

Fun, Play and Challenge Factors for Playability Measurement of Game-Based Learning



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ABSTRACT

Playability is one of the several factors affecting the level of user acceptance of game-based learning applications. Measuring playability with suitable parameters or items determined the successful finding of playability issues. This research proposed parameters for measuring playability based on the concept of game-based learning proposed by Prensky. The measurement category: fun factor, play factor, and challenge factor are defined and based on these aspects, nine constructs and 34 items/measure for the comprehensive measurement of the playability factor are constructed. Moreover, by utilizing the Goal Question Metrics model, this research proposed measurement metrics for the playability measurement process.

Key words : Playability, Goal Questions Metric, Fun, Play, Challenge

1. INTRODUCTION

Educational games or Digital Game-Based Learning (DGBL) involvement in supporting the learning process increased rapidly for recent years. According to the report released by Ambient Insight [1], worldwide revenue for Game-Based Learning products and services reached \$1,841.41 million and predicted revenue by 2019 would reach \$ 4,954.12 million, and particularly in the Asian market, the revenue reached \$1,123.47 million and the predicted revenue by 2019 would be \$ 2,933.33 million. Also, according to the latest market survey also conducted by Ambient Insight in 2016 [2], the revenues for game-based learning market reached \$2.6 Billion and will more than double to \$7.3 billion by 2021.

Another report from [3] showed a similar trend. More than five years ago, [3] predicted that by 2020, mEducation products would have approximately \$38 Billion annual revenue all across the globe. This research defined mEducation products into seven archetypes: Assessment, LMS/Authoring tools, distance tutoring, test prep, collaboration tools, game/simulation based tools, and E-books and E-course. Moreover, the predicted annual revenue for game/simulation based tools is \$13 Billion. Besides, developing regions will be the dominant player in the development of mEducation.

Table 1: Motivation elements in game-based learning

No	Elements in game-based learning	Output for users
1	Fun	Enjoyment and Pleasure
2	Play	Intense and passionate involvement
3	Rules	structure
4	Goals	motivation
5	Interactivity	doing
6	Adaptivity	flow
7	Outcome and feedback	learning
8	Win state	Ego gratification
9	Challenge/competition	adrenaline
10	Problem-solving	Creativity
11	Interaction	Social group
12	Characters/Story	Emotion

Two significance factor that makes it possible: fast economic growth and a rise in GDP share on education. Thus, the developing countries in the Asia Pacific will be the fastest in the growth of mEducation revenue. According to [4], several factors make game-based learning a very effective way of learning. This kind of application offers benefits, as displayed in table 1. Another research supporting [4], is proposed by [5] stated that The benefit of implementing games concept within educational media is increasing motivation, attention and skill of the learner.

From the definition, game-based learning is a game with a particular purpose. Hence the characteristics of games and the quality of the good games should appear on game-based learning. To measure how good games to play, the playability term is used. The term "playability" suggested in several kinds of research such as [6]–[11]. Playability as a significant dimension for the game quality also suggested by [12], along with the other dimensions such as pedagogy, mobility and user interface usability.

In the search for suitable playability aspects, this research identified some elements are suitable to be adopted for measurement aspects in playability. Playability dimension is the dimension that will measure the usability level of game-based learning in term of game characteristics. This research proposed three aspects for measuring playability factor on game-based learning: Fun, Play, and Challenge. This

research suggested Play, Rules, Interactivity, and Adaptivity from the elements proposed by [4] are compiled into single aspect called Play Factor (PF), and Goals and Challenge are compiled into Challenge Factor (CF). Moreover, Fun and Character/Story are compiled into Fun Factor (FF). The proposed model can be seen on figure 1. This research started with the definition of constructs to measure playability resulting in three constructs: fun, play, and challenge factors.



Figure 1: proposed Playability Model

The next step is to define the detailed variable or measure for each construct. Detailed measure and the measurement metrics are developed based on the method proposed by [13], and the result is a measurement metrics for evaluating playability for a games. This paper excluded the validation and the user testing stage, and will be discussed in the different article.

2. RELATED WORKS

The essence of the game is based on "play." Hence playability played a very significant role in the quality of the game, including game-based learning. This section discussed several existing playability evaluation models that support the proposed model.

