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Rhyme of Truce, Training Program for moral psychology in Cyberspace

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Abstract

Rhyme of Truce is an educational program that helps you develop the ability to cope with cyber violence rightly. we aim to produce educational contents that will last a long time in the memory of specially children. By combining the room escape game and Leap motion / VR, the program reflects the user's motion and action in real time. The Keyboard Worrier comes into contact with the user and causes violence, and the user who is attacked by the monster see several negative messages written in red and hears abuses sound. Users enter the virtual space decorated as the cyber world. They can experience cyber-violence indirectly but vividly, and if language violence, which has been overlooked and recognized only as "letters", is executed offline, it will directly wonder if cyber-violence should also be regarded as a means of violence. Users have the opportunity to cope with violence autonomously. When a user is attacked by an in-game monster, there are two ways to choose from. First, fighting against with a keyboard (which is a symbol of language violence) just like a monster. Second, report the abuser to cyber bureau police. Both methods make them to escape the room, but when they get out of the room and return to the home and read the message through the monitor, users can recognize which action was right for.

Keywords: *Cyber violence, Autonomous, Educational program, Experience*

1. Introduction

Today, the Internet has provided a community through which people from all over the world can communicate regardless of nationality, physical distance, and time o day through SNS (Social Network Service). It can hide the identity of the person in the characteristic of the cyber, and the people create the community without burden than the real world, and participate in it to form the relationship with the stranger. With the emergence of the "Youtube" video platform, the one-media (aka Creator) market, which had not previously been spotlighted, grew significantly. Today, Youtube Creator is the 5th hopeful job for elementary school student in 2018. It can be seen that it also had a great influence on young children [1].

However, despite the many advantages, the anonymity of the Internet has been criticized by some netizens as being used for various crimes such as defamation, privacy invasion, and personal information use,

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rather than guaranteeing freedom of expression [2]. Just as Deindividuation theory (Zimbardo, 1969; Kiesler et al, 1984) assures anonymity and makes it easier to do violent behavior by not being self-evident [3], Conversely, actors who leave their faces to the crowd and creators who act actively leave threatening words and phrases on the online are constantly questioned. Accidents that have been hurt by heart by these incidents have been increasingly increasing in cases of suicide due to depression and legal difficulties in finding criminals who have made bad comments. In addition to YouTube, Instagram, Facebook, and other social media platforms, public stars have appeared, and the influence of individual channels has also grown tremendously. In the past, the one-sided and vertically oriented media market is currently aiming for two-way communication, and many people use various means such as SNS live broadcasting, comments, and direct messages to communicate with fans in real time, narrowing the physical sense of distance and raising psychological familiarity. The importance of communication with the fans, and the authorities who try to do this, have to take the plethora of cyber violence.

It is impossible to block 100% of online language violence in a cyber-market where anyone can become famous and can deliver a message to a target regardless of their social status. If the law is further strengthened to stop the profane keyword from being exposed online, people will be accused of cyber-free anonymity and freedom of expression. Therefore, in order to improve the cyber culture and morality in a relatively short time, it was decided that improvement of citizen's awareness was the best option. "I" also came to the conclusion that we needed a program to educate others to be aware of the fact that they could become cyberbullying perpetrators or suspects and to take the attitude of avoiding verbal abuse to others.

Unlike the existing game, which realizes a 3D virtual space in the screen, VR has the advantage of producing various contents using the same area as the existing reality at 360 degrees. This helps the user feel fresher by providing a much greater immersion experience than 2D. VR image content has been popularized by the spread of smart phones and Google cardboard paper production, but VR contents with motion control can be easily accessed from everyday life unless participating in IT exposition or paying money directly by consumers and visiting the VR experience room It is not content that can be. Therefore, if the cyber education is given to those who have never experienced VR before, the possibility that the VR program will feel like an interesting game rather than an education becomes greater. This gives the user the advantage of being able to deliver lessons and messages without the maximum discomfort. This message is coded by the "memory storage process" because it gives the user the first VR experience, and is appropriately used as the basis for the act of locating somewhere in the storage repository and re-storing it when needed later [5]. Thus, it can be seen that the first experience increases the likelihood of users remaining in long-term memory. Based on these facts, we aim to produce educational contents that will last a long time in the memory of specially children.

