et al. proposed an experimental mobile learning environment to test students' learning attitudes and learning achievement [36]. Lastly, Luo, Zhang, Zhang, and Liu [32] explored self-directed learning readiness and attitude on problem-solving ability. Their results displayed a learning attitude as an intermediary variable between self-directed learning readiness and problem-solving ability.

Since positive motivation makes learners willing to learn and a positive learning attitude makes learners favorable assessment of English learning, learning motivation would impact learning attitude somehow. By self-determination theory, motivation can be divided into intrinsic and extrinsic motivation. Additionally, the learners of English cram schools would have different levels of intrinsic and extrinsic motivation in English learning. It is valuable to find out the relationship between learners' intrinsic/extrinsic motivation and learning attitude.

2.3. English Learning Well-Being

Well-being can be described as the characteristics and qualities worthy of pursuit [37]. The concept of Subjective Well-Being (SWB) was given by Diener [38] for a high level of experience of positive emotions and a high level of satisfaction in life. Regarding learning well-being, Zepke [39] stated that it is the engagement and position of the social, cultural, and political capital of students and others, which can improve their communication action. English learning well-being can be defined as the learner experiences a higher level of satisfaction of English learning, considering a learner's self-awareness, classroom activity, and teaching method. Zandvliet, Stanton, and Dhaliwal, Diener [40] studied students' overall well-being impacted by the learning environment. The results showed that the higher the self-reported life satisfaction toward the learning environment students have, the higher the scale of well-being.

Since it is difficult for English learners from EFL (English as a Foreign Language) countries to learn English, there are few studies focusing on English learning well-being. However, for English cram schools, learning well-being of their learners is the ultimate goal of teaching. The present study is interested in if English learning intrinsic and extrinsic motivation would impact the English learning attitude of English cram schools' learners. Additionally, how English learning motivation and attitude impact English learning well-being can be verified since learning well-being has not studied deeply or broadly.

In short, the present study proposes research hypotheses as to the following list.

Hypothesis 1 (H1). *English learning intrinsic motivation will positively impact the English learning attitude.*

Hypothesis 2 (H2). *English learning extrinsic motivation will positively impact the English learning attitude.*

Hypothesis 3 (H3). *English learning attitude will positively impact English learning well-being.*

Hypothesis 4 (H4). *English learning attitude will mediate the impact of English learning intrinsic motivation on English learning well-being.*

Hypothesis 5 (H5). *English learning attitude will mediate the impact of English learning extrinsic motivation on English learning well-being.*

Based on the literature analysis and research hypotheses development, a research model can be proposed, as in Figure 1.

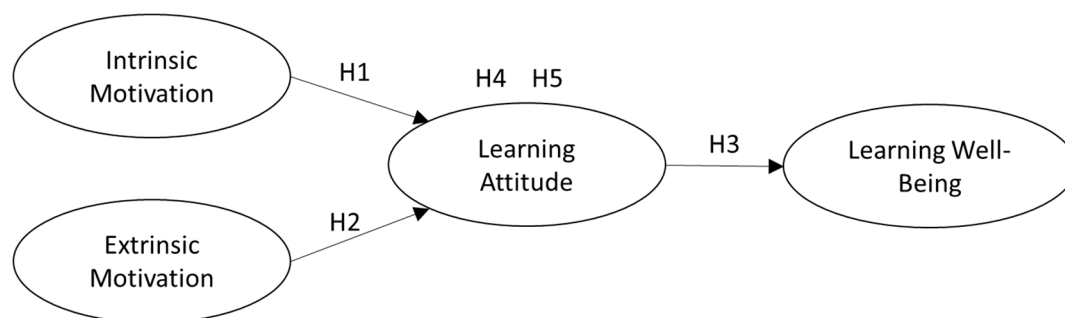


Figure 1. The research model.

3. Methodology

3.1. Measurement Development

The survey questionnaire was developed to collect research data. In order to have better validity and reliability, all indicators should be designed by specific references. English learning motivation can be divided into intrinsic and extrinsic motivation [41]. The present study adopted English learning motivation as intrinsic and extrinsic motivation by referencing Iren's design. There were six items of intrinsic motivation measurement, such as "English will be very useful in any major I choose in the future", "I realize the important role of English in the world today", and "I would learn more about the customs and lifestyles of different countries through English". The extrinsic motivation contained eight different indicators, such as, "I want to travel to other countries (Japan, Germany, Spain, etc.)", "I want to communicate with people who are not native speakers of English", and "I want to go to English-speaking countries (UK, USA, Australia, etc.)".