The first model to be evaluated is SEEM model [14]. SEEM model is built based on Norman's Theory of Action and Malone's Fun Concept[15]. This model proposed easy to apply predictive test model. This model suggested three heuristics for measuring playability: Challenge, Curiosity, and Fantasy.

The next model is created by [16]. This model focused on fun factor as a subset of playability. This model suggested for measuring fun, especially on children's game. There are three aspects to consider: endurance, engagement, and expectations. To measure those three aspects, some tools are utilized, such as a Smileymeter, Fun-Sorter, and Again-Again Table. This research entirely focuses on the fun factor, and it could support the proposed model from the fun factor point of view.

Furthermore, [17] suggested four dimensions for measuring the quality of games. The first part that significantly influenced this model is the gaming experience. [17] proposed five measures for gaming experience: Challenge, competence, flow, immersion, negative affect, positive affect, and tensions. Along with other aspects such as learning experience, adaptivity, and usability, [17] proposed a user experience evaluation framework based on Activity theory.

Also, [8] proposed a comprehensive model containing sets of heuristics to measure playability called Heuristics Evaluation for Playability (HEP). HEP proposed four games heuristics as follows: gameplay, game story, game mechanics, and game usability. HEP provided a new way for the HCI game community to increase the usability and playability of the game they developed.

Finally, [18] suggested a model focused on enjoyment measurement called GameFlow. This model proposed eight elements – concentration, challenge, skills, control, clear goals, feedback, immersion, and social interaction along with a set of criteria for each element to achieve a high level of game enjoyment. GameFlow model was able to measure the enjoyment level of a published game and provide tools for designing a game.

This research studied these existing models, and based on game-based learning concept proposed by Prensky, the suitable elements were extracted and combined, to construct and proposed the new model capable in handling more playability issues.

3. RESEARCH METHODS

This research tries to propose a new model for measuring playability. It started by defining "construct" that suitable to represent the selected phenomenon and defining "measures" to capture the measured data as described by [19]. The methods for proposing the model, following the model stated by [13], consisted of four main activities :

1. Dimension definition. This research proposed three primary constructs: fun factor, play factor, and challenge factor. This research explored each construct into their respective measures. To complete this task, a comprehensive literature review was used.
2. Items Development. This research proposed questions for each factor proposed in the first stage. The initial version consisted of 34 item instrument and designed to measure nine basic ideas/constructs.
3. Instrument Refinement. The initial version of measurement items needed refinement. The main activities of this stage covered measurement validity of the proposed constructs, revision, replacement of the unnecessary items, and restructuring the statement in the measurement items. The refinement process can be done by involving expert judgement as proposed by [20].

4. Confirmatory Assessment of Validity. The final stage is the confirmatory analysis to justify the validity of the overall measurement items. To do this part, the suitable samples were extracted from the populations, and then validity assessment based on the result of the samples were conducted.

This paper covered two parts of this method: dimensions definition and items development and the rest activities will be described in different publications.

4. RESULTS

4.1.Measurement Item Definition

This research proposed three aspects of measuring the playability factor. From those three, the particular measurements items can be created as displayed on appendix 1. The full description and rationale for the selected factors are described as follows:

4.1.1 Fun Factor

Fun factor is considered to be the most straightforward yet complicated aspect to measure for the quality of an m-GBL. When the user played a game, and the user experiences fun sensation, then we can say that the m-GBL is providing "fun" adequacy to play. However, how to define what makes a game fun is rather complicated. Fun is a very personal sensation that can be built from different part of the game. This study proposed five constructs that weaved the fun factor: Game Story, Endurability, Fantasy, Curiosity, and Humor.

a. Game Story

According to [8], good games combines two elements: plot and story. The measurement of this construct is essential to verify the player's judgment and experience based on the story in the game. The more users get connected to the story and character they play, the better is the game. The more players emotionally attached to the story, the fun factor is increased.

b. Endurability (remembrance and returnance)

Games are considered showing a high "fun" factor if the users showed two things once they played particular games. First, the user has a strong memory of the detailed games they played and raised the desire to play again at another time. According to [16], there are two facets of endurability: remembrance and returnance. Remembrance is connected to the ability of the game's user to remember the activity during the game they played. The more the part of the game remembered by the user, the higher the endurability of the games. Returnance is the term to measure the desirability of the user to play the games again and again after the first experience. The logical reason is that if the experience brings fun to the user, they will play it again and again in another time.

c. Fantasy

[15] described fantasy as an essential factor in making fun games. Fantasy brings players to interact with physical objects or social situations that are different from the real world. Fantasy allows users to experience a very plausible condition into a very unreasonable state. This fantasy creates games more "fun" to play.

d. Curiosity

[15] suggested, while interacting games, the user may grow the motivation to learn; this called curiosity. The "suitable" game environment may trigger this curiosity. The curiosity can be built by presenting neither too simple nor too complex environment based on the user's prior knowledge.

