FAN ACTIVITIES AS TOOLS TO IMPROVE LEARNING MOTIVATION
FAN ACTIVITIES AS TOOLS TO IMPROVE LEARNING MOTIVATION

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Various fan scholars identified the positive uses of fan activities, and one of the outstanding aspects is to integrate fan activities in classroom context, especially to use fan fiction in creative writing class. The current study aims to test if students’ fan identification is the enabling predictors of fan activities done in class, and also test the effect of fan activities in class on learning motivation, mediated by self-esteem, enjoyment, expression (both verbal and non-verbal expression), and uncertainty. All of the four mediators are the variables that were explored in previous fan studies.

Because most scales were adapted from the existing ones, pre-test or factor analysis was required. One hundred Thai undergraduate students were asked to complete the questionnaire. The results of factor analysis allowed the researcher to use all scales without rewriting them.

The major data collection was done in DeviantArt.com since this website yields a large number of fan artists. An online questionnaire was completed by 240 users, and 217 valid cases were used in final analysis. Path analysis revealed that fan identification has a positive effect on fan activities in class, which indirectly increases students’ learning motivation, mediated by enjoyment and expression. However, the direct effect from both fan identification and fan activities in class on learning motivation was not found.
Future study should identify other strategies that cause direct effect on learning motivation. The current study suggested that teachers and faculty members should integrate fan activities as a part of class assignment, especially for students who are high in fan identification.
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CHAPTER 1

INTRODUCTION

This chapter introduces the characteristics of fan activities, fan communication, structure of fandom, and their effect, both positive and negative one. The objectives, scope, and the definition of terms regarding this study are also presented.

Fandom is a subculture which contains wide range of communication patterns and communicative practice. These could be found in both online and offline space, in both verbal and non-verbal forms, in both in-group and out-group members, and also in both areas of intrapersonal and interpersonal communication. Generally, the characteristic to describe fandom is how fans have a positive feeling toward the object of fandom, such as celebrity, TV show, comics, sport team, and music band. Fans’ activities can be active, semi-active, or passive.

Before the Internet has become a part of our life, fan activities were generally passive (Jenkins, 1992, p. 14). They could not easily interact with their interesting objects. In other words, these fans perceived their own strong relationship to their favorite celebrities or TV show, but they had never received any feedback from them. This is how some scholars called fans as, “losers” (Stanfill, 2013). This kind of communication could be called one-way communication, as it was found in early communication model.

Keller (2011) considered “album amicorum” in 1800s as an active fan activity, in which album amicorum artists did not only have a positive feeling and attitude regarding their object of interest, but they also recreated and collected it as a
collection of artwork. This practice is similar to current active fan activities. The only difference is that album amicorum could not be published online for all other fans to see it. This means this practice in the present days allows fans to reach more message receivers and gain more feedbacks. This communicative practice in online fan community could be considered as a classroom-like space that fans both share their meaningful message and learn from feedback of others (Magnifico, Curwood, & Lammers, 2015). All these processes are done with enjoyment, not forcing.

Writing fan fiction is one of active fan activities that has been explored by various fan scholars. This activity has been done before the computer-mediated communication (CMC) era, and early fan fictions were published in Fanzine (fan magazine). This practice has been existing through the different eras of media evolution because of a reason that humans enjoy learning from narrative and create an alternative form of it (Schattenherz, 2016). These fan communicative activities do not only retell the story, but also entail it in different ways, from mass media to literature, and from predictable story to unpredictable one.

Later, in the age of Web 1.0, fans published their work in the website with editors. Nowadays, fans have more freedom to publish their work without editor reviews on blog and other Web 2.0 spaces (Rogozinska, 2007). Many fan creators who have never published their work before have a chance to spread their words, their stories, and feeling for other fans to perceive and to seek others who shared emotions toward the same object of interest. The Internet incredibly changes individual intrapersonal communication to be in the mass media format that allows interactivities from worldwide (Appadurai, 1996). The current study does not only explore the effect
of writing fan fiction, but also other kinds of fan activities, such as making fan art and other works. The effect of these activities would be tested if fan activities could benefit students’ learning motivation mediated by four variables which are in-class expression, and three intrapersonal-communication variables, self-esteem, uncertainty, and enjoyment.

Creating Fan Work

Active fans do not only reproduce the text in the format of fan fiction. Original work, whether books, movies, music, and comics inspire fans to recreate many forms of expression (Zimmerman, 2014). They could be invented in the format of fan art, fan video, fan poetry, and other creative works (Zimmerman, 2014). These creative works could be called, “fan work” or “fan creation.” The purposes of creating fan work are to express the emotion of love, appreciation, and respect (Romanenkova, 2014). Sometimes, fans are inspired by the work of other fans instead of the original media (Brennan, Monroy-Hernandez, & Resnick, 2010). This is how fans create meaning, convey message, and share belief to one another in fan community. For example, a fan could draw the crossover romantic pairing, Elsa and Jack Frost, after viewing the work of other fans. This pairing is an example of fanon, which refers to the acceptation among fans.

As the result of this practice, they could make sense of self as being a part of larger community (Black, 2005). Fandom and its outcome should not be limited only to fans themselves, but this secondary text provides mass media producers the way to arrange their future outputs, which could be films, TV series, tone of music, and also live performance. Producers could know what fans need by learning from fan art and
fan fiction. The pairing of Black Widow and Hulk in the Avengers, for instance, was broadly drawn by fans before their love interest was portrayed in films. For music industry, the bands and producers could understand their fans’ need by reading reviews in fan communities. They could learn if fans are satisfied or unsatisfied with their music.

For Slash fandom, the female fantasy regarding romantic relationship of male characters, media producers of Smallville TV series (2001-2011) intended to choose the characters and write the plot for Slash fans to retell the story in their own version, because they knew that this fan practice could enhance their marketing outcome, similar to viral marketing in digital form (Meyer, 2013). The researcher also saw this kind of “Slash marketing” in musical bands. A group of her students made animation by tracing the pictures from actual music video of a K-Pop band. The shot that they chose was when a male artist kissed another male one. Earlier, the researcher, as a prior fan of J-Rock and Visual Kei bands, found that some Dir en Grey fans cut the clip that two male artists kissed each other on stage and made an animated Gif file for decorating their social network profile. Although no one knew that these artists might be actual LGBT groups, the way they kissed in front of the camera is a part of Slash marketing that persuades female fans to fantasy and spread their words about the bands.

Based on the previous paragraph, it could be concluded that firstly, original media, as primary text, are created to satisfy fans; second, they tell stories and create the belief in fans; third, fans create secondary texts in various forms to communicate and share value with other fans; and finally, media producers, in turn, learn from these
creations to improve their media to satisfy the fans. This pattern could somehow show
the interaction between the primary and secondary text, and blur the line between
producers, creators, and audiences. All could be a source of inspiration for one
another.

Form of Secondary Text

Fans may write fan fiction or draw fan art to protest against the original plot
that they do not like (Leavenworth, 2015). Just as artists create their artwork based on
how they want the world to be (Prigent, 2001), so too fans create fan work based on
how they want the original media to be. Although the distinction among the
practices of female fan artists and male geeks in online forum seems to be parallel,
both reflect their need regarding the original media. Male fans who considered
themselves as geeks provided information both to critique and to explore their favorite
text, while female fan artists wrote fan fiction and drew fan art to fill in the part that
they liked and removed their unwanted elements from the original media. Media
producers could gain benefits from both practices to understand the need of their
media consumers and to fix the problems in media found out by fans. Jenkins (1992,
p. 162) considers this fan contribution as the way to repair the original text. Even
though both practices were the outcome of media consumption and the output of fans’
desire, the communication patterns in both types of communities are very different.
For communication in female-based fan creation community, fans comfort and
encourage one another by using positive comments, which push them to keep writing
and developing their work (Campbell, Aragon, Davis, Evans, Evans, & Randall,
2016). For male-based geek community, fans contribute their online forums with
detailed knowledge and express their attitude toward the original media (Kohnen, 2014; Scott, 2015).

While both of these secondary text creators differently supported their fan objects; gender hierarchy, antiquated belief, and patriarchal social norm cause the conflict between both groups of fans. This could be seen in male geek or fanboys who looked down on other fans, both those female fans who were in geek community (Robinson, 2014) and those male fans who consume female texts (Dorsey-Elson, 2014). In Jones’ study (2015), male geeks disdained male fans who were addicted to a female text, My Little Pony, and this negative attitude might prevent male fans to be educated by positive text, just because of the gender into which they were born (Jones, 2015). These negative expressions against fans’ gender and gendered text could be called “tertiary text” that fans established from the appearance of the secondary text.

Moving away from ordinary art forms of fan creations, fan video or fan vid is another types of fan creation which was rarely mentioned in fan studies. Nowadays, technology allows fans to edit the video files of their favorite TV series. They could borrow songs from popular musicians and remake their music video by using clips from TV series. In fan videos, fans often tell the relationship among fictional characters that they want it to happen in the original media (Busse, 2009). Lately, it could be noticed that YouTube do not entirely delete fan video, but YouTube system automatically cites the original work and the name of copyright owner underneath the fan video. As a former fan video maker, the researcher would like to add another type of fan video, which is created by using the original work of the fan video maker, not
the video from entertainment media. When the researcher was in high school and in
the undergraduate school, she often created Flash animation to fit into the song she
liked. Animation production required much more effort and time, but the researcher
found that she has more freedom in composing the narrative than just editing the
existing video.

Some text has a similar producing process as fan fiction, but it is not
considered as a fan work. Some literary work, for instance, was written by borrowing
the plot from public domain work. Jane Austen's Pride and Prejudice, for example,
was reproduced in the movie format with the recreated narration including zombies.
However, Jane Austen's Pride and Prejudice has also been rewritten in Fanfiction.net
and it is still called, “fan work” (Leavenworth, 2015). The researcher would like to
question the standards to classify the authentic work and fan work, if it is reproduced
based on the public domain work. In Thailand, many stories were written by using the
plot of public domain work. Ramayana, for instance, was rewritten from the original
Indian epic by adapting it to fit into Thai tradition and moral beliefs. Moreover, Siam
history regarding wars with the Burmese was often rewritten as novels. With the same
static historical narration, Thai authors have reproduced the historical storytelling in
various versions, e.g. in movie format shown in both television and cinema.

Although many scholars have tried to understand various aspects regarding fan
recreated work and fan fiction writing activities, the majority of fans are not fan
fiction authors. The Internet allows fans to build a secondary discourse based on the
original text, so that they could discuss their favorite TV series, comic, and music
bands with other fans who share the same interest. With a common interest, fans share
their identity, value, emotion, idea, feeling, and canon knowledge (Kuznetsova, 2015). Shared identity as fans provides numerous spaces for people with different races, cultures, classes, and ages to interact to one another. Moreover, fans do not only communicate to other fans who have similar opinion, but they also produce secondary discourse to protect their object of interest (Van den Bulck & Van Gorp, 2011). This kind of discourse is often seen in fan activist activities.

Rhetoric Discourse of Fan Activities

Fan activists create another form of rhetoric discourse with full of symbolic cues. They include motto, phases, quotes, and familiar words shown in their favorite TV series, animation, or songs (Corciolani, 2014; Whiteman, 2009). Symbolic convergence theory could help explain the using of these words (Littlejohn & Foss, 2011, p. 206). By being informed with these words, fans understand the shared meaningful knowledge and background of these words. In fan fiction community, everyone shares similar knowledge about the fan object, which is called, “canon” (Kuznetsova, 2015). They know the plot, setting, and character development of their favorite object of fandom. Some fan scholars believe that people outside the community would never understand fan fictions as much as fans do (Berkowitz, 2012). Interactivities inside general fan community show the similar process of shared meaning as in fan fiction community, that fans could share inside jokes where only insiders can realize what they are (Berkowitz, 2012). Hand gestures in music fan community (sign of the horns or obscene gesture) are another form of meaning sharing. Rock and heavy metal fans may understand the particular hand gestures as
positive encouragement for their favorite musicians, but such the hand gesture is viewed as impolite posture by the outsiders.

Fan discourse is a type of secondary discourse and also an Internet phenomenon. Fan scholars together have constructed the knowledge about the structure, format, and characteristic of the discourse. Then, fan phenomenon can be viewed as a theory to evaluate other types of secondary discourse, citizen journalist communication (Coombs, 2016). The dimensions that make fan discourse different from other secondary discourses are how fans respect the original text and how fans perceive the hierarchy or power differentia that happens between fans and their object of interest, and sometimes, among fans themselves. General secondary discourses may have other types of relationship between practitioners and their target object. For example, when people from a developed country discuss the news about people in an underdeveloped country, they might perceive that their power is higher than the targets.

Because fan activities are various and the relationships among practitioners are complex, it is worth to identify the outcome of being a part of fandom whether it can generate a prosocial outcome on both fans and society. In that case, fan scholars would need to suggest the way to use such the phenomenon to benefit the society and young generation. On the other hand, if the results are negative, fan scholars should establish the strategies to protect fans from negative effects. The next section will review the impact of being in the fan subculture on other related social sectors.
Negative Light

Media consumers can be affected by media content. In a similar manner, fans are also media consumers with a higher rate of media consumption, and cult fans are those who consume the media at the longer and greater amount compared to general fans (Greco, 2015). Hence, fans were viewed as unreasonable people who extremely loved their object of interest without critique (Jenkins, 1992; Stanfill, 2013). This stereotype does not allow fans to classify the prosocial or antisocial contents in media. In other words, both prosocial and antisocial contents are easily able to result in fans.

Violent Content

Problematic media with a large number of fans and consumers have been examined by media scholars. The relationship between media violence and trait aggressiveness has been confirmed by meta-analysis of Anderson and his colleague (Anderson & Warburton, 2012). Video game content is not only the factor that causes players' aggressiveness, but competitiveness is also another important factor (Anderson & Morrow, 1995). Similarly, content in other media, such as television (Josephson, 1987), movies (Bushman, Jamieson, Weitz, & Romer, 2013), and comics (Bauer & Dettore, 1997), could produce an aggressive and anti-social thought in the viewers. As a result, the rating system has been used to control the violent content in movies. Nevertheless, the level of violence in PG-13 is extremely higher in later movies than in early ones (Nalkur, Jamieson, & Romer, 2010). This means adolescent in later generation would watch the violent scene, because of the less stringency in rating system.
Violent content in media is not the only thing that the scholars have concerned. Myth, stereotype, and false belief are another important issue to worry about. Social Learning Theory (Aker, 1973) is used to describe the way young adolescents learn things from media. These people are lack of prior experience in the real-world situation, so they might select some media contents to use as their first time experience, or to use as the script to process their life and make a decision in a particular circumstance (Huesmann & Malamuth, 1986). The worst case shown in a research study is how murderers imitated the killing methods in films to kill actual people (Helfgott, 2015).

Gender Role and Stereotype

Feminist researchers had questioned whether Disney films benefit or harm young girls. The exposure to Disney fairy tales animated films could mislead the young girls about their gender role (Arunrangsiwed & Pasomsat, 2016). With lack of experience regarding gender role, the young girls would absorb media content and use it to develop their gender identity (Butler, 2013; Popa & Gavriliu, 2015). The finding of previous studies shows that early Disney films are more harmful than later ones. Cinderella and The Little Mermaid, for instance, taught young girls that (1) women have to wait for men to help, (2) women cannot be happy without men, and (3) powerful women are wicked (Garofalo, 2013; Morrison, 2014). Later Disney films give a better personality and gender role to female characters, which is relating to the concept of second-wave feminism (Hovdestad, Hubka & Tonmyr, 2009; Rochester, 2014; Wilde, 2014).
Likewise, some comic provides an inappropriate gender role for female characters, as seen in early superhero work of Marvel Comics (Dunne, 2006). These Marvel female superheroes were often fragile and passive. Recently, Marvel Comics has solved such problems, by releasing the book of female superhero, X-Men (2013). For comic books in general, they reinforce the rape myth in such a way that the rape is not harmful if men are raped by women, and also women without supernatural power would always be the rape victims (Garland, Branch, & Grimes, 2016). Crime comics is also another type of graphic novels with violence against women (Lavin, 1998), and fortunately that they are rarely found today. Comics and movies often portray fighting women to impress male audiences (Kittredge, 2014) regardless of gender norms of women. This teaches the false belief to young boys, and makes them misunderstand what the actual women are.