Moreover, about the English learning attitude, the measurement of Huang [42] was adopted and modified. There were three first-order constructs of learning attitude, including toward teachers' teaching attitude, toward curriculum and toward language itself. Attitude toward teachers' teaching techniques had five items, including "When I have doubts and ask a school English teacher, the teacher will teach me patiently", "I think English teachers are very serious in teaching", and "I feel that the English teacher is very careful about the homework". There were nine items in attitude toward curriculum, such as "I think English words are approachable and easy to learn", "I think the English grammar rules are approachable and easy to learn", and "I think I can concentrate on listening in English classes". Lastly, regarding attitude toward language itself, there were two items, including "I think learning English is helpful to me" and "I like the accent and pronunciation of English". The Cronbach α values of the instrument were 0.865.

English learning well-being referenced Zhu [43]. Still, the first order constructs were English learning self-awareness and classroom activity and teaching methods. English learning self-awareness had seven indicators, such as "I feel very happy to have English class every day", "I am confident in studying English", and "I have no pressure in studying English". Then, classroom activity and teaching methods contained five items, including "In English class, students are very happy to cooperate with me", "In English classes, I often have the opportunity to complete learning tasks with

my classmates”, and “English teachers often help me solve my learning problems”. The Cronbach α values of the instrument were 0.85. These adopted instruments had high reliabilities. Additionally, they were designed for EFL learners. The present study used as a Likert-type, 5-point scale to develop the measurement from 1 to 5, representing strongly disagree, disagree, undecided, agree, and strongly agree.

3.2. Data Collection and Research Sample

The research target is English learners in Taiwan. The study has collected 277 valid questionnaires from schools by using an online questionnaire platform. The main purpose of this research is to understand how students’ learning motivation and attitude impact learning well-being. The time period of data collection was from December 2019 to February 2020.

3.3. Data Analysis Procedure

The present study would display the descriptive statistics results first showing a brief view of the sample background information. The geographical variables included the experience of study abroad or living in English-speaking countries, gender, age, the age to start learning English, currently attending private English cram school, and years of learning English. The statistical analysis includes proportion and properties of each categorical variable.

This study used structural equation modeling (SEM) to test the proposed model. Since the SEM method evaluates measurement model and calculates structural coefficient at the same time, it would make the model testing more efficient and effective. AMOS 20.0 was used to test the measurement and structural model. Thus, an additional asset of a structural equation model is that it supports psychometric measure variables which can be considered “hypothetical constructs invented by a scientist for the purpose of understanding a research area” [44]. Since those variables cannot be measured directly, researchers use manifest variables and empirically measurable indicator variables.

Then, the validation of measurement model can be verified by confirmatory factor analysis (CFA). The purpose is to verify the reliability and validity of the instruments of each construct. Moreover, a structural model has to be tested the model fit in order to verify if the covariance matrix of proposed model and the sample was the same. Finally, structural equation modeling (SEM) would be implemented to test the conceptual model by AMOS. The proposed constructs, including English learning intrinsic motivation, extrinsic motivation, attitude, and well-being, would be tested with SEM. The proposed research hypotheses then would be verified.

4. Analysis and Results

4.1. Descriptive Statistics

The characteristics of 277 participants are shown as Table 1 (124 males and 153 females). Most of the participants were age 21–25 years old (51.6%). The second large group is the age of 15–20 years old (25.6%). About the age to start learning English, 48.7% of them were in elementary school. Then, the second large group is the age before elementary school (44%).

There were 38.6% of the participants currently going to the English cram schools. Additionally, 79.1% of them had the experience of study abroad or living in English-speaking countries. About the years of learning English, two groups were 31.4%, 7 to 10 years or less, and more than 15 years.

As shown in Table 2, the figures display the methods the participants chose to improve their English ability. A total of 190 participants chose to listen to English songs (68.6%), followed by 148 participants reading English books (53.4%); 128 participants (46.2%) facilitated English on the Internet; 108 participants (39.0%) watched English videos without subtitles; 87 participants (31.4%) talked with foreigners, and lastly, there were 13 participants learning with their foreign friends (4.7%).

Table 1. Respondent characteristics.