4.1.2 Play Factor

a.Flow

According to [17], [18], when the game entirely occupies a player's awareness in play, and the player temporarily neglected the surrounding environment, then it can be concluded that the game showed a right level of " flow." It is a condition where a player is merged in a game activity. [18] proposed, the elements of flow of the game consisted of :

1. Concentration: Good games required concentration to play; it hinders from presenting too easy and yet dull games. On the other hand, the games present the environment enabling the user to concentrate on the game.
2. Challenge Player Skill: adequately challenging game is necessary to provide the best play experience. However, it should be designed to meet the player's skill level.
3. Control: Throughout the gameplay, the user may develop games skill level and expertise.
4. Clear Goal: Games should provide the player with clear goals at appropriate times
5. Feedback: Timely feedback for the player may increase the quality of their gameplay.
6. Immersion: Players should experience deep but effortless involvement in the game
7. Social Interaction: Games should support and create opportunities for social interaction

b. Players and Game Style Variation

[11] stated good games accommodate a variety of games style to serve the diversity of player's profile. Games must also allow players to try different ways, strategies, or tactics to win games. Games must also be able to impress players from the beginning of the game so that different type of players can express positive feedback just by playing the game briefly. To accommodate the disparity in player's skill level, games also need to provide an Artificial Intelligence setting that is challenging for all level of users, from novice to the expert.

4.1.3 Challenge Factor

According to [17], [18] challenge refers to the difference/gap between the skill level required by a game activity and the player's existing skill and a good Games should be sufficiently challenging and match the player's skill level. If the gap is too high than the player will think the games is too difficult to play the player will stop to play and abandon the games, on the other hand, is the gap is to low than the player will be bored and leave the games as well

a. Challenge

To measure the balance of the user's skill and difficulty level on games activity, [18] proposed four indicators to analyze the challenge presented by a game as follows:

1. Challenges in games must match the players' skill levels

2. Games should provide different levels of challenge for different players
3. The level of challenge should increase as the player progresses through the game and increases their skill level
4. Games should provide new challenges at an appropriate pace

b. Competence

According to [17], to measure competence, it is necessary to identify the successful task performed by the user. The number of tasks successfully performed by the user indicates the competence of the user. Game users may have background variations concerning their age, ability to use the computer, and education level. If the average user showed a high competence level, it would indicate the right playability level.

c. Tension

[17] suggested tension refers to the emotional or physical threats resulting from the failure to respond appropriately. Tension is closely related to challenge and competence. Games with good playability level should show a low level of tension for their user. Failure to completing the task or finishing a level in games should be handled smoothly to avoid emotional and physical pressure.

4.2 Developing Measurement Instrument

After completing the items for each construct as depicted in table 4, the next step is creating the measurement metrics. To create the measurement metric easily, the GQM model is utilized. GQM is the goal-driven method to develop and maintain useful metrics, comprising three part: Goals, Questions, and Metrics [21]. The initial step from GQM is to identify the goals of the measurement. All attribute shown in table 4 will be the goals of our GQM model. From there, the question is carefully constructed, and it is necessary to ensure that all question is measurable. Furthermore, metrics containing the necessary information to answer the question is described. Following the work presented by [22], the attribute from table 4, will serve as quality characteristics, and from there, the goal and guideline can be constructed [see table 7].

For the development of the measurement instrument, the Goal Question Metrics (GQM) model from [21] is utilized. The essential part of GQM model is defining the measurement goals. These goals are obtained from the attribute on appendix 1. Once the goals are defined, the next step is to propose the question for measuring the items. To do this part easier, following [22], this study proposed the guideline for the measurement process, as seen in Appendix 2.