As mentioned earlier, the negative stereotype of fans that is considered by the outsiders is that they love a particular object without a proper reason. Perfect Blue is an animated film that portrays such the stereotype (Norris, 2012). Honestly, fans of Perfect Blue gave positive reviews about the film, but failed to critique its negative stereotype of fans. Without media literacy skills, fans cannot recognize that they are blamed by the media they like.

**Violent Expression in Fan Practices**

Negative outcomes of being a part of fandom are also shown in fan studies. Higher level of identity salience as sport fan can cause a higher aggressiveness against the rival sport team and its fans (Rahmati, Kabiri & ShadManfaat, 2014). Some serious fans use trash talk or impolite words to blame the celebrities they do not like,
and also blame their fans, too (Han, Kim, Kim, Jun, & Kim, 2014). Both examples illustrate that physical and verbal aggressiveness were used by fans to attack the out-group members. In the same fan community, fans have built the hierarchy as well as they do with outsiders (Reysen, Lloyd, Katzarska-Miller, Lemker, & Foss, 2010; Whiteman, 2009). Fans of a famous video game, Silent Hill, reject the new community members who joined their online forum (Whiteman, 2009). It was even worse when there is no equality between genders in some fan communities, as female fans obtain a lower status than male fans (Kohnen, 2014).

Moreover, as fans are aggressive in interpersonal communication, aggressiveness and violence are also used in intrapersonal communication. This violence appeared in the group of male Slash fan artists (Brennan, 2013). Slash is a type of fan art depicting the homosexual relationship between male fictional characters from original media (Arunrangsiwed, 2016; Salmon & Symons, 2004). Male fans who produce Slash fan art express their violent thought through their artwork. It is a type of hegemonic masculinity violence that men need to have the power over other men (Brennan, 2013; Dennis, 2010).

Positive Light

Berkowitz (2012) studies the content in the New York Times and found that the public does not have a negative attitude on fandom, but some fan scholars just focus too much on a single negative issue. The negative aspect regarding fandom might be constructed by outsiders who have no experiences as fans. Herrman (2012), who is both an insider in punk culture and a scholar, is unsatisfied that early researchers misunderstood about punk culture.
Prosocial Fan Activities

Some fan studies showed the prosocial activities that fans join together and help the society. FandomAid is a campaign that fan fiction authors and other fan creators sell their fan work to raise fund for charity (Romanenkova, 2014). Some fan activists do not run the campaign just for their need, but they expand their goal to meet the society need. Football fan activists in Australia, for example, protest against football players' sexual assault crime (Dimitrov, 2008). Another group of fan activists discussed in a research study is on the website Racebending.com. Their web administrators have sent a prosocial message to the media organization to consider removing whitewashing in films (Lopez, 2011). This group of fans started their campaign when Asian characters in an animated film were replaced by white actors when it was made into the movie format (Lopez, 2011). Although this issue was ended in 2010, Racebending.com has never stopped their campaign. Today, they still run their website to improve the portrayal of multi-racial characters in media.

Prosocial Media Consumption

Across several studies, the use of prosocial media to improve manner and positive characteristics in young adolescents has been introduced. Prosocial media do not have to be the media which were primarily created as a part of a particular classroom, but they can be movie, website, game, and other types of media, which bring about positive effects on media consumers. Disney animation could be considered as prosocial media, since Asawarachan (2015) found that Disney animated films could teach morality to young audiences. However, prosocial media are rarely explored by media scholars, unlike media violence which is often found as research
topics. Gentile, Coyne, and Walsh (2011) had conducted a longitudinal study and found that consumption of violent media can affect the adolescents in the two-year-later period through negative effects which are both verbal and physical aggressiveness.

Just as media violence could result in the long-term negative effect, prosocial media should also result in a long-term positive outcome. The scholars could raise a similar question, if young adolescents could learn and imitate prosocial behaviors from media as well as they did with anti-social behaviors (Hogan, 2012). The study of Ostrov, Gentile, and Crick (2006) shows that media exposure can cause both prosocial and aggressive behaviors in pre-school children. For using prosocial media alone, prosocial media could help reduce aggressiveness in young children (Greitemeyer, 2011). For example, prosocial video game can be used to increase prosocial thoughts (Greitemeyer & Osswald, 2011), and help reduce physical aggressiveness (Saleem, Anderson, & Gentile, 2012a). The same scholars, Saleem, Anderson, and Gentile (2012b) had tested the effect of using prosocial video games in another study which shows that playing prosocial video game can increase helpful behaviors and decrease hurtful behaviors (Saleem, Anderson, & Gentile, 2012b). Conversely from problem music, when prosocial content is included in song lyrics, it would result in prosocial thought, feeling, and behavior in its audiences (Greitemeyer, 2009). Since prosocial media have an effect on audiences' feeling, they can improve the level of empathy in media audiences (Prot et al., 2014), which is one of the positive traits that lead people to understand others' feeling.
Social Change

Since popular media can guide people's behaviors, media producers should ethically present the content to generate prosocial belief in media audiences (Brown & Singhal, 1990). To add prosocial message in media also helps solve social problems (Brown & Singhal, 1997). Popular media producers could set their agenda to lead to a social change, such as raising the problematic issues about the poor and inequality in the society (Brown & Singhal, 1993). Some media have been intentionally developed to teach people, such as to promote sexual responsibility (Keller & Brown, 2002). Moreover, an animated film created by Thai producers, Khun Tong Dang the Inspirations (2015), was created to teach young children about bravery and gratefulness (Mongkolprasit & Arunrangsiwed, 2016). This kind of media meets the suggestion of scholars in the area of media study and media literacy, where the company should consider more about the wellbeing of society than thinking solely about their own profit (Sliburyte, 2009; Somsert, 2013). Private company is not only the organization that should be aware of this issue, but scholars suggested that school, policymaker, and government should increasingly concern the impact of media, too (Strasburger & Hogan, 2013). That is, media should be used to educate people in both behavior improvement and knowledge enhancement.

Academic Use of Fan Fiction

Several fan scholars identify the benefits of using fan fiction writing activities in academic setting as a part of creative writing assignment and assignment of other ESL classes, and this is a new strategy of incorporating media in classroom. Earlier media used in classroom are web-based learning, educational application, animation-
based learning, and other types of prosocial media. Researchers in the area of education have tested the capability of using educational media in classroom, before fan fiction writing was suggested to be a part of writing course.

Education media offer much benefit to the students, including generating a better class performance, a higher intention, and increasing intrinsic motivation. Animation-based learning helps improve the knowledge for students with low-prior knowledge, better than those with high-prior knowledge (Zhu & Grabowski, 2006). Visualization, similarly, could make the students understand the process of universe better than traditional lecturing (Badre, Beranek, Morris & Stasko, 1991), because using picture and words together may increase the level of understanding in audiences better than using words alone (Mayor, 2002; Mayer & Moreno, 2002; Rieber, 1990). Nonetheless, creating education media might take a long time and require the skills as website or game developers (Arunrangsiwed, 2014a). Consequently, some scholars suggested the teachers use the existing media to engage students' attention in classroom. For example, teachers might include cartoon characters in mathematic book (Turan, 2014). In this case, teachers of young children had formerly used comic in classroom to encourage the students to read and expand their vocabulary (Wright, 1979). In addition, non-fiction comic use in classroom can create enjoyment, inspiration, and excitement in students (Decker & Castro, 2012).

All previous examples are how teachers use the media as a knowledge-insert method for their students. In fact, this kind of visualization and narrative can be used to support the expression of the students, too. A study by Rättyä (2013) indicates that speaking and drawing together can evaluate students' skills in language grammar
better than using speaking alone. Tasker and Dalton (2008) assigned their students to watch the animation and draw a storyboard (picture sequence) to show their knowledge about the molecular switch. This implies that students can express their knowledge and skill received earlier by using available media, such as drawing tools or computer programs. Similarly, to involve fan fiction in classroom practice can help students express their idea and their language skills. As mentioned in previous studies, moreover, drawing picture is also an effective way for the students to express their idea and knowledge (Cronin-Jones, 2005). The researcher of the current study encourages the teachers and university lecturers to incorporate fan art in classroom as well as they have done with fan fiction.

Academic-Related Skill Improvement

Fan art, fan fiction, fan video, fan poetry, and cosplay activities are the products of fans' enjoyment, that helps fan to keep producing such artwork. They do it without force from others, similar to a proverb, “A volunteer is worth twenty pressed men.” Fan authors write fan fiction because of their own motivation, and this motivation could drive fans to make a better fan work. Likewise, teachers would not want to force their students to work harder in the assignment, but they would need their students to work harder with their own motivation. Doujinshi artists have proved the high level of motivation in fan artists, since Doujinshi is a comic book, which requires effort in both drawing and plot development. After writing a fan fiction, fan authors would seek the way to improve their writing skills to generate a better work (Bolt, 2004; Jenkins, 2006). Plot development is another skill that fans gain from writing fan fiction (Land, 2010). Similarly, creating fan art provides an opportunity
for fan artists to have a better drawing skill (Chen, 2007; Manifold, 2009). Making costume for a cosplay event is considered as another kind of craft making, and fans who created costumes by themselves have earned a skill of making mixed media work (Chen, 2007; Manifold, 2009).

Kate, an informant in Roozen's study (2009), has tried using various kinds of tools to make a better fan art. She began with drawing on paper, then drawing in tablet, and finally coloring in Adobe Photoshop. Hence, the ability to use multiple tools does not only benefit students in academic life, but also provide them an opportunity to work in their interesting area (Manifold, 2009), such as some fan artists or Doujinshi creators have grown up and become professional artists. Lam (2010) showed an example of a former Doujin gamer who later owns a game production company. This implied that fan motivation in making fan work can drive fans to their life achievement.

Some fan scholars do not believe that joining a fan fiction community could help fans improve their writing ability. Magnifico, Curwood, and Lammers (2015) conducted a content analysis in two websites that fans generally publish their fan fiction, fanfiction.net and figment.com. They found that most comments are to inform the author positively, but not to point out the mistake or suggest the way to improve writing skills. Moreover, some fan fiction authors are discouraged by the community, when their fan fictions are banned or blamed. This case happens when fans violate the agreement of community, such as giving the fictional characters an uncommon habit, called, “OOC” (Out of Characters) (Kuznetsova, 2015).
While the study of Magnifico, Curwood, and Lammers (2015) shows that most comments for fan fictions do not direct fan authors how to write a better work, the researcher of current study argues that without critique comments, fans are still able to improve their writing and drawing skill. To post fan fiction or fan art online is like to join a contest. Fans will not need their fan art to be the worst in the gallery. Like an artist who need one's artwork to standout from others' (Arunrangsiwed, 2015a), fan artists should also need their fan art to be seen and famous in the community.

Previous fan studies suggested that the motivation to improve fans' writing skill is not based on the critique in comments, but fans improve their writing ability because of their motivation received from the positive comments (Schott & Burn, 2004) of “mentors” or people who commonly provide a cheerful comment for fan fiction authors. Some users who gave negative comments are often blamed by other mentors and users (Campbell et al., 2016). The motivation to continue doing fan work with a higher quality can be described by two drivers, which are encouragement and inspiration (Campbell et al., 2016). As shifting away from the ordinary mentoring process that fan authors post their fan fictions before receiving the comments from the mentors, Lammers (2016) showed another process which was done by an active fan who was an active learner. The participant in the study of Lammers (2016) did not wait for mentors to comment her work. Conversely, she sought for people to proofread her fan fiction, and sought for fan artists to create illustrator for her fiction.

All of these evidences make fan practices different from classroom practices. Fan scholars who are writing teachers suggested that fan fiction should be a part of
writing assignment (Black, 2006; Black, 2009a; Land, 2010; Manifold, 2009). Reading fan fiction should help increase the amount of reading in students who do not like to read a book (Berkowitz, 2012). This is similar to the suggestion of early study in comic use in classroom, which could engage young children to read and expand their vocabulary (Wright, 1979). Fan fiction, as well as comic books, should be able to help students who have reading problems (Berkowitz, 2012). Therefore, school administrators and librarians may provide their students a section in the library with tangible books of fan fictions (Land, 2010).

More recently, the studies in this area point out that the benefit of fan fiction use in classroom is greater than to increase the amount of reading, learning motivation, and to engage students in writing class. Fan fiction use in classroom can improve learning activities to meet the requirement in the 21st century skills (Bahoric & Swaggerty, 2015). With fan fiction assignments, the students will use digital media to explore others' work and publish their work online. This process motivates them to learn by themselves both inside and outside classroom, and also enhance their creativity in plot construction (Bahoric & Swaggerty, 2015). Since the original media contain a strong story setting and character development, fans could borrow them to rewrite in fan fictions (Jenkins, 1992, p. 51-52). On the contrary, when the teachers assign their students to write their original story, the students might worry about the setting and character development. This concern will not occur when they have to write a fan fiction, because plot and characters do exist in the original media (Jessop, 2010). These evidences offer an assumption that fan fiction use in classroom should help minimize students' uncertainty.
Without guiding by the teacher, some students brought fan practices into the classroom by themselves. Fans may merge their knowledge from classroom with their beloved story from entertainment media and develop both of them to be fan art or fan fiction. This way will help fans to remember a difficult lesson easier (Roozen, 2009), because people can remember things in a narrative format, which contains a causal relationship between each part of knowledge, better than in a fragmented format.

While most fan scholars identify the benefit of fan activities in classroom, some of them also provide the detailed strategies of how to run the classroom with fan activities. Teachers who teach history or classic literature, for instance, could assign their students to draw fan art of classic literatures (Zimmerman, 2014). This would help them visualize the scene in the literary work. Moreover, the teachers will be able to indicate how students understand the literary work (Zimmerman, 2014). Bahoric and Swaggerty (2015) identified various ways of using fan fiction in classroom based on the grade level of the students. That is, fan fiction can directly help increase media literacy skills in older students, as their teachers may assign them to rewrite the original media by avoiding stereotypes, gender inequality, and violence.

Although Bahoric and Swaggerty (2015) suggested teachers use fan fiction activities as a tool to teach their students to avoid stereotype belief and myth in media, Vasilyeva (2015) found that some fan fictions repeat the stereotype shown in media. The example raised in the study of Vasilyeva (2015) was the fan fiction of a manga-style animated series, Hetalia: Axis Powers. This series contains a lot of racial stereotypes, in which each cartoon character represents a whole country, and all stereotypes of the particular country were added into the character. Fans of this series
wrote about a female character, Belarus, whose characteristics were borrowed from news and other popular media. Such these racial and gender stereotypes are opposite to how Belarusians view themselves (Vasilyeva, 2015). When teenagers are engaged in online community alone, they might not know that media are teaching them an inappropriate thing. However, with fan fiction writing in classroom, teachers are able to guide the students to be active media consumers.

Copyrights Issue: Point to Concern

While fan fiction community and fan fiction writing activities in classroom bring about a lot of benefits for fans and students, there is an unsolved problem related to law and policy. Fans use the plot and characters from the original media without permission from the copyright owners. Although many authors and copyright owners do not have problem with fan fiction activities, Ann Rice, an author of original media, are unsatisfied that fans rewrite her story (Jessop, 2010). However, since copyright laws aim particularly to protect the benefit of copyright owner, writing fan fiction does not take any benefit from the copyright owner, but instead supports the copyright work and make it more famous (Kalinowski, 2014). Fan fiction function is similar to word-of-mouth marketing; hence it will be a bad marketing strategy if the company tries to take down fan fiction online community (Romanenkov, 2014). On the contrary, the company should find the way to support fan fiction related to their own media (Berkowitz, 2012). Romanenkov (2014) suggested a method to solve the issue of copyright in fan fiction, that the company should create the space in their own website and let their fans upload fan fiction into the space. Thus, fans have to sign an agreement to transfer the license of their work to
the company. This method could be allowed in the current copyright law, and the company will be able to control the quality of fan fiction, such as screening out the pornographic content (Romanenkova, 2014).