Characteristics	Valid N	Percentage (%)
Gender		
Male	124	44.8
Female	153	55.2
Age		
15 or less	25	9.0
15–20	71	25.6
21–25	143	51.6
26–30	16	5.8
31–40	12	4.3
41 or more	10	3.6
Age to start learning English		
Before elementary school	122	44.0
Elementary school	135	48.7
Junior High school.	20	7.2
Currently, attending private English cram school		
Yes	107	38.6
No	170	61.4
Experience of study abroad or living in English-speaking countries.		
Yes	58	20.9
No	219	79.1
Years of learning English		
6 years or less	29	10.5
7 to 10 years or less,	87	31.4
11 to 14 years or more	74	26.7
more than 15 years	87	31.4

Note: N is the participant number. $N = 277$.

Table 2. Multiple-choice question allocation table.

Items	Number of People	Percentage (%)
I read books in English.	148	53.4
I watch films in English without reading subtitles.	108	39.0
I watch cartoons in English.	84	30.3
I read my favorite comics in English.	33	11.9
I speak English with foreigners (e.g., tourists).	87	31.4
I write letters in English to my friends who live abroad.	13	4.7
I listen to songs in English and try to understand the meaning.	190	68.6
I use English on the Internet.	128	46.2
I play games in English.	46	16.6
Others	32	11.6

4.2. Convergent Validity

This study adopts Structural Equation Modeling (SEM) for the empirical research method. The instrument has to be tested for construct reliability and validity first. Then, the research model can be examined the path effects among these constructs [45]. Fornell and Larcker [46] suggested the method to exam convergent validity, including to calculate item reliability, composite reliability (CR) for each construct, and also the average variance extracted (AVE) value. Confirmatory Factor

Analysis (CFA) provides factor loadings, reliability and convergent validity about the measurement, as shown in Table 3. The standardized factor loadings are from 0.516 to 0.882, which means all items are considered convergent valid. Then, the composite reliability figures are from 0.630 to 0.910. Since Nunnally and Bernstein [47] suggested that CR value had better greater than 0.7, most of the figures of this model fit the requirement. Then, about the recommended standard figure for average variance extracted is 0.5 [46,48]. The present research has average variance from 0.460 to 0.738, which is in a reasonable range.

Table 3. Convergent validity.

Construct	Item	Significance of Estimated Parameters				Item Reliability		Construct Reliability	Convergence Validity
		Unstd.	S.E.	Unstd./S.E.	p-Value	Std.	SMC	CR	AVE
Intrinsic motivation	MOV7	1.000				0.737	0.543	0.879	0.480
	MOV8	0.875	0.076	11.520	0.000	0.693	0.480		
	MOV9	1.119	0.096	11.687	0.000	0.737	0.543		
	MOV10	1.031	0.085	12.103	0.000	0.762	0.581		
	MOV11	0.978	0.092	10.644	0.000	0.669	0.448		
	MOV12	0.919	0.114	8.090	0.000	0.521	0.271		
	MOV13	1.036	0.086	12.058	0.000	0.735	0.540		
	MOV14	1.060	0.100	10.554	0.000	0.656	0.430		
Extrinsic motivation	MOV1	1.000				0.597	0.356	0.835	0.469
	MOV2	0.942	0.127	7.411	0.000	0.516	0.266		
	MOV3	1.666	0.160	10.392	0.000	0.861	0.741		
	MOV4	1.590	0.155	10.238	0.000	0.874	0.764		
	MOV5	1.255	0.147	8.523	0.000	0.615	0.378		
	MOV6	1.116	0.144	7.743	0.000	0.554	0.307		
Attitude toward teacher's teaching techniques	ATT1	1.000				0.759	0.576	0.878	0.590
	ATT2	1.086	0.078	13.853	0.000	0.814	0.663		
	ATT3	1.228	0.097	12.661	0.000	0.771	0.594		
	ATT4	1.104	0.089	12.347	0.000	0.751	0.564		
	ATT5	1.170	0.094	12.416	0.000	0.745	0.555		
Attitude toward curriculum	ATT6	1.000				0.668	0.446	0.910	0.532
	ATT8	0.978	0.102	9.550	0.000	0.612	0.375		
	ATT11	1.128	0.097	11.640	0.000	0.785	0.616		
	ATT12	1.178	0.097	12.126	0.000	0.827	0.684		
	ATT13	1.026	0.091	11.288	0.000	0.759	0.576		
	ATT14	0.866	0.092	9.438	0.000	0.621	0.386		
	ATT15	0.966	0.089	10.850	0.000	0.744	0.554		
	ATT16	1.106	0.094	11.759	0.000	0.815	0.664		
Attitude toward language	ATT7	1.000				0.641	0.411	0.630	0.460
	ATT10	1.299	0.153	8.485	0.000	0.714	0.510		
English learning self-awareness	WEB1	1.000				0.710	0.504	0.890	0.576
	WEB9	1.119	0.113	9.904	0.000	0.642	0.412		
	WEB10	1.289	0.101	12.819	0.000	0.839	0.704		
	WEB11	1.297	0.104	12.440	0.000	0.809	0.654		
	WEB12	1.127	0.093	12.140	0.000	0.777	0.604		
	WEB16	1.078	0.091	11.902	0.000	0.760	0.578		
Classroom activity and teaching methods	WEB4	1.000				0.784	0.615	0.877	0.546
	WEB5	0.813	0.060	13.536	0.000	0.777	0.604		
	WEB6	0.901	0.066	13.758	0.000	0.781	0.610		
	WEB7	0.785	0.062	12.747	0.000	0.744	0.554		
	WEB13	0.890	0.072	12.316	0.000	0.721	0.520		
	WEB14	0.672	0.067	10.046	0.000	0.611	0.373		
English learning attitude	Teaching attitude	1.000			0.000	0.744	0.554	0.837	0.632
	Course attitude	1.309	0.164	7.957	0.000	0.872	0.760		
	Language attitude	0.798	0.127	6.260	0.000	0.762	0.581		
English learning well-being	English learning self-awareness	1.000			0.000	0.836	0.699	0.849	0.738
	Classroom activity and teaching methods	1.299	0.155	8.365	0.000	0.882	0.778		