2. Body

2.1 Program GUI creation

When the user wears the VR device and completes the preparation of the game, the program can be started. The user enters a common room where one computer is placed. The user can freely move using the keyboard direction key, and when an event occurs in which the user and the computer keyboard collide, the user enters the cyber maze instantaneously. At this time, the keyboard acts as a path for connecting the user to the maze. The user can touch the keyboard with only the hand, and the motion passes the value to the input to Leap motion and activates the script below.

Figure 1. "Rhyme of Truce" splash screen (point view of user)

For the script to work, Rigidbody and Collider must be enabled on the target object.

MovingTO

Assembly Information

Filename Assembly-CSharp.dll

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class MovingTO : MonoBehaviour {

    public Transform moveto;
    public AudioClip[] hitsound;


    public void portal(GameObject obj)
    {
        obj.transform.position =
moveto.transform.position;

gameObject.GetComponent<AudioSource>().PlayOneSh
ot(hitsound[Random.Range(0, hitsound.Length)]);
        // print("Touch!");
        // phone.SetActive(true);
    }

}
```

Figure 2. User instant messaging script

2.2 Escape Cues and Script Production

Keyboard Worrier comes into contact with the user and causes violence, and the user who is attacked by the monster hears a negative message written in red in front of him and a vow of the voice of a person. There are three kinds of verbal phrases that are output by voice, and we set random phrases to be reproduced every time a user is attacked by using a random function.

Figure 3. Monster depicting a cyber-violent perpetrator

```
private void OnTriggerEnter(Collider coll)
{


    if(coll.transform.gameObject.tag == "EWeapon")
    {

        Instantiate(TextMsg, TextPos.transform);
        gameObject.GetComponent<AudioSource>().
            PlayOneShot(hitsound[Random.Range(0, hitsound.Length)]);