Objectives

Joining fan community as active fans can benefit young adolescents in various aspects. Fan creators, such as fan artists and fan authors, obtained their freedom to recreate original text to satisfy themselves and others with the same identity and canon knowledge. This fan communication pattern includes the form of visual image, moving image, and verbal text in online space, sending from fans to fans and to outsiders.

Fan creations could be read as the output of identity transformation and integration. An individual with the identities as fan, artist, author, consumer, Internet user, and student could generate fan work used to express themselves and their world view both to support and be against the original text, both to entertain and disturb the audiences, and both for fans with canon knowledge and for people without the similar knowledge, such as a teacher. This fluid identity in individuals destroys a clear cut between media consumers and creators (Jenkins, 1992, p. 280), and makes fan culture a unique area to be explored in research studies. Moreover, in the aforementioned part of this dissertation, the mainstream media producers could have a great chance to learn fans’ taste and need through fan creations, so they could develop and adapt their media production fitting in fans’ need or shifting away from fans’ expectation. The study of primary text by fans and of secondary text by media producers help complete the loop of communication model.
Fan identities create passion in doing fan work and motivate fans to expand the original text without limited boundary. This process of making fan work has been suggested to be used in classroom to improve the interactivities between teacher and students, especially those with in-class communication problem (Simon, 2012). The outcome of making fan creation in classroom context should be explored and identified with a quantitative approach to ensure future teachers and educational practitioners to make the decision to use fan activities for their classes.

The objectives of this study were

1. To identify the influence of fan identification on the amount of fan activities in class
2. To test the effect of both fan identification and the amount of fan activities in class on learning motivation
3. To examine the effect of fan activities in class on four mediating variables, which are uncertainty, self-esteem, enjoyment, and expression
4. To indicate the contribution of four mediators on learning motivation.

Scope of the Study

Scope of Population and Samples

Since the objectives of the current study were to identify the effectiveness of using fan activities in classroom in terms of improving self-esteem, enjoyment, and expression, and diminishing uncertainty, and the effect of which on learning motivation; the population was students who were fan creators with experiences with
fan activities in classroom, regardless the territory they lived in. Fan creators, whether from Asian or Western countries, have done similar practices. In Lamerichs’ study (2013), for example, she found the similar pattern in participating cosplay community in the United States, Europe, and Asia. The only differences were photography etiquette and the origination of costume making. Comparatively, manga or Japanese comics have been spreading to Europe before 2000s, so fans from many countries have been influenced from the same text, even it is created by Asian (Bouisson, Pellitteri, Dolle-Weinkauff, & Beldi, 2010). For fanfiction.net, the majority of users were from North America, Australia, and various countries in Europe, and they have shared their alternative story to fulfill the missing part in original media (Alexa.com, 2018). These evidences could describe fan practices of fans from all around the world, that they have similar pattern of practices, including their media consumption, fan work creation, and relationship with one another in fan community.

Because the Internet has transformed fan creative practices shown in fanzines with editors to be in online space where everyone has the equal right to publish their work, online space became one of the most significant parts of fan creation activities and also the showcase where fan creators could gain feedback from various audiences from other countries. The participants of current study were drawn from online users in the website with a large number of fan creators, and these users had to be students taking the art-related course with experience of doing fan activities. The number of sample were at least 208, but not exceed 420.
Scope of Data Collection Time Period

The researcher studied the concept and the early exploration in the area of fandom by reading other research studies and academic papers during 2015 and 2017. Late 2017, the researcher began her data collection in online community, in which many fans were. The selected online community was Deviantart.com, because it allowed fans to post any kind of fan creations, such as fan art, fan fiction, photograph of dolls and cosplayers, Flash 2D animation, and games.

Scope of Variables

Quantitative approach was employed in the current study to confirm the prior belief regarding the benefit of fan activities in educational context. The variables to be studied were as follows:

1. Independent variables: fan identification and fan activities done in classroom

2. Mediators: students’ enjoyment, self-esteem, expression, and uncertainty during doing class activities

3. Dependent variable: students’ learning motivation

Definition of Terms

Learning Motivation

Learning motivation is the process that students or learners are aroused and directed to learn, including self-studying either by inner psychological force or outside factors. Students with learning motivation would be likely to maintain their
effort and desire to achieve their expected skills, knowledge, and academic goal (Feng, Fan, & Yang, 2013).

Uncertainty

Uncertainty is an emotional state affected by the interpersonal interactivity, and resulting in an intrapersonal communication. Characteristics of uncertainty are stressfulness and psychological strain regarding unsure outcome and future (Matthews & Scott, 1995). The term “uncertainty” is very close to anxiety, as seen in uncertainty reduction theory. Uncertainty could be caused by dilemma, stressful event, identity crisis, and conflict with others. The current study focused into uncertainty in class and during academic course, such as uncertainty regarding teachers’ decision, isolation in group assignment, class activities, and examination.

Self-esteem

Self-esteem is a kind of self-judgment that an individual perceived one’s own self-worth, both toward oneself or as a part of larger group (Crocker & Major, 1989). Self-esteem could be constructed by extrinsic experience and intrapersonal communication, and it could influence the individual’s attitude, behavior, and communication pattern toward others. People with self-esteem would believe that they have ability to do things at least the equal level with others. Their positive feeling toward self is different from which of narcissists. This is because narcissists’ perceived-self would be affected more by others’ attitude, blame, and praise (Freis, Brown, Carroll, & Arkin, 2015).
Enjoyment

Enjoyment refers to positive emotion, playfulness, joyful experience, and pleasure in doing something (Lin, Gregor, & Ewing, 2008; Nah, Telaprolu, Rallapalli, & Venkata, 2013). In the current study, enjoyment is positive emotion occurred during class period, such as class satisfaction, excitement regarding class activities, and joyful interactivities with other classmates.

Expression

Expression is to display the emotion, identity, opinion, skill, and knowledge of oneself to others (Baxter, 2006). The purpose of expression could be emotionally self-serve, and some may express themselves for others to recognize their worldview and abilities. Academic expression was used as a variable in the present study, which includes both verbal and visual expression. In-class expression could be considered as a part of learning activities. Teachers would be able to evaluate the class by noticing any form of students’ expression.

Fan Activities

Fan activities are the activities of fans that are related to their objects of interest. Fan activities could be both passive and active. Passive fan activities are collecting DVD, toy figures, and posters; watching movie and TV show; and attending sport matches and live music performance. Active fan activities are not just to purchase and collect the fan objects, but they are the creative activities to extend and contribute to objects of interest, such as writing fan fiction, drawing fan art, making mask and costume for cosplay, and other fan creative work (Arunrangsiwed & Beck, 2016). “Fan activities in class” is an important variable of the current
research study, used to indicate the amount of fan activities that students do for their class.

Fan Creations

Fan creations are the output of active fan activities, including fan fiction, fan art, fan doll, fan video, manip, fan doujinshi, and cosplay activities, —both costume making and stage performance—.

Figure 1.1: An Example of Fan Art Based on the Simpsons
Figure 1.2: An Example of Fan Doll Based on Japanese Musicians

Figure 1.3: An Example of Cosplay Based on Red Hood
Figure 1.4: An Example of Fan Video or Fan Vid Based on a US Musician

Fandom

Fandom refers to fans’ self-perception or fan identity developed as they are a part of fan community (Schroy, Plante, Reysen, Roberts, & Gerbasi, 2015).

Fanship

Unlike fandom, fanship refers to fans’ self-perception as the fans of object of interest, which is about psychological connection of fans toward their favorite texts or celebrities, without consideration about other fans and fan community (Schroy, Plante, Reysen, Roberts, & Gerbasi, 2015). In the mentioned cited paper, fandom and fanship could be combined as one variable, which is fan identification.

Fan Identification

Fan identification is the way fans identify with their object of interest and bring its values or concept to construct their identity. Fan identification could be described as the psychological attachment of fans to their object of interest, which
could result in their personal and emotional commitment toward it (Dimmock & Grove, 2005). In the current study, fan identification also involves their connection toward in-group and out-group. Out-group refers to both general people and perceived enemy or rivals.

Fanon Knowledge

Fanon knowledge refers to the knowledge regarding the agreement among fans (McCain, 2015). This agreement is contructed based on the canon knowledge or the existing data from the original text, but it is bent by fan needs and blended with the narrative of other texts. One fanon could be built in another existing fanon. It could be in the form of narrative or story setting that is constructed to serve fans’ self-need.

Benefit of Study

To involve fan activities into classroom contexts is the way to blend students’ free time activities with academic lessons, that many fan scholars found that this learning strategy would help increase students’ enjoyment and learning motivation. The current study would help confirm these qualitative findings to ensure the teachers and faculty members regarding the benefit to using fan activities as a part of class activities. The expected benefits of fan activities used in class that could be confirmed in this study are to improve learning motivation, enhancing self-esteem, enjoyment, and expression, and also to reduce students’ uncertainty. Whether these positive outcomes were found in the research findings or not, the capacity of this learning strategy would be indicated, and could be used to provide future directions to both fan scholars and educational researchers.
CHAPTER 2

LITERATURE REVIEW

The current study included seven variables, where the researcher would review them, beginning with independent variables, which are fan identity and fan activities first, following by dependent variable, which is learning motivation. Finally, four mediators, uncertainty, self-esteem, enjoyment, and expression are reviewed. Conceptual framework and research hypotheses are developed accordingly.

Variables

Fan Identity and Fan Activities

The time of fan culture began before the age of computer-mediated communication. The communication of fans had been one-way communication for long time. General fans did not have a chance to reach their idols or people who worked on or created their object of interest (Jenkins, 1992, p.14). Although some fans did, it does not mean that their message would be listened (Jenkins, 1992, p.45). Later, Web 2.0 has incredibly changed communication pattern in fandom. It had changed individuals’ intrapersonal communication to be the form of text in mass media that allowed interactivities from worldwide (Appadurai, 1996). This Web 2.0 does not only allow fans to freely express their opinions and expand the story of original media, but most of these fan contributions would still be online and waiting for unexpected message receiver to find out (Baym, 2007). This feature of Web 2.0 could be considered as an important part of fan identity construction. It could be imagined that when a media audience who just finished watching a TV episode and loved the story, existing online text is available for him to earn knowledge regarding
the object of interest. Fan contribution, both created by geek fan boy or fan creations, would be an alternative resource for new fans to dig into the deepest part of fanon knowledge and develop their fan identity to continue the loop by contributing to fan communities using blended data from original media, from early fan contribution, and from his own prior experience or other identities.

Since one or more identities could be combined and transformed to be another unique identity (Young, 2007), fan identity could be mixed and blended with other identities and cause a specific way to produce fan creations and contribution. This kind of identity also helps young fans to develop their sense of self, expected self, and learn about the world around them through the lens formulated by identity (Lammers, Magnifico, & Curwood, 2018). Brown and Schulze (1990) found that fan identity and racial identity caused different perception on the same source of media, and this could be an evident that fan identity also affects the way people view the world. Most fan scholars discussed fan activities as the result of fan identities, such as their forms of communication; group communication, fans-to-media, fans-for-fans, and fans-to-anti-fans (Littlejohn & Foss, 2009). They studied fans’ language, belief, structure in community, dress code, and relationship among them, all of which help construct fandom as a culture (Gooch, 2008). Nonetheless, Jenkins (1992, p. 19-20) helped remind the scholars who studies fan identity to break the sphere of fandom to be in real-world setting. Fan activities as a product of fan identities could be to watch the show, to attend the concert, to collect the figure and many other things related to the object of interest. Moreover, fan identity and this practice could also affect fans’ world view and script in their routine. They would think and act according to the
essence of their object of interest (Jenkins, 1992, p. 19-20). Spider Man, for instance, shows its value in the quote that with great power comes great responsibility.

One of the major kinds of fan creations written in academic papers is fan fiction. It has been known that storytelling is a part of human evolution, and these communicative activities were influenced by the identity of the storyteller, who tells the story through one’s point of view (Bers & Cassell, 1998). Fan creators and fan authors did not only simply retell the story, but they created the alternative version (Schattenherz, 2016) by borrowing the material from original media (Jenkins, 1992, p. 49-52), and mixing with their identity and prior experience (Black, 2006). This communicative practice helps strengthen belief inside fandom, convey meaningful message, stabilize fan identities, and helps fan authors create a sense of self as a part of community (Black, 2005).

For fan community in general, it also helps enrich fanon knowledge from fans to fans (Tsay-Vogel & Sanders, 2015). Its sphere is not enclosed, but when it is disclosed to the space outside, it helps fan even better to solidify their identity (Tsay-Vogel & Sanders, 2015). When fans have a chance to learn what in-group and what out-group is, the clear separation would also reinforce self-concept and self-esteem (Keaton, 2013). This identification is a part of social identity theory of Tajfel and Turner (1979), where fans form their communication differently toward in-group and out-group members (Cheung, Chiu, & Lee, 2011). Before the beginning of interpersonal interaction, fans would develop bias by using intrapersonal communication, which in-group bias is constructed to solidify their identity and reduce uncertainly (Gudykunst, 2005). As the result of this, some groups of fans
rudely look down on other groups of fans (Han, Kim, Kim, Jun, & Kim, 2014). Out group could also refer to media producers such as comic publisher, celebrity, and record label. Fans who are high in fan identification would fight against the hegemony to protect the text they love, even many times, the hegemony did not care about die-hard fans since they intend to make profit from general fans (Jenkins, 1992, p. 30, 45).

Being stated in the previous paragraphs that fans construct communication pattern by using in-and-out group bias, this could be described by social identity theory of Tajfel and Turner (1979). Another important theory that helps explain fan communication based on their identity is Burke's identification theory (Burke, 1969). The individuals have both forced and choosing-change identity. Choosing-change identity refers to the identity that people are free to seek and obtain as their own identity without being forced by others (Young, 2007). Fans have made their own choices to become fans of objects of interest. The objects of interest could be famous people, TV series, films, animation, books, comic, and others. In the meantime, fans have shown their identities to others whether in verbal or visual communication, as it could be seen in fan conventions, sport matches, and online fan communities. Generally, fan conversation is assumed to be about the discussion regarding their object of interest, but fan activists are those who protest for something related to their object of interest. This means that the public could still understand fan activists’ identity as fans, but they expressed their need in different ways apart from general fans. Since fans have made their own choices of identity and their choices are shown to other people, they will need to maintain their identity to support their choice. This could be described by confirmation bias (Wason, 1960).
To support the chosen choice is not the only reason that an individual needs to maintain their identity. The individuals could maintain their identity to avoid identity crisis and identity uncertainty. Identity crisis and identity uncertainty occurred when the individuals are unsure about their identity (Szabo, 2015). They might question whether this identity is suitable for them, whether this identity is good enough for them, or if they might not be good enough to use such the identity. When people are not sure about who they are, they lose a certain level of self-concept (Szabo & Ward, 2015). Self-concept is associated with self-esteem (Rosenberg, 1989), where low self-esteem was known as the cause of various negative life-outcomes (Creemers, Scholte, Engels, Prinstein, & Wiers, 2012; Hawton, Rodham, Evans, & Weatherall, 2002; North and Hargreaves, 2006; Sowislo & Orth, 2013). Based on these evidences, people would need to avoid all these problems by maintaining their identity.