The complete assessment questions based on Appendix 2 can be described as follows:

A. Game Story

1. Consistency of the storyline
 - Do you think that the games you play presenting consistent storyline from the beginning to the end of the games?
2. Interesting storyline

- Do you feel that the game attract you because of the storyline stimulating your life experience?
3. Possible story outcome scenario
 - Do you keep thinking about the possible outcome or alternative story ending based on the gameplay they played?
 4. Strong connection to the storyline
 - Can you feel the storyline of the game even without the presence of the game characters you have played, Outside the gameplay?
 5. Control over various scenario and strategy
 - Do you have control over the character to be played in different scenario and strategy to win?
 6. Fairness of the outcome
 - Do you think you have the necessary skill and tactics to win the game, even for the worst challenge?
 7. Personal emotion involvement
 - Do you experience emotions such as anger, aggravation, threat, relief, pleasure, or curiosity when interacting with various storylines, viscerally?
 8. Interesting Game character
 - Are you attracted to Game character for this particular reason:
 - a) character in games has similarities with players in several conditions
 - b) the characters attract the attention of players
 - c) characters develop in the adventure played in the games?

B. Endurability

1. Remembrance
 - Do you remember the activity you played in the games?
2. Returnance
 - Do you want to play the games again and again after the first experience?

C. Fantasy

1. Different “World”
 - Do you feel the sensation of surrounded by physical objects or social situations that are different from the real world?

D. Curiosity

1. Motivation to learn something new
 - players are motivated to learn new experiences or knowledge in the game.

E. Flow

1. Concentration
 - Do you think it needs concentration to play this game?
 - Are you able to concentrate on the game you play?
2. Challenging Player Skill

- Do you think the game is sufficiently challenging and match the player's skill level?
- 3. Control
 - Do you think the games support player skill development and mastery?
- 4. Clear Goal
 - Do you think that the games provide a player with clear goals at appropriate times?
- 5. Feedback
 - Do you receive appropriate feedback at the right moment?
- 6. Immersion
 - Players should experience deep but effortless involvement in the game
- 7. Social Interaction
 - Does the game you play support and create opportunities for social interaction?

F. Player and Game Style

1. Game Style Support
 - Do you find more than one game style during playing the game and match your game style preference?
2. Numerous ways to win
 - Can you implement a different scenario or strategy to win the games?
3. Positive feedback
 - Can you give the quick positive feedback in a short time of game playing?
4. Challenging Artificial Intelligence setting
 - Is there any Artificial Intelligence options provided by the games that allow you to play according to your skill level?

G. Challenge

1. Match Player's Skill
 - Do you think the challenge matched your game skill progression?
2. Different Level of Challenge
 - Do you find any level of difficulties that can be selected based on your skill?
3. The progression of challenge level
 - Do you think along with the progression of the games, the difficulties of the challenge grows higher?
4. New Challenge
 - Do you think the new challenge appears on the games at an appropriate rate and period?

H. Competence

1. Successful Task Completion
 - Do you think it is possible for you to complete all necessary task provided within the game?

I. Tensions

1. No Physical Threat
 - Do you experience a physical threat in completing the task?

2. No Emotional Threat
 - Do you experience an emotional threat in completing the task?

The available question list is a significant input for constructing complete GQM model, especially on the measurement metrics. The complete result of GQM is available in Appendix 3, and the measurement refinement process can be started[23][24][25].

5. FUTURE WORKS

This paper covered two activities dimensions definition and items definitions. However, the initial measurement metrics produced by these activities required validation. The validation will ensure that all items were free of bias and redundant information, some irrelevant measure will be eliminated, and the new relevant items will be added to the measurement list. Moreover, the final step for confirmatory assessment will be done by selecting the appropriate samples, conducting an evaluation based on the proposed model, and statistical analysis will conclude the validation process. Once, the confirmatory assessment completed, the proposed measurement model is ready to use.

6. CONCLUSION

The main contribution of this article is the proposed model for measuring playability based on Prensky's theory on game-based learning. The relevant three primary constructs are proposed: fun, play and challenge factors and specific constructs for each primary constructs are presented as well. Utilizing the GQM model, the final result of this article is the initial version of playability measurement metrics (Appendix 3). Refinement process based on expert judgment and user testing is still needed to verify the initial version, and after refinement process, proper confirmation of validity studies will ensure the final version of the measurement ready to use by the particular users.