Unstd.: Unstandardized factor loadings; Std.: Standardized factor loadings; SMC: Square Multiple Correlations; CR: Composite Reliability; AVE: Average Variance Extracted.

4.3. Discriminant Validity

The present study uses confidence interval analysis to test the discriminant validity among constructs. The correlation coefficient should not include 1 in order to verify their discriminant validity each pair. AMOS has been used to build correlation coefficient under 95% of confidence level by adopting the Bootstrap method. When confidence interval does not include 1, the null hypothesis has

been rejected. That means the two constructs are discriminated with each other [49]. Table 4 displays Bias-corrected and Percentile method confidence interval analysis results. All pairs of constructs do not include 1. Therefore, the discrimination validity of each pair can be verified.

Table 4. Bootstrap correlation coefficient under 95% confidence interval.

Pair Correlation			Pearson Correlation	Bias-Corrected		Percentile Method	
				Lower Bond	Upper Bond	Lower Bond	Upper Bond
IN	↔	EX	0.750	0.581	0.857	0.583	0.858
WBE	↔	IN	0.544	0.351	0.685	0.338	0.678
ATT	↔	IN	0.428	0.193	0.640	0.205	0.656
WBE	↔	EX	0.513	0.321	0.682	0.303	0.668
ATT	↔	EX	0.431	0.195	0.679	0.195	0.679
ATT	↔	WBE	0.700	0.418	0.914	0.452	0.940

4.4. Model Fit

Since the structural research model needs to be tested with the present collected data for the model fit, this study uses the maximum likelihood method. Scholars proposed several criteria to examine the model fit from different perspectives, such as Klien; Schumacker and Lomax; Jackson and Gillaspay [50–52]. A total of 194 papers from American Psychological Association Journals were collected and reviewed from 1998 to 2006. By comparing confirmatory factor analysis (CFA), the recommended criteria and standard for model fit have been proposed, such as χ^2 , df, χ^2 /df ratio, GFI, AGFI, RMSEA, SRMR, CFI and TLI(NNFI), etc. The basic assumption of structural equation model is that the covariance matrix of model and sample should be the same. However, since SEM is the big sample analysis, it is easy for p value less than 0.05, which make failure for hypothesis rejection. The research model fit would not have a good result. Therefore, according to Bollen [53], the Bootstrap method was adopted to do the modification.

Table 5 displays sorts of model fits indicators with the suggested thresholds. Most of the results reach acceptable levels, according to Schumacker [51]. Only χ^2 does not come out as the satisfied result, which should be less than 3. Since χ^2 is very sensitive to a large number of samples, we need to calculate the ratio of χ^2 over its degree of freedom. Hu [54] suggested implementing the combined rules for the model fit criteria. That would make the type I error controlled better.