In the area of fandom, a number of fan studies have tried to identify the identity construction process during joining fan community and engaging in fan activities. To interact with other fans in community can bring about identity development (Black, 2006). Writing fan fiction and showing it online are also a kind of interaction which is another way to develop one’s identity. To create such fan work helps young adolescents to understand who they are and discover their identity. This identity, constructed during engaging in fan activities, does not need to be fan identity, but it can be anything that fan fiction writers perceive about themselves during writing fan fiction, such as emotional impact and the involvement in objects of interest (Bahoric & Swaggerty, 2015).
As it was known that most participants in past fan studies could develop their identity through engaging in fan activities without being interrupted by their physical or mental problem. However, a fan in the study of Cook and Smagorinsky (2014) had pervasive developmental disorder or had a low prior social skill. Later, she developed her social skills and developed sense of self by joining anime (Japanese cartoon) community. She got encouraged to develop her anime-style drawing by other people in the community (Cook & Smagorinsky, 2014).

Fans and fan scholars give a more respect to the way people construct their second identity than those mentioned in the studies in the area of social network use. Social network is the place where many adolescents use to develop their social identity (Chandler & Roberts-Young, 1998). They could express who they really are and who they want to be (Calvert, 2002). Users may choose to create their second identity to communicate with others. Most social networks allow their users to create their second identity, and sometimes that second identity is anonymity. The users who appear as anonymity might use a cartoon character in their profile pictures instead of using their real photos. These users do not have to provide their real name and real address to public. It was found that many anonymous users are not romantic ones. They are in social network for other purposes, and not to show their attractiveness to others (Kim, Klautke, & Serota, 2009).

The environment of the Internet is lack of facial expression. To meet new people online, users perceive low level of trust and high level of uncertainty because of lack of this information (Boyd, 2003; Camp, 2000). Earlier, emoticon was used to replace facial expression (Crystal, 2001), and later, stickers, such as in Facebook
message and in Line application, are popularly used (Pairoa & Arunrangsiwed, 2016). However, all of these unrealistic facial expressions are not enough to develop the relationship between the individuals who have never known each other's public identity (Wright & Bell, 2003). This implies that anonymous users would not be able to gain any trust from others. Cyberbully is also the cause that prevents general people to trust anonymous users. The users with cyberbullying behavior often create a second identity to pretend to be someone else. They use a social network both to steal others' information and to violate others' privacy (Manzi-Schaed, 2012).

Cyberbully is not only the topic that shows the inappropriate behavior of the anonymous users. The users with multiple online identities often have an inappropriate stereotype, such as using impolite words in the discussion (Suh, Shin, & Lee, 2010). The researchers in this field suggested that social network should not allow the users to change their identity to avoid such problems. Nevertheless, it should not be forgotten that social network can help young adolescents develop their social identity, social skills, and other kinds of self-development (Arunrangsiwed, 2014b). The scholars need to identify the benefit of the development of second identity online, instead of listing down its negative outcomes.

Jenkins (1992, p.6) mentioned the benefit he earned from his fan identity that it allows him to collect the data from female fans. His devotion, commitment, and shared identity as fans initiated the trust, so female fans, who were in the homosocial fan culture in this era, provided him the information and copy of artwork he needed. Both Jenkins (1992), and Freund and Fielding (2013) showed that fan identities help destroy the wall between people with different genders and people who did not know
each others. This would generate the flow of communication in fan community related to their object of interest, their development, and loyalty regardless other identities outside fandom.

Lamerichs (2011) found that when fans attend the cosplay event, they wear the temporary identity as media characters, but their permanent identity is fan identity. Most of these cosplayers use the same pseudonym as they have used in the online community (Chen, 2007; Lamerichs, 2011). Participants in fan fiction community often construct their second identity and use pseudonym to replace their real name (Lammers, Magnifico, & Curwood, 2018; Leavenworth, 2015). Similarly, Chen (2007) also found that fan artists and Doujinshi artists often use pseudonym. This nature of fan community makes fans different from general social network users, who have low level of trust when they meet the anonymous users. Without knowing the background of others, fans can communicate with other fans who like the same object of interest. Freund and Fielding (2013) can easily conduct the online interview with fans, when both of them show that they are also the fans, too. In other words, fans trust other fans because they have a shared identity.

After the process of identity construction, fans would need to find the way to maintain their identity. Writing fan fiction is a strategy fans use to maintain their identity. Fan authors write fan fictions since they are unsatisfied with the story of the original media (Land, 2010; Leavenworth, 2009). If fans do not do anything to remove their dissatisfaction, they might face identity crisis. This is because fans would have negative feeling toward their objects of interest, then they would need to change their identity. This could imply that writing fan fiction is the act to maintain
fan identity. A participant in the study of Roozen (2009) is a fan fiction practitioner, who chooses to work as a writing teacher when she grows up, since she wants to maintain her identity as a fan fiction author.

Two previous examples are how fans established the intrapersonal communication strategies to maintain their identity. Without creating fan work, many fans do communicate to others to maintain their identity and self-esteem. Herrmann (2012) is a scholar and an insider of punk culture. He found that many scholars who are outsiders do not understand the fact of this culture. To maintain his self-esteem and his punk identity, he has to tell the world exactly what punk is (Herrmann, 2012). Similarly, when young people collect a lot of comic books, their activities are viewed by adults as nonsense. They have to describe their activities to others that to collect the comic book is a kind of investment that they could later sell their comic books at high price (Brown, 1997).

Based on the social identity theory, when people perceive that they are in a group, they would perceive the outsiders as outgroup members (Tajfel & Turner, 1979). If their identity is threatened by outsiders, they have to defend to protect their identity. In online discussion, fans used their knowledge and verbal expression to protect their favorite celebrities who were blamed by media and public (Van den Bulck & Van Gorp, 2011). In some group of fans, they do not only have the identity as fans of object of interest, but they do perceive that they are fans of the authentic object. The characteristics of an authentic object are that it is hard to be understood by non-fan people. Authentic object must not be too famous and consumed by general people. The stories and fictional characters in Marvel Comics, for instance, had been
authentic before 2000s, because outsiders who had never read comics would never understand the story if they just turn on the pages of the comic book. However, when X-Men and Avengers film series got released, Marvel Comics Universe have lost its authenticity, because its media could be understood and become popular among general people. This might have some effect on the die-hard fans’ identity. Although they could still read and discuss about their favorite text, what they have know is no more authentic, and that destroys their uniqueness or nerd identity. Similarly, fans of a video game, Silent Hill, perceived that their favorite video game is an authentic object, but when it was made as the movie, Silent Hill is not authentic anymore (Whiteman, 2009).

Furthermore, fans of a rock band, Afterhours, felt that they lost authenticity since the band shared the same stage with pop artists (Corciolani, 2014). Finally, these fans solve their identity crisis by constructing an argument that on the stage with a lot of pop bands, their favorite rock stars would have a chance to show the high-quality music to general public (Corciolani, 2014). This argument did not only remove fan’s identity crisis, but it is the way to enhance fan-esteem and maintain fan identity. The researcher could also read it as the trait exhibitionism that fans identified with their favorite band and perceived that they were hailed by outsiders, too. This exhibitionism is different from the sub-dimension of narcissism that is about an individual’s need to show-off. This fan exhibitionism is the way fans perceive that they could show off, even in fact, the one who does it is their favorite band.

As it was known that an individual can wear more than one identity, and one’s identities can be transformed and merged, Margolin and Riviere (2015) have
described how dancers compose the unique dancing style by cooperating social, racial, and gender identities. Fans, similarly, can wear both fan identities and other existing identities they have had. Likewise, football fans protested against a sexual assault behavior done by male football players, because these fans have both fan identity and gender identity (feminism) (Dimitrov, 2008). For active fans, fan fiction authors or fan artists, they have both fan identity and artist identity. Fan identity alone will persuade them to devote for their fan object, and artist identity alone will drive them to create an artwork. As the result of fan-and-artist-identity blend, fan creations were created in various forms, such as fan art, fan fiction, fan toy, fan video, imitating make-up style, and also Doujinshi. These identities provide fans the opportunity to become both creators and audiences (Busse, 2009). Black (2005) firstly found that fan fiction was created because of fan identity and writer identity, and later, she found that fan, writer, and cultural identity together led a fan to compose a unique story (Black, 2006).

To create a piece of art, the artists not only just draw or paint, but they have to create all its meanings, and its hidden emotions (Dilworth, 2007; Petrenko & Korotchenko, 2012). Fan artists do the same thing. They are inspired by the media and their needs based on the media. They created a fan art with the combination of its meaning, inspiration, and also its appearance. By this process, fans will find themselves as the owners of their artwork, even it is the recreation of the original media or even they are not the copyright owners. According to the personhood theory, the artists would have the connection and relationship with their artwork (Romanenková, 2014). This means fan artists would perceive that they are the owner of their artwork, too. All these examples show that fan identity together with other
identities could bring about various fan activities and their feeling toward the particular activities. The scholars suggested that game players similarly should develop their skills to be game developer as well as fan artists who are both fans and artists (Brennan, Monroy-Hernandez, & Resnick, 2010).

When the individuals come to interact with other people who have similar identity, their shared identity makes their interaction more comfortable and positive than individuals with unrelated identity. For example, people will be able to work together more easily when they have a similar race, skill, and other types of identity (Donze, 2011). When young audiences of TV show meet other fans of the same show, they could talk to each other both online and offline. Moreover, they try to find other mutual interests, such as their favorite band and sport team (Berkowitz, 2012). Shared identity does not have to be the mutual favorite object, but it can be the mutual disliked object. Identification through antithesis is one of Burke's identification strategies, that people would join together to fight against a common enemy (Cheney, 1983a). An example raised in the study of Bodkin, Amato, and Peter (2009) is how the sport fans of NASCAR drivers join against the driver whom they hate.

The teachers could employ the strategies of shared identity in their classroom by trying to understand and respect students' identities (Simon, 2012). Some students believe that teachers do not like them to be a fan of entertainment media, such as comics and movies. The teachers should be aware of the students’ belief, and should not allow that situation to happen. Teachers could inform their students that they understand that students are fans of some media object (Chen, 2007). Simon (2012) described the word, “connoisseurs”, or how teachers and students have mutual
interests and mutual identity. Teachers need to know what their students like, what
their skills are, and what they believe in. When the students found they and their
teachers share the same interests, they will pay more attention to classroom activities
(Alvermann & Hagood, 2000). Pan and Wu (2013) suggested another teaching
strategy, which is cooperative learning instructional methodology, or how teacher and
students have mutual problems and goals to solve such problems. This learning
method could lead the student to have a higher level of learning motivation (Pan &
Wu, 2013). Mutual interest and shared identity between teacher and students can also
be done through social network. When both teacher and students use Facebook to
communicate to each other, they will see their mutual interest, which will be
developed to be a shared identity, not only the identity as social network users, but
also as the members of other social group (Grosseck, Bran, & Tiru, 2011).

To bring fan activities into the classroom is the way a teacher makes the
students believe that he or she allows them to wear their fan identity, even the teacher
may or may not be a fan of the same object of interest. It will be even better if the
students and their teacher have the same object of interest, and this situation will
make them identify with one another. Without mutual identification, the teacher may
only let the students do fan activities as class assignment. The activity itself might
help increase fan identity salience in the students, like in sport fan study that there is a
relationship found between fan activities and identity salience (Phua, 2010). As the
results of this, fan activities in classroom should help heighten students' learning
motivation, enjoyment, and expression, and also reduce uncertainty, as well as fans do
in the context of fan culture.
Uncertainty

As the suggestion that fan activities used in classroom should help diminish pressure, fan fiction in creative writing class could minimize students' anxiety and uncertainty, since the students have always known the story setting and existing character (Jessop, 2010). Students who write fan fictions do not need to worry about creating a whole new story with a limited time during the semester. This means fans' prior knowledge about their object of interest should be able to reduce their anxiety and uncertainty while doing class assignment. Kelly and his colleagues suggested that people with high uncertainty may choose not to do anything or limit their own interaction, because they do not know others’ expectation and are afraid to be blamed (Kelly, Keaton, Finch, Duarte, Hoffman, & Michels, 2002). Contrastingly, for fan activities in classroom, because each student has one’s own object of interest, their work could not be easily compared to others’, and teachers may not have initial experience looking at the particular work. Hence, students’ uncertainty regarding teacher and friends’ expectation might be reduced. Moreover, to let students do the project or work on the object they are interested in is also a kind of reward. Uncertainty and anxiety in classroom could be caused by a large amount of punishment, lack of reward, and lack of time to work on the project (Kelly & Keaton, 2000). This could be another evidence to support that uncertainty has somewhat relationship to fan activities and learning outcome. The researcher, finally, used uncertainty as the mediator in her research model.

Uncertainty reduction theory (URT) was developed by Berger and Calabrese in 1975. In an initial interaction, the communicators would try to find the information
of one another, which is called “information seeking process.” Generally, this theory was used to understand cross-cultural communication, such as the communication among people with different races, ethnics, and religion (Kim, 2016). If one perceived that one has enough information, the uncertainty will be reduced. In the area of fandom, fan identity allows fans to perceive similarity even they might have cultural differences (Freund & Fielding, 2013; Jenkins, 1992), because fans perceived cultural similarity and shared knowledge regardless the places they were born.

Uncertainty could be understood as a part of intrapersonal communication, which an individual tries to understand oneself and the environment by using available information (Weiner, 2000). Whenever they found that their existing knowledge and information are not enough, they will be in the uncertainty stage. The level of uncertainty could be heightened and reduced based on the environment and individuals’ perception. When the level of uncertainty breaks the equilibrium and the individual could not bear it, one will be motivated to seek more information by interacting with other people (Wiseman & Koester, 1993). If this happens in the classroom, students would be motivated to ask their teacher and their friends some questions or look for other sources of knowledge, such as library or the Internet. Nevertheless, information seeking process may not be done with limited resources, so the level of uncertainty might remain the same. This would cause another process of intrapersonal communication, in which one would positively or negatively predict about the future based on available experiences such as prior learned stereotype (Gudykunst, 1995). This process might cause the changing in the behaviors, decision making, and the way to interact with others.
Because studies in fan culture and fan community are often conducted in online community, this part of dissertation would discuss uncertainty in online space. In the computer mediated communication (CMC) era, people who interact online have to ask the questions more frequently than in face-to-face context (Antheunis, Schouten, Valkenberg, & Peter, 2012). This is because, without facial expression and real-world setting, it is harder to remove uncertainty and to develop the relationship (Ramirez, Walther, Bergoon, & Sunnafrank, 2002). However, for some people with trait shyness, using CMC can help them reduce uncertainty (Orr, Sisic, Ross, Simmering, Arseneault, & Orr, 2009). Antheunis, Valkenberg, and Peter (2010) suggested that direct interaction in social network can reduce the level of uncertainty faster and better than searching alone. However, in some situations, direct communication cannot be processed. For example, uncertainty can be caused by the separation of romantic partners who are not able to face each other easily. People who lose the romantic relationship would use social network to find the information regarding ex-partner's social activities and new romantic relationship (Tong, 2013). This way, their uncertainty will be decreased.

Perceived similarity is another way to reduce uncertainty. Perceived attitude and culture similarity has a strong relationship with low level of uncertainty (r=.47) (Antheunis, Valkenberg, & Peter, 2010). This might imply that perceived differentiation should be associated with high level of uncertainty. In the study of Santos (2014), when couchsurfers moved to stay in the house of their host, their uncertainty occured when they and their host had culture and language differences. In the school contexts, uncertainty is often found in the first-year students who just start studying in college. Their uncertainty was produced by the school competition, worry
about new roommate, lack of allowance, and anxiety about looking for new friends (Shanley & Johnston, 2008). As perceived similarity has an effect on the level of uncertainty, perceived similarity is an important factor in identification process as well as it does with the level of uncertainty. People will identify with media characters and other people who they perceive similar to themselves (Hearold, 1986; Mongkolprasit & Arunrangsiwed, 2016). Perceived similarity and identification process can generate trust, as seen in a fan study. In the study of Freund and Fielding (2013) perceived similarity can make fan scholars easily conduct online interview with other fans, even the scholars and their informants have never known each other before.