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APPENDIX 1 : MEASUREMENT ITEMS FOR EACH FACTOR

No	Items	Literature Resource
FUN FACTOR		
FF1	Game Story	
FF1.1	Player understands the storyline as a single consistent vision.	[8]
FF1.2	The player is interested in the storyline. The story experience relates to their real life and grabs their interest.	[8]
FF1.3	The Player spends time thinking about possible story outcomes.	[8]
FF1.4	The Player feels as though the world is going on whether their character is there or not.	[8]
FF1.5	The Player has a sense of control over their character and can use tactics and strategies.	[8]
FF1.6	Player experiences fairness of outcomes	[8]
FF1.7	The game transports the player into a level of personal involvement emotionally (e.g., scare, threat, thrill, reward, punishment) and viscerally (e.g., sounds of the environment).	[8]
FF1.8	The player is interested in the characters because (1) they are like me; (2) they are interesting to me, (3) the characters develop an action occurs.	[8]
FF2	Endurability	
FF2.1	Remembrance	
	the ability of the user to remember the activity during the game they played	[16]
FF2.2	Returnance	
	the desirability of the user to play the games again and again after the first experience	[16]
FF3	Fantasy	
	Interaction of the user with physical objects or social situations that are different from the real world.	[15]
FF4	Curiosity	
	The ability of games to induce a motivation to learn while interacting games.	[15]
PLAY FACTOR		
PF1	Flow	
PF1.1	Concentration	[18]
PF1.2	Challenge player skill	[18]
PF1.3	Control	[18]
PF1.4	Clear Goal	[18]
PF1.5	Feedback	[18]
PF1.6	Immersion	[18]
PF1.7	Social Interaction	[18]
PF2	Players and Game Style Variation	
PF2.1	Game style variation support	[11]
PF2.2	Numerous ways to win the game is available	[11]
PF2.3	immediate positive feedback from all kind of player	[11]
PF2.4	Challenging AI setting to the different level of player (novice to expert)	[11]
CHALLENGE FACTOR		
CF1	Challenge	
CF1.1	challenges in games must match the players' skill	[18]

	levels	
CF1.2	games should provide different levels of challenge for different players	[18]
CF1.3	the level of challenge should increase as the player progresses through the game and increases their skill level	[18]
CF1.4	Games should provide new challenges at an appropriate pace	[18]
CF2	Competence	
CF2.1	Performing all task in games successfully	[17]
CF3	Tension	
CF3.1	Failure in completing task results in an emotional threat	[17]
CF3.1	Failure in completing task results in a Physical threat	[17]

APPENDIX 2 : GUIDELINE TO DEVELOP ASSESSMENT QUESTIONS OF PLAYABILITY DIMENSIONS

Quality Characteristic	Goal	Guidelines
Fun Factor		
Game Story	Consistency of the storyline	Games provide consistent storyline from the beginning until the end of the game
	Interesting storyline	The storyline presented by the game draws the user's interest by stimulating their life experiences.
	Possible story outcome scenario	After/during the gameplay, the user keeps thinking about the possible outcome or alternative story ending based on the gameplay they experienced.
	Strong connection to the storyline	Outside the gameplay, players can still feel the storyline of the game even without the presence of the game characters he has played
	Control over various scenario and strategy	To win, a player may have control over the character in different scenario and tactics
	Fairness of the outcome	With proper skill and scenario/tactics, it is possible to win, even for the hardest challenge
	Personal emotion involvement	Players experience emotions such as anger, aggravation, threat, relief, pleasure, or curiosity when interacting with various storylines, viscerally
	Interesting Game character	Game character attracted the user in several ways: character in games has similarities with players in several conditions, attracts the attention of players or characters develop in the adventure played in the games
Endurability	Remembrance	the users remember the game activity they played
	Returnance	The users want to play the games again and again after the first experience
Fantasy	Different “ World”	the user is surrounded by physical objects or social situations that are different from the real world.
Curiosity	Motivation to learn something new	players are motivated to learn new experiences or knowledge in the game.
Play Factor		
Flow	Concentration	Games should require concentration and the player should be able to concentrate on the game
	Challenging Player Skill	Games should be sufficiently challenging and match the player's skill level
	Control	Games must support player skill development and mastery
	Clear Goal	Games should provide the player with clear goals at appropriate times
	Feedback	Players must receive appropriate feedback at appropriate times
	Immersion	Players should experience deep but effortless involvement in the game
	Social Interaction	Games should support and create opportunities for social interaction
Player and Game Style Variation	Game style support	Players come with the preference of different game style, and enjoyable games accommodate it by giving different game style during the gameplay.
	Numerous way to win	Different scenario or strategy can be engaged to win the game
	Positive feedback	Immediate feedback comes from the