Table 5. Model fit.

Model Fit	Criteria	Model Fit of Research Model
χ^2	The small the better	959.33
DF	The large the better	770
Normed Chi-sqr (χ^2 /DF)	$1 < \chi^2$ /DF < 3	1.25
RMSEA	< 0.08	0.02
TLI (NNFI)	> 0.9	0.98
CFI	> 0.9	0.98
GFI	> 0.9	0.91
AGFI	> 0.9	0.90

4.5. Path Analysis

Path analysis is a statistical method used to analyze causal relations between variables. It is the way to find and verify path coefficients that meet the model assumptions. Table 6 shows the path coefficient results of the research model. Intrinsic motivation ($b = 0.251$, $p < 0.001$) and extrinsic motivation ($b = 0.231$, $p = 0.003$) impact attitude significantly. Then, learning attitude ($b = 0.912$, $p < 0.001$) impact well-being significantly. Moreover, learning attitude provides 50.9% of coefficient

determination of well-being. Then, intrinsic motivation and extrinsic motivation can predict 32.9% variance of attitude.

Table 6. Regression coefficient.

Dependent Variable	Independent Variable	Unstd	S.E.	Unstd./S.E.	p-Value	Std.	R2
Learning attitude	Intrinsic motivation	0.251	0.070	3.579	0.000	0.344	0.329
Learning attitude	Extrinsic motivation	0.231	0.077	2.990	0.003	0.284	
Well-being	Learning attitude	0.912	0.129	7.068	0.000	0.714	

4.6. Indirect Effects with Bootstrapping

The indirect effect of the bootstrapping test has better statistical power than the causal method and coefficient product method [55,56]. Additionally, the bootstrapping method does not need to confirm the normal distribution of the sample, as the coefficient product method (such as the B-K method) does. Bootstrapping uses the sampling with replacement method, which draws a sample from the original samples until reach the same number as one process. Hayes [57] suggested repeating this process at least 1000 times and recommended implementing this process 5000 times. Therefore, when the process repeats 1000 times, there would be 1000 indirect effects ($a*b$). This 1000 indirect figures would form its own data distribution. Then, the standard error and confidence interval can be produced. In short, bootstrapping can provide confidence interval with a statistical power of indirect effect, especially, bias-corrected bootstrapping [56,58].

The examination of the indirect effects, including intrinsic motivation $\rightarrow$ learning attitude $\rightarrow$ well-being, is shown in Table 7. The confidence interval does not include 0, which means the indirect effect exists. Then, the second indirect effect is from extrinsic motivation through learning attitude to well-being. The confidence interval also does not include 0. The indirect effect exists.

Table 7. Indirect effect of mediation model analysis results.

Indirect Effect	Point Estimate	Product of Coefficients			Bootstrapping 1000 Times	
		S.E.	z-Value	p-Value	Bias-Corrected 95%	
Intrinsic motivation $\rightarrow$ Learning attitude $\rightarrow$ Well-being	0.245	0.112	2.188	0.017	0.041	0.478
Extrinsic motivation $\rightarrow$ Learning attitude $\rightarrow$ Well-being	0.202	0.098	2.061	0.036	0.010	0.440

4.7. Moderation Effect

Moderation effect is defined as the application analysis of categorical variables by using structural equation model. While moderator is a categorical variable, multi-group analysis needs to be implemented. The path coefficients of different groups have to be constrained as equal. Then, we can compare to the unconstrained model. The $\Delta\chi^2 = 6.420$ is greater than one degree of freedom (1 df = 3.84). Therefore, the p value is less than 0.05. Gender as the moderator for intrinsic motivation to learning attitude is tested significantly as Table 8 shown.

Table 8. Moderation effect analysis.

			ΔDF	$\Delta\chi^2$	p
Intrinsic motivation	$\rightarrow$	Learning attitude	1	6.420	0.011

5. Discussion and Conclusions

5.1. Theoretical Implications

In the past, domestic studies on English learning have rarely discussed how to improve English learners' well-being in Taiwan. It is difficult to learn English in an EFL environment. Therefore, English learning well-being would be a challenge for most learners. This investigation provides certain empirical evidence to find out what impacts English learning well-being. Moreover, the average scales of all constructs would display the English learning psychological situation from cram school English learners. First, the item average scales of English learning motivation are between 3.509 and 4.397, which is considered as high in the middle. The item average sales of English learning attitudes are between 3.170 and 4.130. It can be interpreted as the English learners recognize the importance of English learning. However, the average scale of learning well-being is 3.332. It may represent the learners were not very satisfied with their English learning. The research results are similar to the study of Zhu [43]. The learners feel that learning English is not fun, the grammar is difficult, and are very nervous to answer questions in English. However, they acknowledge that English is very important and needs to be learnt.