Uncertainty is a negative feeling and it can bring about much negative result. Uncertainty, rumination, and worry have the association with one another (Asadi, Abedini, Poursharifi, Nikokar, 2013). Dugas, Freeston, and Ladouceur (1997) found that intolerance of uncertainty is the predictor of trait worry. Later in the related study, intolerance of uncertainty has the effect on both worry and depression, but has a greater effect on worry more than on depression (Dugas, Schwarts, & Francis, 2004). Later, many researchers have found the anxiety and depression as the outcome of intolerance of uncertainty (Carleton, Mulvogue, Thibodeau, McCabe, Antony, & Asmundson, 2012; McEvoy & Mahoney, 2012; Yook, Kim, Suh, & Lee, 2010). Jensen, Cohen, Mennin, Fresco, and Heimberg (2016) found that intolerance of uncertainty has a greater effect on anxiety than on depression, and high level of intolerance of uncertainty may cause anxiety disorder. Intolerance of uncertainty can also create panic symptoms and they might be mediated by anxiety sensitivity (Carleton, Duranceau, Freeston, Boelen, McCabe, & Antony, 2014). Oglesby, Boffa,
Short, Raines, and Schmidt (2016) revealed that people with high initial level of intolerance of uncertainty have a higher chance to have post-traumatic stress symptoms (PTS) after university campus shooting. Earlier, the study of Santacroce (2002) also showed a similar finding that there was a statistically significant correlation between anxiety and PTS (r=.56).

Uncertainty can also affect low psychological well-being (Kang, 2005). Identity uncertainty is another type of uncertainty. Sexual identity uncertainty was discovered as a cause of poor psychological well-being, too (Morandini, Blaszczynski, Ross, Costa, & Dar-Nimrod, 2015). Mostafaie, Mirzaian, and Zakariaie (2015) found a higher level of uncertainty in people who have suicidal thoughts than in general people. Because future is unpredictable, uncertainty about future leads some people to think about suicide (Brand, Gibson, & Benson, 2015).

In some research studies, uncertainty is not completely a bad thing. Liao and Wei (2011) positioned the rumination as the mediator between uncertainty and depression. Without rumination, people may not feel depressed and anxious even they are in the uncertain stage (Liao & Wei, 2011). This is supported by the suggestion of Lind and Van den Bos (2002), Arunrangsiwed (2017), and Takeuchi, Chen, and Cheung (2012), that positive prejudice is a way to reduce uncertainty and depression. In fan community, new people who join online conversation, assumed to have low level of uncertainty in the particular context, post more polite and friendly messages in web board than people who have been in community for long time (Reysen, Lloyd, Katzarska-Killer, Lemker, & Foss, 2010). The mentioned study might be the only positive case among many studies that found negative effect of uncertainty.
Since uncertainty can result in many negative outcomes, the strategies to minimize the level of uncertainty should be identified. Hanson, Hallmark, Malland, and Griego (2014) have used a freshman seminar course to reduce student's uncertainty. This course provides the opportunity to the students to quickly construct their identity as college students. Identity construction and identity development are also the ways to reduce uncertainty. Uncertainty could be viewed as two aspects. First is uncertainty caused by surrounding environments, such as meeting new people, being in new places, and passing new situations. Second is identity uncertainty, where people are not sure about their identity, or they face identity crisis. These are the reasons that Hanson and his colleagues (2014) have used to help their students to construct their identity.

The opposite of identity uncertainty is self-concept clarity. Self-concept clarity occurred when people know who they actually are. Szabo and Ward (2015) found a positive link between self-concept and self-esteem. In 1999, North and Hargreaves revealed that music could help enhance adolescents' self-concept, and later in 2006, the same researchers found that music can increase self-esteem in the audiences (North & Hargreaves, 1999; North & Hargreaves, 2006). This could imply that, during the process of identity uncertainty reduction, self-concept clarity and self-esteem could be enhanced.

Self-esteem

Self-esteem is a positive trait and it was examined in various fields, especially in education and psychology. Self-esteem is how the individuals have a positive feeling and positive attitude about themselves, and perceive their own worthiness.
The peak of self-esteem is when people are 50-60 years old, and it will decrease when people get older (Orth, Maes, & Schmitt, 2015). Self-esteem can affect and be affected by many variables. For example, self-esteem is positively influenced by the beginning of romantic relationship, and negatively influenced by the break-up (Luciano & Orth, 2016). High self-esteem is beneficial to romantic relationship, where it helps create happiness and make the relationship last longer (Erol & Orth, 2016). High self-esteem makes people satisfied with their life, job, and relationship with life partner, and brings about the positive attitude regarding things around (Orth, Robins, & Widaman, 2012).

Low self-esteem, however, undoubtedly causes a high level of depression (Sowislo & Orth, 2013). Nonetheless, in a longitudinal research design of Orth, Robins, and Roberts (2008), low self-esteem has a smaller effect on depression than in a cross-sectional design. In another longitudinal study, Steiger, Allemand, Robins, and Fend (2014) found that decreasing self-esteem in adolescent year is the risk factor of depression in adulthood. Besides depression, self-esteem has a negative link to physical aggressiveness, anger, and hostility (Garofalo, Holden, Zeigler-Hill, & Velitti, 2016). People with low self-esteem can be more emotionally harmed than general people (Orth, Maes, & Schmitt, 2015).

Based on these previous findings, high self-esteem is linked to positive outcomes, but low self-esteem is associated with various negative traits. Low self-esteem, in fact, can also lead the individual to have anti-social and other unwanted behaviors. This could be seen in the past research findings regarding self-harm. There was a belief that problem music, such as heavy metal, rock, and hip hop caused self-
harm in their audiences. Later, North and Hargreaves (2006) found that self-harm behaviors in these audiences are caused by low self-esteem, not by the music. Low self-esteem has a relationship with anxiety, but the causality is unknown (Sowislo & Orth, 2013). Low self-esteem together with other factors, drug use, depression, and anxiety can cause self-harm in adolescents (Hawton, Rodham, Evans, & Weatherall, 2002). Orth, Robins, Meier, and Conger (2016) added another variable, narcissism, to see if it could describe the variance in depression, and they found that narcissism is not an enabling predictor of depression, but low self-esteem is. Since low self-esteem results in depression, it could cause loneliness, and finally cause suicide thought (Creemers, Scholte, Engels, Prinstein, & Wiers, 2012). For the study of Brausch and Decker (2014), self-esteem performs as the mediator between depression and suicidal ideation. Fortunately, Brausch and Decker (2014) found that suicide thought could be prevented by the supports from parents, family, and friends. However, this strategy alone is not enough, so the scholars should suggest alternative strategies to heighten people’s self-esteem.

Vanhalst, Luyckx, Scholte, Engels, and Goossens (2013) extended the relationship between self-esteem and loneliness by adding perceived social-acceptance as the mediator. Low perceived social-acceptance is a significant predictor of loneliness (Vanhalst, Luyckx, Scholte, Engels, & Goossens, 2013). Low self-esteem could also affect people's thought about their own body shape. People with low self-esteem think that they are fatter and heavier than the actual body size (Pearl, White, & Grilo, 2014). As it was known that there is a negative linear association between self-esteem and dissatisfaction toward one's own body, these people may lose their weight to strengthen their self-esteem (Makinen, Puukko-Viertomies,
Lindberg, Siimes, & Aalberg, 2012). This suggestion matches the finding of others’ study, that patients with eating disorder try to make their body mass index (BMI) smaller to heighten their self-esteem (Brockmeyer, Holtforth, Bents, Kammerer, Herzog, & Friederich, 2012). Marshall, Parker, Ciarrochi, Sahdra, Jackson, and Heaven (2015) argued that low self-esteem does not always bring a negative effect to people who have it. They found people with low self-esteem and high self-compassion will not face mental problem, since self-compassion helps them understand that they do not need to be perfect. Kelly, Vimalakanthan, and Carter (2014) conducted a similar model by controlling the self-esteem variable, and found that low self-compassion brings about eating disorder.

The researchers of past studies have suggested that both school and parents should develop self-esteem in adolescent years, since self-esteem can prevent depression when they grow up (Steiger, Allemand, Robins, & Fend, 2014). The educational institute and other related organization should provide the intervention to increase self-esteem for the students, because it could be a way to prevent a later depression symptom (Sowislo & Orth, 2013). This intervention should be able to help the individuals to have a better future, such as positive life-outcome, better health, better psychological well-being, and good relationship with others (Orth, 2016; Orth & Robins, 2014).

Besides the intervention, there are also other ways to increase self-esteem. As it was known that stressful events in life may diminish self-esteem (Orth & Luciano, 2015), being a fans of entertainment media and engaging in fan activities may prevent the stress in the fans. Parental support is an important factor to increase self-esteem in
young children (Plunkett, White, Carter, & Horner, 2016). There are two types of parental support, which are emotion and tangible support. Teachers or lecturers should also be the ones who provide emotional support to their students. Since these people are often the researchers who work in school or university, they have an opportunity to seek for the strategies to improve self-esteem in their students. Self-esteem will be increased when an individual perceives that his friends and family have positive attitudes toward him (Zeigler-Hill, Besser, Myers, Southhard, & Malkin, 2012). This implies that teachers and lecturers need to teach their students to have a positive attitude regarding their friends, so all the students in classroom would not be left alone with depression and loneliness. This process can be considered as an emotional support, too.

Without the suggestion from psychological-related papers, adults have tried to avoid the problem of low self-esteem in their children. Parents and adults like to give praise for young children, especially for children with low self-esteem, who will often get an inflated praise from adults (Brummelman, Thomaes, de Castro, Overbeek, & Bushman, 2014). Two types of praise are personal praise and process praise. Parents mostly give personal praise to the children with low self-esteem without the acknowledgement that their behavior might be harmful for their children (Brummelman, Thomaes, Overbeek, de Castro, van den Hout, & Bushman, 2014). This is because young children who are personally praised will feel ashamed if they cannot achieve their goals, but those whose process are praised will not. The example of process praise is “it's great that you have been working hard.” Campbell, Aragon, Davis, Evans, Evans, and Randall (2016) published one of the rare quantitative studies regarding active fans. They found that in fan community, especially among
fan fiction authors, the users and mentors almost always give the praises to the author, but the researcher did not identify the type of praise. This means we may not conclude whether the positive comment in fan fiction community may or may not improve fans' self-esteem, so the relationship between joining fan community and fan self-esteem is still waiting to be identified.

As self-esteem has been tested and found as the cause of academic achievement for long time (McCroskey, Daly, Richmond, & Falcione, 1977), many recent studies as mentioned earlier also found a similar outcome of self-esteem. Hence, it is important to understand the development of self-esteem and its effect based on the interpersonal interaction, especially in school contexts. Self-esteem, as a psychological trait, is hard to be changed, but still changeable. Self-esteem could be increased by perceived self-worth after being praised by others and perceived successfulness after communication, and it is also considered as one of intrapersonal theories (Weiner, 2000). Supportive interaction from friends and family could cause both self-reliance and self-respect, and both could contribute to the level of self-esteem (De Francisco & Chatham-Carpenter, 2000). This could be concluded that self-esteem could be affected by extrinsic factors such as peer support and also prior intrinsic factors. After perceived support, encouragement, and even discouragement, intrapersonal communication would be processed and change self-esteem in an individual (Weiner, 2000). As the result of this, the level of self-esteem would construct personality which has an influence on behaviors toward other people (McCroskey, Daly, Richmond, & Falcione, 1977). This implies that interpersonal communication could result in self-esteem and self-esteem will cause change in further interaction, too.
In the area of fandom, self-esteem has been found as the predictor of media use in sport fans (Phua, 2010). Abdallah (2017) found the short-term effect of attending a sport match on fans’ emotion. Successfulness of the team would improve fans’ positive emotion and vice versa. However, this study did not find the link of sport team achievement on fans’ self-esteem (Abdallah, 2017), but it could not confirm that the continuous team achievement might be able to improve fans’ self-esteem. For fan creator community, interaction between fans could help heighten the level of self-esteem, because those who could not gain a proper social status in their real life are allowed to gain it from the world of fandom by challenging using the ability to express their imagination (Jenkins, 1992, p. 159).

Hernandez, Robins, Widaman, and Conger (2017) found the effect of self-esteem on school belonging in male students, which is positively linked to learning outcome. To connect this finding to the current study, school belonging is similar to how students identify with their school. Comparatively to the earlier study of Cheney (1983b), the organization tried to improve employees’ identification toward the organization since it was related to corporate loyalty and better communication climate among employees. The link of identification and self-esteem was also examined in Keaton’s study (2013), that fans’ in-group and out-group communication was shaped by the purpose to strengthen and maintain the level of self-esteem (Keaton, 2013). Because self-esteem could be heightened by interaction with other people, and identification toward groups, it was included in the research model by linking it with fans’ activities which is also related with self-esteem, too. The researcher expected that fan activities as the mean of in-class communication would be able to help improve self-esteem and finally increase students’ learning motivation.
Enjoyment

Enjoyment has been considered as an important part of intrinsic motivation (Ryan & Deci, 2000). Enjoyment can be produced during the working process, when an individual exactly knows their goals, and these goals are achievable (Csikszentmihalyi, 1990). This definition of enjoyment occurs before the goal is completed. There is also another definition of enjoyment, where it happens after the individuals reach their goal. For example, enjoyment is caused after the expected positive outcome related to the goal of the individuals (Reeve, 2005), and enjoyment is the satisfaction of needs (Tamborini, Bowman, Eden, Grizzard, & Organ, 2010). Generally, the variable, enjoyment, is frequently found in game-related research papers, that the researchers looked for the elements of games and characteristics of game players which are the predictors of enjoyment (Quick, Atkinson, & Lin, 2012; Shafer, Carbonara, & Popova, 2011; Skalski, Tamborini, Shelton, Buncher, & Lindmark, 2011). Game characteristics with a high amount of reward and low amount of punishment will create enjoyment in the players (Chumbley & Griffiths, 2006). The satisfaction of playing video game can occur when the players perceived that the game is easy to play (Klimmt, Blake, Hefner, Vorderer, & Roth, 2009). That is, the player character rarely died, while the enemy often did. Anderson and Warburton (2012) suggested that this enjoyment regarding the easiness to earn the reward can make the players addicted to the video games and also influenced by the video games. In this case, if video games contain anti-social contents, they will be even more harmful when the players are addicted because of the easiness of the game.
However, some other studies show different causes of the enjoyment. Abuhamdeh and Csikszentmihalyi (2012) found that video gamers’ perceived challenge is the predictor of enjoyment while playing a video game. Perceived challenge is different from perceived easiness as mentioned in the study of Klimmt, Blake, Hefner, Vorderer, and Roth (2009). Perceived challenge should occur with a difficult game. Personality traits of game players are another factor that results in the variance of enjoyment. Fang and Zhao (2010) found that the enjoyment will increase when there is the matching between personality trait of the game player and the characteristics of the game. Based on this study of Fang and Zhao (2010), it could imply that the educational games which were tested in quasi-experiments might be able to please only some students. For other kinds of media such as animation or film, the researchers have also examined enjoyment in the audiences. Hero characters are more enjoyable than the villain and moral-ambiguous characters in the media with narrative such as films (Krakowiak, 2008). However, the villains with purely negative behaviors are enjoyable because their behaviors are not possible in the real-world setting (Krakowiak, 2008).