		user in a short time of playing a game
	Challenging AI (Artificial Intelligence) Setting	The Artificial Intelligence option of the games allowed the novice to the expert player to finish and enjoy the games.
Challenge Factor		
Challenge	Match Player's Skill	Good games designed the challenge in a way that the challenge matched the player's skill progression
	Different Level of Challenge	A different challenge should be presented to a different player with various skill (easy, moderate, hard).
	The progression of challenge level	Along with the progression of the games, the difficulties of the challenge grows higher.
	New Challenge	A new challenge should appear on the games in the appropriate rate and period.
Competence	Successful Task Completion	Good games should provide an appropriate competence level, where the intended user should be able to complete all necessary tasks.
Tensions	No Physical Threat	Failure in completing task results in an emotional threat
	No Emotional Threat	Failure in completing task results in a Physical threat

APPENDIX 3: COMPLETE GQM MODEL WITH THE MEASUREMENT METRICS

Aspects	Measure	Goal	Question	Metrics				
				1	2	3	4	5
Likert Scale 1=strongly disagree 5=strongly agree								
Fun factor	Game Story	Consistency of the storyline	Do you think that the games you play presenting consistent storyline from the beginning to the end of the games?					
		Interesting storyline	Do you feel that the game attract you because of the storyline stimulating your life experience?					
		Possible story outcome scenario	Do you keep thinking about the possible outcome or alternative story ending based on the gameplay they played?					
		Strong connection to the storyline	Can you feel the storyline of the game even without the presence of the game characters you have played, Outside the gameplay?					
		Control over various scenario and strategy	Do you have control over the character to be played in different scenario and strategy to win?					
		Fairness of the outcome	With proper skill and scenario/tactics, is it possible to win, even for the hardest challenge?					
		Personal emotion involvement	Do you experience emotions such as anger, aggravation, threat, relief, pleasure, or curiosity when interacting with various storylines, viscerally?					
		Interesting Game character	Are you attracted to Game character for this particular reason:					
	a) character in games has similarities with players in several conditions							
	b) the characters attract the attention of players							
	c) characters develop in the adventure played in the games?							
	Endurability	Remembrance	Do you remember most activity you played in the games?					
		Returnance	Do you want to play the games again and again after the first experience?					
	Fantasy	Different “World”	Do you feel the sensation of surrounded by physical objects or social situations that are different from the real world?					
Curiosity	Motivation to learn something new	Are you motivated to learn new experiences or knowledge in the game?						
Play Factor	Flow	Concentration	Do you think it needs concentration to play this game?					
			Are you able to concentrate on the game you play?					
		Challenging Player Skill	Do you think the game is sufficiently challenging and match the player's skill level?					

		Control	Do you think the games support player skill development and mastery?						
		Clear Goal	Do you think that the games provide a player with clear goals at appropriate times?						
		Feedback	Do you receive appropriate feedback at the right moment?						
		Immersion	Do you experience deep but effortless involvement in the game?						
		Social Interaction	Does the game you play support and create opportunities for social interaction?						
	Player and Game Style Variation	Game style support	Do you find more than one game style during playing the game and match your game style preference?						
		Numerous way to win	Can you implement a different scenario or strategy to win the games?						
		Positive feedback	Can you give the quick positive feedback in a short time of game playing?						
		Challenging AI (Artificial Intelligence) Setting	Is there any Artificial Intelligence options provided by the games that allow you to play according to your skill level?						
Challenge Factor	Challenge	Match Player's Skill	Do you think the challenge matched your game skill progression?						
		Different Level of Challenge	Do you find any level of difficulties that can be selected based on your skill?						
		The progression of challenge level	Do you think -along with the progression of the games, the difficulties of the challenge grows higher?						
		New Challenge	Do you think a new challenge appears on the games in the appropriate rate and period?						
	Competence	Successful Task Completion	Do you think it is possible for you to complete all necessary task provided within the game?						
	Tensions	No Physical Threat	Do you experience a physical threat in completing the task?						
		No Emotional Threat	Do you experience an emotional threat in completing the task?						