    }
}
```

Figure 4. Abusing sound replay script

Inside the maze, the monster receives the user's position value and moves towards the user's current position. There are 5 monsters in total, and you can defeat them in 2 different ways. Destroy all monsters that are present to reveal a hint that tells the way out of the maze.

2.3 Monster attack with keyboard Object

When a user touches a randomly placed keyboard in the maze, a new keyboard object is created and panned in the user's hand. The keyboard in the user's hand acts as a weapon, and a monster attacked more than three times on the keyboard is destroyed after playing the deceased action. Each monster has a function to count the number of attacks, and when the count value exceeds 3, the monster disappears automatically.

2.4 Call Cybercrime Police

The keyboard is automatically copied to the user when the Collide event occurs, but the note provided as an escape hint is only parented to the hand while the user takes an action to hold it by hand. The note is a cybercrime phone number, which is the same number that the user must enter when he finds the phone booth. The process of finding, remembering, and applying the clues actively leads to user interaction and actively

engages in the program, which is more positive than watching the video.

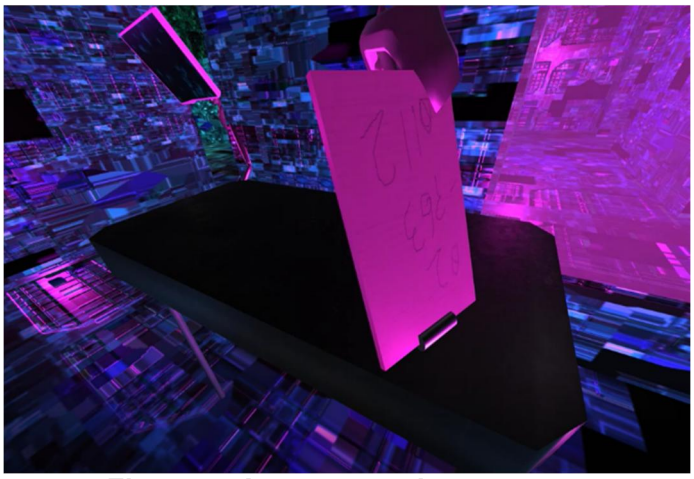

Figure 5. A user grasping a note

A total of five telephone booths are installed in the maze. When the user's hand collides with the phone booth, the numeric keypad object that was hidden in the user's view is activated. The user must go to the telephone booth and enter "023630112" in the state of memorizing the cybercrime telephone number written in the notebook. If an incorrect number is entered, the system initializes the previous value and provides an environment in which the user can enter the number again.

Figure 6. Numeric keypad exposure view as seen by user

If the user matches the entered numeric array with the stored array value, the police character comes along with the siren sound to attack and destroy the monster. At the same time, the user is presented with a text message informing the location of the exit.

Figure 7. Police character summoned by user

When all 5 monsters in the maze are destroyed and the user touches Exit normally, the user returns to the room where the program was started. The picture of the room is as it was, but a message is written on the 'computer' screen, which is the means by which users connect to cyberspace.

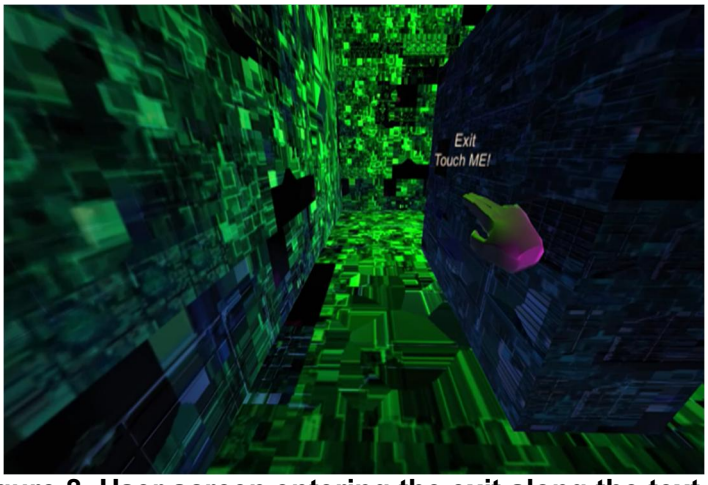

Figure 8. User screen entering the exit along the text

2.5 Ending of the program

An attack on a monster with a keyboard as a weapon in the maze indicates that the user responds equally to the perpetrator who attacked him when he heard a scorn or criticism on cyberspace. This is the act of creating a second offender and shows that the cyber-violence countermeasures of the suspects determine whether the language system of the cyber space will be cleaner or not.

Figure 9. Messages printed on the computer screen

3. Conclusion

We have created a VR training program that allows the user to input real motion within the program using Unity. The characters appearing in the program are modeled directly using Maya and Max tools, and each character has five motions in total: Idle, Attack, Walk, Damaged, and Die. Respectively. VR contents can provide excellent learning effects by providing play learning and sensory experience to children. Through the concept of "learning through play" proposed by Jean Piaget and Lev S. Vygotsky, the child can separate the behavior from the thing and the thinking, He said that the ability to develop and replace would be helpful to builders [7]. Since this program is an educational content made for a child, if the GUI of the program is seriously frightened or frightened, it can be left as a trauma to the user. Therefore, in order to prevent such trauma from occurring, I refered to the movie "Matrix" and conceived the GUI as a mysterious and cyber critical concept. The characters that appeared also did not include any irritating material such as blood, knives, and guns. Also, since the high-level profanity that is reproduced in the monster attack event can provide unpleasantness to the user, it is possible to recognize that the user is a profanity the sentences were selected and used. I wanted to give the input value to the Leap motion when the user entered the cyber police number on the keypad screen, but there were too many problems to solve such as physical distance constraint, recognition error, unintended input, slow response speed and so on. VR goggles cannot be seen at the same time, so it is virtually impossible to read the numeric position of the keyboard. So if you are to develop a form that will recognize the user's voice and throw input values into the array It is expected that the education will be completed.

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