In other contexts, such as in classroom, students who perceive their sport-related ability and strength will be more enjoyable in physical education class (Cairney, Kwan, Velduizen, Hay, Bray, & Faught, 2012). Tamminen, Gaudreau, McEwen, and Crocker (2016) found the relationship among enjoyment, team commitment, and motivation given by other team members. Larson, Redden, and Elder (2014) found that the decreasing of enjoyment in taking salty snack could be found in the participants who had priory evaluated the salty level in food. This effect
is similar when students use their media literacy skills during watching films, the enjoyment with the film could be reduced.

Many studies, mentioned earlier, identified the predictors of enjoyment, and some have found the positive outcome predicted by the enjoyment. Enjoyment is not only a positive emotion of an individual, but also benefits the business such as game production company. It was found that people intend to share the game during the playing session, if they discover their positive emotion and the enjoyment of that game (Cohen, 2014). Similarly in online marketing, when people enjoy online shopping, their level of trust increases (Neuendorf, Xiong, Blake, & Hudzinski, 2014). Enjoyment can also bring about positive learning outcome in classroom contexts. When the learners watch the educational and entertainment video, their enjoyment is the predictor of their knowledge (Schneider, Weinmann, Roth, Knop, & Vorderer, 2016). Two types of knowledge predicted by this enjoyment are subjective knowledge (ability to analyze) and objective knowledge (ability to remember). There are also the relationships found among enjoyment and academic achievement and challenging of the students (Choi & Kim, 2013). The current study aims to examine the effect of fan activities in classroom on enjoyment and the influence of enjoyment on learning motivation.

Fan creations are the products of fan identities, which are generally created from positive emotion or enjoyment. This is different from some outputs of identity that is caused by negative emotion, as seen in protesting campaign or fan activism. Fans produce fan work not because of money, but enjoyment and identity expression. Fan work could be a form of communication that conveys the message from fans to
fans or to others, and the messages of which could be either the opinion about the media or the way to show their love and loyalty toward the object of interest. Some may argue that fans also sell their artwork and earn the commission from others to do the requested fan work. Jenkins (1992, p. 49) also explained this issue that most fans did not earn much money, and they also spent all they earned to contribute to their object of interest. Hence, media producers did not lose any of their profit to their fans.

There was a long-time belief that fans could not separate the fantasy and reality (Jenkins, 1992, p. 10). The researcher of the current study argues that fans’ mental does not function that way. That is, many Thai people enjoy watching outlaw superhero films, but they tended to blame the outlaw in real-world news, as it could be seen in the case of Dj. Nott. This implies that fans can distinguish between the reality and fantasy, and what they perform toward their favorite text is only to increase their positive feeling or enjoyment. Jenkins (1992, p. 33) described the pleasure as the reward that fans earn from the popular text. Fans would look for a new text and try it to see if it matches their need. If the text is right for them or could generate their enjoyment, they might begin to develop fan identity regarding the particular text. Initial enjoyment is not only able to transform individuals’ identity, but also motivate them to do unexpected fan activities. For example, fan identity and enjoyment could perform as the predictor of binge watching which refers to the behaviors that fans keep watching many episodes of TV series continuously (Shim & Kim, 2018).

Students, as well as fans, need to have enjoyment during their interaction with teacher (West, 1994). Enjoyments in students could be caused by in-class tasks, in
which they are interested (Stephanou, 2011). In-class task is also a means of student-teacher communication, that causes positive emotion during learning, which finally brings about a better school performance (Stephanou, 2011). Another way to improve students’ class enjoyment is to include technology-based studies in learning process. Wu and Chang (2005) identified two types of interactivities which are machine and person interactivity. Machine-interactivity was commonly found in games which was mentioned in the early part of this section. Enjoyment could be developed when game players interact with the machine and the level of enjoyment was also varied by parasocial and character identification (Klimmt, Hartmann, & Frey, 2007; Skalski, Tamborini, Shelton, Buncher, & Lindmark, 2011). Because human-machine communication could heighten the level of enjoyment, web-based and game-based learning were developed (Lee, Kim, & Fiore, 2010), as it was also done in narrative-based website (Soto-Sanfiel, Aymerich-Franch, Ribes-Guardia, & Martinez-Fernandez, 2011). This could be concluded by using the research findings of Hefner, Klimmt, and Vorderer (2007) that interactivities in games, narrative, and known characters can increase the level of enjoyment, mediated by identification and parasocial interactivities.

Moyer-Guse and Nabi (2009) provided a detailed explanation about these two phenomenons, identification and parasocial interactivities. Character identification refers to the moment that media audiences imagine themselves to be in media narrative by pasting themselves into a fictional character, which is generally the point-of-view one. During this process, the audiences share emotion, perception, expectation, and enthusiasm with the character. Similarly, parasocial interaction occurred when media audiences temporarily perceived that the world in media
narrative was real (Moyer-Guse & Nabi, 2009). In other words, identification helps describe the connection between audiences and the characters, and parasocial interaction describes the connection between audiences and environment in media narrative.

The effect of identification on fans’ enjoyment was also initially mentioned in Jenkins’ book (1992, p. 140-141). During the time that he wrote his book, it was after the second wave of feminism movement. He found that female fans enjoy watching Beauty & the Beast TV series, because they could identify with the main female character, Catherine, who was strong and independent in feminine way, not as tom boy or female superhero in comic books. Female fans do not only identify with strong female characters, but also with male ones when they wrote or read Slash fan fictions. To transform straight male characters to have homosexual relationship in Slash text is also another way to increase the level of enjoyment in fans who have this taste. Their enjoyment is caused by writing and reading activities and also the discussions between Slash fans about shipping among their favorite male characters. Shipping is the form of relationship, which is set by fans, and it is a kind of fanon, too (Pagliassotti, 2008).

Although the researcher of the present study does not believe that female fans wrote and read Slash fan fiction, because of the need of sexual equality in romantic relationship, Jenkins (1992, p. 193) found that this need is the cause of making Slash fan work. Because romance was the text originally created for female readers, Slash was also a romance that was more enjoyable than the general romance story, since female readers are allowed to identify with a feminine male character that was treated
equally with another male one. Moreover, to write fan fiction by adding a preferable part or deleting an unwanted part is also another way to increase fans’ enjoyment which helps fans maintain their identity. In other words, although original text could not generate the pleasure in fans, fans use fanon, such as shipping and fan fiction, to please themselves. Hence, fans could still be fans, even the original text is unsatisfied (Jenkins, 1992, p. 162).

Outside Slash text that fans’ enjoyment is caused by shipping-related discussion, enjoyment in general fans in online community is produced by the activities related to their object of interest, such as information seeking, community supporting, and contribution. These practices showed link between fans’ interaction and identity strengthening (Dill-Shackleford, Vinney, & Hopper-Losenicky, 2016).

In conclusion, enjoyment is an important factor that makes individuals to be fans, drives the process of communication in fan community, and lets fans find the strategies to maintain their enjoyment and identity. That is, the pleasure from media exposure leads an audience to seek information about the particular media. One would make a decision to participate in fan community. Then, both enjoyment from media and enjoyment from interactivity in community would help maintain one’s fan identity. This implies that enjoyment could be caused by one-way communication between the original media and fans, and also by two-way communication among fans in communities.

Expression

To come up with the question that what fan expression is like, many people might think about groupies or the group of female fans who are screaming to show
their love to their favorite celebrities in an erotic way (Jenkins, 1992, p. 15). In fact, fan expression is not limited on gender, and all fans could express their love, loyalty, and opinion through various means, such as dress, speech, and action (Miller, 2016). Fan identity also helps construct network in fandom, that people who share the same identity would comfortably express themselves and communicate to one another (Jenkins, 1992, p. 6). Fan practices should be able to benefit in-class or school expressions, especially among students with fan identity.

The ability to express one's knowledge and skill is important in academic area, because the students need to be able to show their proper work to their teachers. Without ability to express one's idea, the teacher may not know the learning capacity and the received knowledge of his or her students. This means that if the students can express what they know to their teacher, their expression will influence on their academic performance.

Students can have various forms of expression, such as writing, drawing, and verbal expression. In an early study, Hale (1995) suggested that drawing could help young children to discover themselves, help develop their idea, and help to confirm their knowledge. Art expression can improve the idea expression of students with non-art major, like the engineering major (Pun, 2011). Gocmen (2012) found that most art students have high self-esteem and a low level of shyness. This low level of shyness may refer to the confidence to express their idea and thought.

Teacher-student communication is also another important factor to improve students’ in-class expression. Goodboy and Myers (2008) found that teachers’ confirmative feedback has a positive effect on students’ motivation and satisfaction.
This would help suggest that teachers should confirm to their students that making fan art or writing fan fiction would not violate the school policy. This will help fan activities in class to be an effective learning tool to develop students’ expression through assignment and class activities.

Academic-related benefits of fan fiction writing activities were identified since fan work was published in fanzine or fan magazine (Jenkins, 1992, p. 47). A student with weak English language skill could gain her confidence to express her idea and imagination in fan fiction community, which is the place for her to practice using English language communicating with a wider group of friends (Black, 2009a). This expression in online fan community is not just one-way communication to express imagination, but fan fiction readers also provide feedback to the writers, which is similar to the classroom contexts where teacher would provide feedback to his or her students (Magnifico, Curwood, & Lammers, 2015). The imagination expression of fan creators transforms passive consumer to be producers, where Jenkins (1992, p. 280) stated that there was no clear cut between artists and consumers. Fan practice is more than the loop of verbal interaction in the circular model of communication, but this interaction was created by the expression through various forms of art, not limited to fan fiction, but also fan art, fan video, cosplay, geek contribution, and other forms of artistic expression. The researcher expects that fan activities done in school contexts will benefit the students by enhancing their idea, skill, and knowledge expression. And finally, if they have an ability to express what they knew, they should have a higher learning motivation.
As shifting away from transferring fan expression to enhance in-class expression, active learning strategies and multiple channels of communication were developed to increase class engagement (Dixson, 2010). Web-based learning was also suggested for heightening students’ expression. Nagel, Blignaut, and Cronjé (2009) discussed that some lurkers would not express any idea to contribute to academic homepage, if the teachers did not provide feedback or grade their post. While web-based learning and school website have been promoted, some students interact with their classmates with a negative tone. There was a long-time debate regarding students’ right on their free expression in school (Hafen, 1987). Similarly for online expression, Shariff and Johnny (2007) showed their concern about cyber-bullying in school website, which they advised that teachers should actively watch and remove negative contents against friends or faculty members. On the other hand, academic expression toward fan object should not be a serious issue since fictional characters are not real persons. Some academic-related fan work might be posted publicly, but some may not.

Sprague (2012) has suggested teachers to create their own online space for their students to post their fan fictions. It could be broadly found that many online fan works are not appropriate for young adolescents. Some fans express their erotic need through fan fictions, and publish them on public websites, like, fanfiction.net. The researcher of the current study has seen the hard-core erotic fiction written about sexual relationship of characters in Twilight film series and even more strange for the erotic story of robots from Transformers, and also many weird romantic human-animal relationships. Duggan (2017) has raised an example of an inappropriate shipping which is Snarry or Harry Potter and Severus Snape. Although this shipping
shows freedom of erotic expression, the same-sex and teacher-student romance turn its fan work against social norm. This could be an example of inappropriate fan imagination expression.

Beside erotic-related expression, some free expression in fan community could be counted as cyber-bullying and sexual harassment. Although Jenkins (1992, p. 48) found fan fiction community as the safe place that female fans could avoid the harassment and power of male geek fans, female fans are still verbally attacked when they step into male-based homosocial fan community (Robinson, 2014). Geek’s expression shows negative light of fan communication, which in fact, everyone should have right to express their love, taste, and imagination as long as they are not used for attacking others’ mental, identity, and body. Negative gender-based expression could be seen in the cases of Twilight mom or old women who liked Twilight, Brony or older men who preferred watching My Little Pony (Jones, 2015), and Grandma Trek or old women who were fans of Star Trek (Jenkins, 1992, p. 11). This power imbalance could be understood by Social identity theory regarding in-group and out-group communication based on members’ bias. Whether fan expression studied in early studies might be positive or negative, the current study would take the positive aspect of fan expression and test if it was the mediator between fan activities and learning motivation.

Learning Motivation

Two types of motivation are intrinsic motivation and extrinsic motivation (Ryan & Deci, 2000). Intrinsic motivation is grown from the actual need of the individuals, such as their enjoyment and their interest. Extrinsic motivation is the
outside driver, such as money, fame, and social position. Many students have the same extrinsic motivation, which is GPA and future achievement. Bembenutty and White (2013) found that intrinsic motivation is positively associated with academic performance ($r=0.20$). The teachers would need to design their teaching method, class activities, and homework assignment to meet the student need and to be able to increase their intrinsic motivation.

Big five personal traits are a group of variables that help describe students' learning motivation (Ariani, 2013). Although personal traits lead the researchers to understand the characteristics of the learners, the strategies that can directly help increase learning motivation should be identified. High learning motivation can benefit the students in academic performance and life achievement; therefore, Trautwein and Ludtke (2009) have studied the homework quality and homework characteristics that can motivate the students to work harder. Learning motivation would help enhance students' engagement in the problem, even it is difficult (Eseryel, Law, Ifenthaler, Ge, & Miller, 2014). Nonetheless, an important problem found along the semester is how the students' learning motivation continuously decreases (Busse & Walter, 2013). Based on these previous studies, teachers and educational researchers should help identify the strategies to increase students' learning motivation, and to prevent the dropping of learning motivation, especially in the second half of the semester.

There are several strategies to increase students' learning motivation which were suggested in previous studies. Hollman (2013) used social learning theory (Bandura, 1977) to explain that if one develops a positive attitude about something,
one will easily learn about that thing. This theory might be the reason why enjoyment and learning motivations are often used as outcome variables in educational study. Su and Cheng (2014) found an effectiveness of mobile gamification learning system, that games as the learning activities can heighten students' learning motivation. Grosseck, Bran, and Tiru (2011) found that learning motivation, class engagement, self-esteem, and self-confident can be increased by the interaction between students and their teacher in social network, Facebook. The identity development is another process that bring about the learning motivation. When college students firstly enter to school, they will construct two identities, which are scholar and socializer identity. Komarraju and Dial (2014) found that scholar identity has an effect on self-efficacy and finally can result in learning motivation. A variable that decreases learning motivation is high level of pressure (Garn & Jolly, 2014). This could be the reason that learning motivation is dropped at the second half of the semester (Busse & Walter, 2013). The current study suggests that using fan activities in classroom not only increase learning motivation and enjoyment, but should also reduce pressure.

Conceptual Framework and Research Hypotheses

After reviewing the variables of fan activities, fan identification, learning motivation, uncertainty, self-esteem, enjoyment, and expression, it was found that uncertainty, self-esteem, enjoyment, and expression could benefit the students in some ways, although uncertainty may also send a negative effect to them, too. The conceptual model of this study was presented below along with 11 testable hypotheses.
RQ1: Does fan identification influence the amount of fan activities that fans do in class?

Fandom as a culture is consisted of fan-based language, dress code, structure in community, fan practices, and products of the particular practice. These are the forms of communication that fans use both inside and outside their community (Gooch, 2008). To perceive oneself as a part of fandom is a kind of fan identification. This identification would stimulate fans to do fan activities. Likewise, Phua (2010) found the positive link among sport fan identity salience, fan-related media use, and self-esteem as a part of fan culture. Fans who were high in identity salience also engaged more in other fan activities, contributed more to fan community, and devoted more to their objects of interest (Perkins, 2012; Taylor, 2015). Zhang (2017) also found a positive association between sport fans’ identity and their social media use regarding their favorite team.