The research hypotheses of the relationship between learning motivation, learning attitude, and learning well-being all have significant positive impacts. According to the regression analysis, learning attitude can have up to 50.9% of variance explanation influencing learning well-being. It means that English learning's well-being depends on what level of learners' English learning attitude is. Moreover, the regression coefficients of intrinsic and extrinsic motivation to learning attitude are 0.251 and 0.231, respectively. The intrinsic motivation has a higher impact than extrinsic motivation. According to Denault and Guay [15], intrinsic motivation can be described as when someone participates in an activity because the activity is enjoyable, interesting, and satisfying. Even when studying English was not very enjoyable, interesting, or satisfying, the cram school English learners' intrinsic motivation drove their attitude toward learning English. The cram school's program is not a part of formal education systems. People go there more because they need to learn English from inside.

Regarding the mediation and mediation effects, this study also proposed learning attitude as a mediation variable between intrinsic and extrinsic motivation and learning well-being. Two indirect effects both existed. That means motivation affects learning well-being through learning attitude. Intrinsic and extrinsic motivation both impact English learning well-being indirectly. Learning attitude can be described as the reason why learning motivation influences English learning well-being. Moreover, the present study also tested a moderation effect analysis by using gender as the moderation variable influencing intrinsic motivation to learning attitude. The testing result shows that there is an intervening effect from different gender to motivation and learning attitude.

Furthermore, the present study proposed an English learning well-being instrument since the construct comparably rare appears in domestic empirical research. Three first-order constructs have been proposed, including English learning self-awareness, classroom activity, and teaching methods. Additionally, certain questionnaires have been developed for each first order construct. Along with confirmation factor analysis by collected sample data, factor loadings are verified all in the acceptable range. The construct reliability (CR) is up to 0.849. The English learning construct can be better understood, applied, and measured. In short, after this empirical study, English learning well-being can be used as a well-designed result variable in the future.

5.2. Practical Implications

The research results show that intrinsic motivation and learning attitude positively impact learning well-being of English cram school learners. Learners' attitudes toward curriculum and attitude toward teacher's teaching techniques are the two most significant antecedents. This empirical evidence is similar to some previous researches [18,59]. Contrastingly, extrinsic motivation provided negative affect. According to Whitehead [60], students having high intrinsic motivation would implement their

learning goals. Nevertheless, since self-driven is the key to learn, teachers should provide learning strategies and training for students to be able to learn independently. Intrinsic motivation in English learning then can be nurtured [61–63].

Similar to the research results of Liu [64], learning motivation and attitude were non-intelligence factors which impacted English learning. According to this empirical study, the major English learning pressure for learners is “answering questions in English”. Since intrinsic motivation would be impacted by pressure, teachers should be very careful about interactions with students in English. Instead of a lively learning activity, if the process or question itself is not right, answering questions in English would become a student’s nightmare. First, a step-by-step strategy may be the right way to build up students’ confidence in answering questions in English. Then, positive feedback from teachers to lower the pressure should be able to accumulate students’ intrinsic motivation. Moreover, preparing and practicing sorts of scenarios would help students to be familiar with answering questions in English. We may use some e-learning tools with audio or video materials and music for learning English. For example, choose one good resource from so many websites, will help you learn in a fun way by using games or filled with more visual materials, like videos and texts. Make some kind of interesting, memorable connection that helps us learn and remember the meaning of an English word, we might use an app or website to learn on the go (while you are traveling or moving) and at home. This way, we can turn our learning resource on and off whenever you want to or need to.

5.3. Research Limitation

The research is based on a questionnaire survey. The suggested sample number should be around 200–500. Since this is the research limitation, the sample size is not large enough. For future studies, a bigger sample size is suggested in order to increase sample variety and decrease systematic error. Moreover, the research target was learners of English cram schools in Taiwan. The implication of this research is limited. According to the research target, a future study can use this research model focusing on other target groups, for example, learning motivation and attitude of high school students.

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