Modeling the Smartphone Game to Improve Players’ Focus  
Case Study of Game Dumb Ways to Die  

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Abstract - Commonly, playing a game is judged as an activity which spend a lot of time, money, and energy. Players usually spend their money to buy vouchers to play and also buy characters, weapons and equipments which provided in the game. Players who addicted to game mostly spend their time and energy to satisfy their desire to solve the challenge on a game.  

However, not all of games give the negative impacts. There are a lot of advantages which can be obtained by games, such as to train our memory, precision, speed, and even ability to get money from games. A game called “Dumb Ways to Die” that can be found on smartphone is an example of game to increase speed and concentration of people who play it.  

There are a need to find some characteristics of a game which has positive effects for the players. Those characteristics can be formulated as the example of a good game. This paper will analyze the opinion and produce the conclusion from a survey of playing "Dumb Ways to Die” to generate a positive game model.  

Keywords- positive game, speed, concentration, favorable, game model  

I. INTRODUCTION  

Nowadays, smartphone is not only being a need, but it has changed to be a trend and lifestyle [3]. Even though smartphone is only a device in daily activity, it has a lot of influences in human life [5]. Sophistication which can be found on smartphone makes the users of smartphone are able to do many things such as chatting, browsing, playing games, writing, and e-banking [5].  

The presence of smartphones has increased the number of games, especially kids games. But, sometimes it is considered to be something negative for several people because it wastes the time, money, and energy [2], even though not all game produce those negative impacts. There are many things we can get from a lot of games that exist [2], one of the benefit it is to get money.  

II. LITERATURE REVIEW  

Dumb Ways to Die is the one of application from various games which already exist that connecting many elements such as :  

2.1 Concentration  
Concentration is focusing his/her attention to his/her work or activity [1]. Concentration that applied in this game can be seen on several challenges that can be found on this game such as:  

a. The way how to keep the duck safe and not bitten by the bear.  
b. The way how to keep the egg’s balances.  
c. The way how to choose a panda behind the door among two psycho characters.  
d. The way how to take the toast inside the roaster without shocked by the electricity.  
e. The way how to add the mustard to the hotdog in order to fit it with the dotted line, so the character is not bitten by the snake.  

2.2 Speed  
Speed is somebody’s ability to do a continuous movement on the same type with the shortest time. [4]. There are several applications of speed that exist on this game:  

a. The way how to blow away a plane in order to avoid the plane fell to the ground.
b. The way how to clean up the screen from the vomit that created by the character of the game.

c. The way how to defense the character from the piranha to avoid getting bit by the piranha.

d. The way how the character banishes the bees from its face.

e. The way how to run as quick as possible to avoid the character burnt.

f. The way how to merge the balloons to its rope, so the character does not need walk into the rail and getting hit.

g. The way how to seal the holes to avoid the character are running out of the blood.

h. The way how to move the character as quick as possible from the yellow line so it does not struck by the train.

i. The way how to arrange the word “patience” as quick as possible in order to avoid the character are not getting hit by the train when it crosses the rail.

### III. RESEARCH METHODOLOGY

To prove that “Dumb Ways to Die” game can increases concentration and speed, a research was held with 20 people as the subjects, (student and college student) to play that game 15 minutes a day for 5 days consecutively.

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</table>

### IV. RESULTS AND DISCUSSION

Based on the research that was held on 20 people, obviously the concentration level, speed, and the accuracy from each player in average has increased day by day, it can be seen from the score that getting higher. According to the survey, there are a lot of superiorities that contains in this game [6] such as:

1. 20% people assume that “Dumb Ways to Die” game is interesting, attractive and innovative.

2. 25% people assume that “Dumb Ways to Die” game is pushes the player to keep focus, sharp, to train agility and memory.

3. 35% people assume that “Dumb Ways to Die” game does not makes bored because it use so many interaction models (tap, swipe, drag, etc).

4. 20% people assume that “Dumb Ways to Die” game is utilizing feature that contains in the device like touch screen (tap, swipe, drag, pinch), gyroscope (device tilt), microphone device (blow).

In this game, player not only forced to totally concentrate utilize a split second to avoid danger that threaten his or her life, but also increasing the speed of player’s hand when touching screen of their cell phone.
because when the challenge changed, time that
needed to finish it are shorter there are 3
chances that gives for player to complete 15
challenges to survive in this game before the
game is over.

According to the interview that was
held to 20 respondents, there are 3 challenges
on this game which have an effect on daily life.

Through this challenge, 10%
respondents are going to be more careful and
predict all the possibilities that exist with
ambient conditions especially when they want
to go before the vehicle in front of them when
they are driving, not only that, the type of
game like this even applied as concentration
test by Sundial Puspa Iptek Bandung for
interactive learning.

Through this challenge, 10%
respondents are going to be more thoroughly to
do a math question about counts a sequence
number. On this game, respondents are not
only trained being thoroughly but also to think
quickly and accurate so they are going to be
accustomed when they are facing the similar
challenge.

Through this challenge, 10%
respondents are going to be more aware when
they are crossing the street. This challenge told
us to be more aware thus we do not know what
kind of dangers in front of us and when it are
going to happen.

V. CONCLUSIONS

Based on the result of research and
discussion about “Dumb Ways to Die” game,
can be conclude that 25% of games have a
positive effect for the player, one of it is
increasing player’s concentration. From 20
people who have already play that game,
among 35% of them said that the characteristic
of a good game is has a positive effect which
can be applied on the daily life just like cross
the road, doing a counts on math question, and
go before a vehicle in front of them, beside of
that, the game can be a way for interactive
learning too. On the game we are tend to be
forced to take a decision quickly and
accurately to complete a mission. Playing

game is also a good way exercises our brain to
avoid get easily senile. Indirectly, game makes
our brain takes a decision quickly and
accurately in the real world.
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REFERENCES