Fans with high fan identification would similarly attend the sport match more often than those with low fan identification (Laverie & Arnett, 2000). All of these
mentioned quantitative studies were all done in the area of sport fandom, but only few studies examined this link in the area of fan creation or media fandom. Perkins (2012) classified music fans into 4 groups based on identity salience, which are casual fans, loyal fans, die-hard fans, and dysfunctional fans. The numbers of albums collected, the level of knowledge, and the frequency of attending the show are varied by the types of group. Van den Bulck and Van Gorp (2011) have also studied the activities of music fans, and they divide fans into 3 groups. Fans with low identity salience may only listen to the music, but fans with high identity salience will defend for their favorite artist if there was negative news about his or hers. Groene and Hettinger (2016) found the positive effect of Harry Potter and Twilight fan identification on the level of engagement in fan communities. Media fan identity salience could also drive fans to participate more in fan fiction communities (Taylor, 2015). These should be the research studies with the most relevance to the first hypothesis of the current study.

Since an individual could have and earn various identities, and these identities could be mixed and blended, products of mixed identity can be more diverse than of an identity alone. It might be assumed that two identities can help reinforce each other and enhance the level of identification. We might try to think about when people cheer their national football team. Their nation identity and sport fan identity are mixed, and both identities influence them to strongly express themselves in cheering their team (Brown, 1998). Bodkin, Amato, and Peter (2009) have found that when NASCAR driver fans know exactly which racers they like and hate, they will have a stronger commitment during cheering than other fans with single identification. This means people can identify with the one they like, and at the same time identify with
others who have the similar hatred opinion. This situation contains two identification sources, as fans and anti-fans. In another sport fan study, Guest and Luijten (2017) found the combination of gender identity and fan identity regarding female soccer team, which helped construct the perception of female empowerment among fans. Feminist fan activism, as the combination of feminist and fan identity, led football fans to protest and ban the football players who committed the sexual assault crime (Dimitrov, 2008).

In the area of fan creations, fan identity alone may not be enough to produce the artistic expression. These fans need to have identities as artists, authors, filmmakers, and so on, in order to generate various kinds of fan creations. Black (2009b) showed the output of mixed identity which was a fan fiction that integrated fan, author, and ethnic identity all together. Since the combination of two or more identities could result in the different ways of commitment and might have an effect on the identity salience, the current study focused on the combination of fan, artist, author, and academic identity and sought its outcome as fan activities done in academic contexts. Accordingly, the first research hypothesis is proposed.

H1: Fan identification has a positive effect on the amount of fan activities done in class.

RQ2: Can amount of fan activities in class contribute to students’ learning motivation?

Although there was none of the studies that draw a direct effect from fan activities in class to students’ learning motivation, fan activities were somehow related to fans’ motivation to continue doing fan activities and develop their own
skills of making fan work. It was known that to practice drawing and other academic-related skills can benefit the students (Price, 2013). Learning motivation and homework motivation are considered as the important topic to be studied, because they will lead the students to keep practicing things by themselves. As mentioned, the process of creating Doujinshi (amateur comic book) requires a large amount of motivation, Doujinshi proves that the motivation can drive fans to complete a story with long sequence of drawings (Lam, 2010). Although Chen (2007) found that artists who were not successful in making Doujinshi had face the depression regarding their drawing and plot developing skills, they still have motivation to improve their skills and hope that their work will become famous someday. Fan fiction authors also enjoy practicing and developing their writing skill, and hope that they will have some improvement in it (Bolt, 2004). Based on these studies, fans do not only have intrinsic motivation as many believed, but also have extrinsic motivation that they need to have a better skill and need to be famous in the community. Music fans, as well as fan creators, play the music instruments because of their enjoyment and the wish that they will grow up to be the artists (Alvermann & Hagood, 2000).

Many fan scholars agreed that writing fan fiction helped develop fan authors’ writing skill (Bolt, 2004; Jenkins, 2006; Land, 2010). Fan art, whether as a part of fan fiction or stand alone one, could also develop drawing and painting skill (Chen, 2007; Manifold, 2009). Fan artists could start making their work from traditional painting technique and later, mastering themselves to use more complex tools as computer graphic (Roozen, 2009). Fan creator community, especially fanfiction.net, allowed fans with any level of skills to exhibit their work and receive feedback from fellows (Fisher, 2016). Because barriers or gatekeepers who filter out the low-quality writing
do not exist, the structure of this community helps motivate the beginners to keep working on their fan fiction (Fisher, 2016). This way, the beginners could gain suggestion and encouragement from others in the community which might result in the higher level of motivation to produce better work. “Mentors” are those who provide critique comment, suggestion, and encouragement to others in fanfiction.net, and “mentees” are the ones who receive the particular feedback from mentors (Campbell, Aragon, Davis, Evans, Evans, & Randall, 2016). Because of this encouragement, some fan fiction authors became more proficient and created their own original work (Campbell et al., 2016). This could be concluded that the level of fan motivation is the result of participating in fan community and interacting with other fans. Some fans had self-motivation and actively requested for the critique and cooperation with other fans (Lammers, 2016).

On the other hand, a large number of feedbacks in both fanfiction.net and figment.com do not identify the writing problem and the way to improve the literacy work, but most comments are about to inform, praise, and express admiration (Magnifico, Curwood, & Lammers, 2015). This positive feedback might be the source of fans’ motivation (Schott & Burn, 2004) to continue developing their work, not the technical comment. Additionally, the researcher of the current study, who has done fan works and published them online, also got motivated by the structure and feature of the online community, such as view count on each piece of artwork, the number of badges on profile, and level of membership in fan forum. This could be considered as the motivation derived from human-machine interaction. In the study of Kuznetsova (2015), some fans were banned and blamed by other fans because they made fan work that violated both canon and fanon. The researcher would explain this case that,
although these fan creators were blamed by others, they would still earn motivation from being a part of community, since they could be awarded from the mentioned human-machine interaction.

The motivation to keep writing and drawing to contribute to fan community could certainly help improve academic skills, especially for art-related classes. Another way to participate in fan community and show the loyalty toward objects of interest is to help spread the word about them. Chinese fans who know other languages help translate the text into Chinese for other fans who do not know the second language to be able to consume the media (Zhang & Mao, 2013). The researcher of the current study has had similar experience as the subject of Zhang & Mao’s study (2013). When she was young, she translated biography and news of rock and heavy metal bands into Thai, converted Kanji and Hiragana letters in Japanese songs into Romaji, and also interpreted surrealistic music video into words. This type of contribution could link fan activities and fan motivation together, whether to contribute to fan community or to show the loyalty to the objects of interest.

In the area of education, learning motivation can be enhanced by bringing students' interesting activities into classroom (Garn & Jolly, 2014). This could be seen in William’s study (2006), that suggested teachers to use popular culture interested by students to heighten students’ motivation and class engagement. Students should also have a better enjoyment and learning motivation if they can choose what to put in their assignment. This is because they have an opportunity to learn what they want to know and to practice the skills that they want to earn (Garn & Jolly, 2014). Black (2009a) suggested that teachers should use fan fiction as an engaging element in the
classroom. Learning motivation gained from fan activities are that (1) the students have a chance to use technology, (2) the students are allowed create the work regarding their object of interest, and (3) the students can enjoy class activities as well as their free time activities (Bahoric & Swaggerty, 2015). As a result, the second research hypothesis is proposed as followed:

H2: Fan activities in classroom help improve students’ learning motivation.

RQ3: Does fan identification send a positive effect on learning motivation?

As presented in the early literature that identification can be used as rhetorical strategy to heighten employee’s corporate loyalty and working motivation (Cheney, 1983a; 1983b). To borrow fans' activities into classroom, fan identification should be activated by such the activities. This identification should be able to motivate students to have more energy in doing their class assignment. Some fan studies showed that fan identity could stimulate fans to develop fan-activities-related skills, until they could use those skills in their professional career (Manifold, 2009), or owned the company that produced the media regarding the developed skills (Lam, 2010).

To allow students to do fan activities for class should not only directly increase students’ learning motivation, but it should be able to improve the level of students’ identification toward teachers and classes. Conflict between teachers and students could be caused by various reasons, and one of them is the identity difference. Teachers and students with different racial identity found a difficulty to communicate and transfer the knowledge in class (Gershenson, Holt, & Papageorge, 2015). The problematic relationship between teachers and students would diminish students’ learning outcome, so teachers should timely repair class climate (McGrath
& van Bergen, 2015). Furthermore, it might be even worse if this in-class relationship occurred in young children. The long-term effect of student-teacher conflict was found in the first-grade students who had had prior conflict when they were in preschool (Skalicka, Belsky, Stenseng, & Wichstrom, 2015).

The researcher of the current study also had had in-class conflict with the instructor in an architecture course. During that course, she had three absences and received a very low grade. The researcher did not have motivation to develop her work, since she believed that the instructor was not able to see her design development and her enthusiasm for finishing the project.

Both previous studies and the researcher’s self-experience show the negative outcome of student-teacher conflict on learning motivation. One way to solve this conflict should be the identity shared by both teachers and students. Although different racial identities could not be shared, many choosing-change identities could be possibly shared. If students and their teachers have similar object of interest, their climate in communication would be better (Alvermann & Hagood, 2000), and also lead to a higher learning motivation. For the teacher who allows one’s students to write about their object of interest, one could change the students with poor learning motivation to participate more in class lesson (Simon, 2012).

The researcher would hypothesize that fan identification has the positive effect on learning motivation. This relationship has never been explored with a quantitative research design, even there are many qualitative papers written about the link between fan identity and fan motivation (Black, 2006; Black, 2009a; Chen, 2007; Simon, 2012). The following hypothesis is consequently derived from the above literature.
H3: Fan identification brings about the improvement of students’ learning motivation.

RQ4: Is the influence of fan activities in class on learning motivation mediated by uncertainty?

While learning motivation is an important factor for students’ achievement, students’ intrinsic motivation continuously decreases from the beginning to the end of the semester (Busse & Williams, 2010; Busse & Walter, 2013). Based on H2 and H3, the current study sought the effect of both fan identification and fan activities in class on learning motivation. Both of these predictors are about students’ experience and the forms of communication inside and outside classroom. They could convey a meaningful message through fan work for their teacher to see and understand them and their adopted identities.

Intrapersonal communication, which is caused by both intrinsic and extrinsic factors, would be studied in the present study. Initial fan identity and academic identity were considered as the intrinsic factor, and fan activities in class which were used to interact with the teacher were the extrinsic factor. After the intrapersonal communication was processed, the individual would change their behaviors (Weiner, 2000), of which this study focused on learning motivation, and the mediators are three intrapersonal variables (uncertainty, enjoyment, and self-esteem) and in-class expression.

As it was known that anxiety is the results of intolerance of uncertainty, and anxiety may cause many negative effects in people’s life, the scholars should look for the strategies to manage uncertainty. At the first time that adolescents became freshmen in college, they have to face many issues that cause uncertainty and anxiety
A seminar course for first-year students has been designed to reduce students’ anxiety. In this course, students can express their feeling through their artwork and their discussion with other classmates (Julliard, Gujral, Hamil, Oswald, Smyk, & Testa, 2000). Drawing does not only provide the students a simple way to express themselves, but drawing can also help the students to develop their identity and how they perceive about others (Elkis-Abuhoff, Gaydos, Rose, & Goldblatt, 2010). Based on this finding, it could imply that drawing can help the students moving away from identity uncertainty, because to develop an identity is to improve both stability of self and self-concept which are opposite to identity uncertainty. Self-concept clarity and the belief regarding stability of self are how one knows exactly who he is and knows his own goal (Campbell et al., 1996).

Although there was lack of previous research papers written about the link between fan activities in class and uncertainty, some evidences in fan studies also help describe this casual relationship. Whenever the students have a chance to do fan activities in class, their fan identities would be provoked, since the activities could remind them of their fanship and fandom. To perceive oneself as a part of a larger group could help reduce the level of uncertainty (Jetten, Hogg, & Mullin, 2000). The level of uncertainty in male Anime fans was also decreased after joining Anime fan community, because fan community provided them with the identity, worldview, friendship, and self-esteem, which was another mediator in the current study (Ray, Plante, Reysen, Roberts, & Gerbasi, 2017). Moreover, psychological well-being could be affected by narrative identity, which was constructed by the prior experiences involved with the story (Reese et al., 2016). Psychological well-being could be somehow negatively related to uncertainty and anxiety. Fan identity is also developed
with the narrative both from media and direct experiences as the members who contributed to the community.

These aforementioned studies showed the possibility that fan activities could negatively describe the variance in uncertainty. However, Cowley, Charles, Black, and Hickey (2008) found the relationship in different direction. Their study revealed that playing video games, as fan activities, could drive the emotion of positive stress or uncertainty, and this emotion would make the players enjoy the activities better (Cowley, Charles, Black, & Hickey, 2008). This is similar to football fans who felt uncertainty during watching the match. The level of their enjoyment was varied by the uncertainty (Paul, Wachsman & Weinbach, 2010). This implies that some kinds of fan activities could bring about uncertainty, but this type of uncertainty was not harmful for fans’ psychological well-being.

Since artistic activities could help diminish students’ uncertainty, Fan creations should be able to reduce the level uncertainty, not only because they are types of artwork, but it allows the students to use their prior knowledge about their favorite characters or movies to invent their new artwork (Jessop, 2010). This could be described by uncertainty reduction theory that the more information the individual has, the less uncertainty one would experience. To bring fan activities into classroom, students may guess that their teacher is a fan of some popular culture. Thus, they will expect their teacher to understand their attitude toward media object. To perceive culture and attitude similarity is the way to make people identify with each other, and also the way to reduce the level of uncertainty (Antheunis, Valkenberg, & Peter, 2010). Roozen (2009) had shown the way a student used fan fiction to support her
learning by rewriting the difficult lesson in fan fiction format, which helped her to remember it better. When a student could pass through the hard part of the course, one’s uncertainty should be faded away. Furthermore, students who enrolled in a Japanese language course had low level of uncertainty because they had had experience in reading Japanese as a part of Manga/Anime fan activities (Williams, 2006). Hence, the researcher hypothesized that fan activities in class should benefit students by reducing their uncertainty during learning.

H4: Fan activities in classroom can cause a lower level of uncertainty.

However, some educational studies showed that uncertainty could benefit students’ learning outcome. This is because when the level of uncertainty breaks its equilibrium, the individual would be motivated to seek for one’s missing information by beginning to communicate to others (Wiseman & Koester, 1993). In school contexts, students with uncertainty might try to communicate with their teacher and interact more with other friends. They may seek for information, and some may reduce their uncertainty by looking for others who have the same academic problem. Nowadays, information could be easily retrieved from online resources. Uncertainty can motivate the students to look for more information and spend more time to consider finding out the right answer. The result is that the students with a high level of uncertainty could answer the question more precisely than students with low uncertainty (Ozcelik, Cagiltay, & Ozcelik, 2013).

There was also a suggestion that uncertainty can motivate the students to learn the new thing to fill in their missing part of knowledge (Arunrangsiwed, 2017), and this results in students’ academic skill improvement. Carabine (2013) has described
her experience during studying in art major that she had suffered with uncertainty all along her road to the achievement. Moreover, Dewaele, MacIntyre, Boudreau, and Dewaele (2016) found the equally high level of anxiety, enjoyment, and interesting in the same group of female students enrolling in a Foreign Language class. Based on these past articles, uncertainty may improve students’ learning motivation, although this motivation seems to be extrinsic motivation, not an intrinsic one. On the other hand, Hong, Mason, Peng, and Lee (2016) found a negative influence of anxiety on homework motivation and homework achievement, while in-class achievement helped students perceive securely in their learning ability (Hagenauer & Hascher, 2014). In other words, academic-related achievement might both negatively predict and in turn, be caused by the level of uncertainty. The findings of MacIntyre and Vincze (2017) could support the negative link between uncertainty and learning motivation, that positive emotion had a greater influence on learning motivation than did the negative emotion. Enjoyment in learning as a part of intrinsic motivation has a negative association with anxiety (Dewaele & MacIntyre, 2014).

The result of these studies might be the reason why the strategies to reduce students’ uncertainty and anxiety should be identified. Hsu and Huang (2017) had examined the effect of teacher confirmation, such as to answer students’ question, to remember students’ work, and to show her/his perception regarding students’ information, and found its benefit in the reduction of students’ uncertainty about negative unpredictable future. The same researchers also found that this teacher’s behavior helped students to have more willingness to communicate in classroom (Hsu & Huang, 2017). This research results would help compose the hypothesis that uncertainty had either positive or negative effect on learning motivation.
H5: Students’ level of uncertainty had an influence on learning motivation.

RQ5: Is the influence of fan activities in class on learning motivation mediated by self-esteem?

To develop one’s identity is a way to develop self-concept. Self-concept may both reduce uncertainty and heighten self-esteem. There is a link found between self-esteem and self-concept (r=.67), and ethno-cultural identity conflict has a negative relationship with both self-esteem and self-concept (Szabo & Ward, 2015). This may imply that identity development can enhance both self-esteem and self-concept. Self-esteem can be considered as a kind of self-concept where one knows one’s own value, efficacy, and self-worth (Rosenberg, 1989). In a fan study, sport fans with poor self-concept can earn a positive emotion when they come to see the match (Cialdini, 2008). This might be because having fan identity can solve the identity and self-concept problem. The current study will test if fan activities in classroom could positively predict the level of self-esteem among students. This is because fans have to employ both fan identity and their academic skill to complete fan-related tasks in class.

Self-esteem is a personality that is developed by intrapersonal communication after interaction with others, and it could result in individuals’ behavior both with themselves and others, such as trait openness (McCroskey, Daly, Richmond, & Falcione, 1977). For music fandom, to attend a live show is a way to arouse fan identity salience and that could provoke self-esteem and positive feeling toward self and object of interest (Arunrangsiwed & Puxtaran, 2017). As for video games players, their self-esteem was moderately described by their level of identification toward the
character (Watts, 2016). Without any activity or playing the video games, the participants in this mentioned study would never be high in identification.

As reviewed in the first chapter of this study, most research studies that tested the relationship among fan identification, fan activities, and self-esteem were in the area of sport fandom. Phua (2010) had found an interacting effect between both fan identification and their media use, and this media use could heighten fans’ knowledge regarding their object of interest, which finally resulted in the higher level of self-esteem. Rhee, Wong, and Kim (2017) had interviewed sport fans about this topic, too. And they found that, to identify with sport team could fulfill the missing part of individuals’ identity, which implied that being a sport fan could help improve the level of self-esteem. Contrastingly, when sport fans attended the sport match, the achievement and failure of their favorite team did not have any effect on their self-esteem, but only affected their emotion in short term (Abdallah, 2017). However, Delia (2017) found a long-term effect on emotion, after sport fans faced the negative event regarding their favorite team. This might be because the participants in Abdallah’s study (2017) was students, who earned force-changing identity as fans of the team of their educational institute, not the fans with choosing-change identity whose self-esteem is benefited by being a part of the sport fan culture.

As fan identification in previous studies was described with two parts, fandom (identity derived from fan community) and fanship (identity, in which fans perceived themselves as fans of their object of interest), self-esteem could describe the greater amount of variances in fanship better than in fandom among Anime fans (Schroy, Plante, Reysen, Roberts, & Gerbasi, 2015). Being an Anime fan, both friendship in
online community and developed identity could help increase self-esteem (Ray, Plante, Reysen, Roberts, & Gerbasi, 2017).

However, the researchers explained that the fan-esteem of female and male fan was unequal, because both genders may have a different level of ability while engaging in Anime fan community (Ray, Plante, Reysen, Roberts, & Gerbasi, 2017). Psychological well-being, as one of the outcome variables that was frequently explored, is associated with self-esteem. Sense of belonging and also fan identification could benefit fan psychological well-being (Wann, Hackathorn, & Sherman, 2017), which might suggest the relationship between fandom and self-esteem. Similarly, to develop the identity based on the individual’s experience could help improve psychological well-being, too (Reese et al., 2016). Earlier, Jenkins (1992, p. 159) explained the link between fan identity, fan activities, and self-esteem. That some fans had low social status in real-world contexts, because their ability did not match their occupation, but in fan community, they could be successful with the particular skills and known by other fan creators.

Moreover, online fan fiction community does not have the editor to screen out the work with poor English writing, so fans could convey their idea through the transformed plot to the public regardless their writing skills. Although the work might have low writing quality, these fans could gain confidence because they could simply display their opinion to broader audiences without time delay by editorial process (Black, 2009a). In other words, the first step to the achievement of writing fan fiction is to get it published to the public, and the online self-publishing could provide fans these opportunities, so fans’ confidence would be heighten based on this simple step.
This process could be described by Goal-setting theory (Locke & Latham, 1990). Being in fan communities, fans could gain more of positive feeling and have less stress (Driessen, 2015), and lower stress could help improve the level of self-esteem (Orth & Luciano, 2015).

For classroom contexts, which is the primary point of the current study, only few studies discussed about the use of fan activities to improve students’ self-esteem. Just as knowledge regarding object of interest could heighten sport fans’ self-esteem (Phua, 2010), so fan activities in class should allow students with fan identity to be the specialists while doing the assignment (Jessop, 2010). Furthermore, writing fan fiction for class provided the opportunity for the students to develop their identity, world-view, and self-esteem, because they could communicate their knowledge regarding media and canon to their teacher and friends (Bahoric & Swaggerty, 2015). Since none of the previous studies tested the influence of fan activities in class on students’ self-esteem, the current study would help fill in the gap of fan studies. Based on the above literatures, the researcher hypothesized that fan activities in class help increase students’ self-esteem.

H6: Fan activities in classroom have a positive effect on students’ self-esteem.

After the causal relationship between fan activities and self-esteem was hypothesized, the influence of self-esteem on learning motivation should be examined in the same model. Self-esteem has a positive relationship on academic motivation (Supple, Su, Plunkett, Peterson, & Bush, 2013). Academic motivation can be both learning motivation and the motivation to finish the task. Students’ engagement is another variable predicted by self-esteem (van der Kaap-Deeder, Wouters,
Verscheren, Briers, Deeren, & Vanteenkiste, 2016). This is because self-esteem can influence the student to perceive their own ability to learn by themselves and to believe in their own learning skill, both of which establish self-educational behavior (Siminica & Traistaru, 2013). The belief in one’s own learning skill can be called, self-efficacy, which has a strong impact on academic achievement (Diseth, Meland, & Breidablik, 2014). Chang and his colleagues found that students with high Internet self-efficacy have a better score on final exam than those with low Internet self-efficacy (Chang, Liu, Sung, Lin, Chen, & Cheng, 2014). Generally, self-efficacy was related to learning motivation (Ross, Perkins, & Bodey, 2016), and this relationship could help suggest that fans who have completed fan work by themselves before, would have self-efficacy if they were assigned to do the similar activities again in class.

Based on the early study conducted by McCroskey, Daly, Richmond, and Falcione (1977), they discussed that self-esteem had a positive influence on academic achievement and the decision making for future lives. A more recent study revealed that self-esteem together with conscientiousness and openness can predict academic self-efficacy, which can result in a better academic performance (Giunta, Alessandri, Gerbino, Kanacri, Zuffiano, & Caprara, 2013).

In fan contexts, fan creators often received praise comment when they post their work on the Internet (Campbell, Aragon, Davis, Evans, Evans, & Randall, 2016). Positive comment is a cause of the development of self-esteem and motivation. However, all people could not be treated with the same assumption. Children with low self-esteem would have less desire to seek challenge after receiving inflated
praise, but children with high self-esteem would have more desire instead
(Brummelman, Thomaes, de Castro, Overbeek, & Bushman, 2014). The current study
would hypothesize that self-esteem is an enabling predictor of learning motivation.
Self-esteem can be increased by the perception that others see one’s worth. Fans’ self-
estee can be awarded by having fan identity and receiving positive comments from
the community, which motivate them to improve their drawing and writing skills. In
classroom setting, this effect should work in the same way. The following hypothesis
is thus derived.

H7: Students’ self-esteem is an enabling predictor of learning motivation.

RQ6: Is the influence of fan activities in class on learning motivation mediated by
enjoyment?

Some fan scholars called fans as labors of love, but in fact, they should not be
called, as such, since what fans got is not money but enjoyment (Stanfill & Condis,
2014). This enjoyment is caused by the way fans escape from stressful reality to
having fun with popular media temporarily (Lewis, 1992, p.55). This could be
supported by the study of Driessen (2015), that even older fans still enjoy going to a
concert because they escape from a stressful event in their routine. Additionally, fans
who left fan culture for a long period of time and had an opportunity to attend the live
show of music band again, would be immediately high in self-esteem and
enjoyment, since the particular feeling in their past was aroused (Arunrangsiwed &
Puxtaran, 2017).

Enjoyment is one of the variables frequently explored in the studies in the
field of media consumers and fandom, especially in passive fans. For instance, people
enjoy a sport program with violence better than the non-violent one (Raney & Depalma, 2006); in fan community, people enjoy both conversation about things they like and dislike (act of anti-fan) (Gray, Sandvoss, & Harrington, 2007, p.15); audiences of soap opera have more enjoyment when the moral fictional characters meet their good ending (Weber, Tamborini, Lee, & Stipp, 2008); and earlier, Tomlinson, Buttle, and Moores (1995) found that sport fans does not only enjoy watching the match, but their enjoyment is affected by customer service at the stadium, too.

Identification is another cause of enjoyment in fans. To identify with sport team can cause the enjoyment (Richardson, 2004) and satisfaction (Madrigal, 1995) in sport fans. The level of football fans’ enjoyment was found as the result of uncertainty during cheering their favorite team (Paul, Wachsman, & Weinbach, 2010). Team’s successfulness in sport match could transfer short-term positive emotion to fans (Abdallah, 2017). Similarly for boxing fans, the greater level of fan identification caused a greater level of enjoyment and a larger amount of boxing-related media consumption (Devlin, Billings, & Leeper, 2016). Wrestling fans with high wrestling skills may be easily able to identify with their favorite athletes. It was found that wrestling fans with high wrestling skills enjoy watching wrestling tournament than those with low wrestling skills (Scanlan & Lewthwaite, 1986). This identification process may be caused by perceived skill similarity. These mentioned studies could reveal that fan activities and fan identification are associated with fans’ enjoyment.

Previous given examples are all about passive fans or fans in general. One of the attempts of the current study is to understand the benefit gained from the activities
of active fans in class. Enjoyment during learning should be improved because young students are continuously decreasing in enjoyment, (Hagenauer & Hascher, 2014). Dewaele, MacIntyre, Boudreau, and Dewaele (2016) revealed that students would have more enjoyment, if they learned about the lesson that they were interested in. Fan activities in class could provide students with the particular opportunity, because students with fan identity would initially have their object of interest.

Another way to understand the changing in enjoyment in students is to relate it to learning outcome, such as skills and knowledge. Schneider, Weinmann, Roth, Knop, and Vorderer (2016) found the relationship between enjoyment and both knowledge based on self-experience and knowledge from other sources. This link was also supported by a previous study, which found the association between young children’s reading skill and their enjoyment (McGeown, Johnston, Walker, Howatson, Stockburn, & Dufton, 2014). Since students with fan identity could consider themselves as professional in their fan objects, their knowledge and their skill in doing fan activities should be able to improve their in-class enjoyment.

The academic papers that would help support this hypothesis is the enjoyment of doing fan activities outside classroom contexts, which was broadly explored by fan scholars. First, it could be seen in fan community, where fans enjoy contributing to their community because they can express their knowledge and opinion among other fans (Bacon-Smith, 1992, p.179-180). By joining such the community, fans perceive that they are a part of social group, which causes enjoyment, appreciation, and behavior of collecting tangible objects (Tsay-Vogel & Sanders, 2015). Next, enjoyment can be established by engaging in fan artistic activities itself. One of the
participants in Manifold’s study (2009) told her that the art class was not enjoyable, but making fan art was. If fan art is allowed to be created as classroom assignment, the students should enjoy the class better.

Enjoyment can occur when the need is satisfied (Tamborini, Grizzard, Bowman, Reinccke, Lewis, & Eden, 2011). As it was known that active fans keep writing fan fiction because of their enjoyment, fan authors enjoy writing fanfiction since fan fiction allows them to remove unsatisfied part from the original media. As the result of this, they earn the enjoyment which the original media cannot give them.

One of important subfields in fan study is Slash, which is fan work with homoerotic content. Earlier, Slash was not a serious among the scholars since they believe that female fans create this type of work to express their need of gender equality and trust (Kustritz, 2003; Leavenworth, 2009; Salmon & Symons, 2004). By this process, female fans have enjoyed their rewritten fiction contained gender equality. This is because, in that period, media might not portray an appropriate female role, with which female fans were not satisfied with it. Nowadays, Slash work is continuously created by both female and male fans, and it includes the real-gay-like relationship and relationship with violence (Dennis, 2010). This causes the existing knowledge become ambiguous. Various today media have remove gender inequality from its plot. The roles of female and male characters are now changed (Peltea, 2015), and sometimes, anti-stereotype idea is introduced. The Avengers is one of superhero films showing female characters with ability to fight and to make a decision on their own. This film is popular among fan authors and frequently got rewritten in the format of fan fiction (Kosnik et al., 2015). Brown (2013) suggested that female fans
still prefer making Slash fan work because of their enjoyment driven by the fantasy being in male body. This could point out that enjoyment, not gender inequality, is the reason why female fans still keep creating their fan works.

Another aspect regarding enjoyment found in fan studies is that uncertainty and challenge are the source of enjoyment. When sport fans cheer their favorite team during the match, they cannot know the upcoming results. Paul, Wachsman, and Weinbach (2010) found that this uncertainty can bring about fans’ enjoyment during cheering. Similarly for active fans who create fan video based on original footages from original TV series or movies, they have limited resources, skills, and technology to make a new story from the original given footages (Stein & Busse, 2009). This limited resources challenge fans to create fan work, and it was known that challenge is also a cause of enjoyment (Abuhamdeh & Csikszentmihalyi, 2012). In conclusion, being a fan, having fan identity, doing fan activities, and joining in fan community can provide fans the enjoyment because of reduced dissatisfaction (Tamborini, Grizzard, Bowman, Reinccke, Lewis, & Eden, 2011), decreased stress (Driessen, 2015), and consequently increased self-esteem (Orth & Luciano, 2015). Accordingly, the eighth hypothesis is proposed.

H8: Fan activities in class can result in increased enjoyment.

Enjoyment is a positive emotion, which can bring about other positive outcomes including learning motivation. Engagement and enjoyment during learning can drive the students to have more involvement, excitement (Ainley & Hidi, 2014), pride, and satisfaction during learning (Dewaele & MacIntyre, 2014). Enjoyment during learning is important to be explored because positive attitude toward learning
can bring about lifelong learning (Hagenauer & Hascher, 2014), which is also one of the 21\textsuperscript{th} century skills.

Students, who are motivated by enjoyable experience regarding information seeking and learning, would adopt this script and do it in their future life (Ainley & Hidi, 2014). “Script” is automatic behavior that an individual would do when one is stimulated by outside arouser(s). Script could be reinforced by both media exposure and self-direct experience (Anderson & Warbuston, 2012). However, the level of enjoyment is decreasing during young adolescent age (Hagenauer & Hascher, 2010), so the scholar should identify the way to increase it.

Educational game is designed as a tool to increase students’ enjoyment and satisfaction. Students’ extrinsic motivation could drive the students to play educational games before the class, because they need to receive a higher grade (Jong, Lai, Hsia, Lin, & Lu, 2013). AWWWARE is a web-browser-based game that was developed for teaching young children to search for relevant and safe online resources (Muller, Petko, & Gotz, 2011). Iten and Petko (2016) tested using this game in class and found that machine feedback (score), prior knowledge, and enjoyment could significantly predict students’ motivation. The researcher of the current study noticed that using fan activities in class, students would have both prior knowledge regarding fan object and enjoyment of bringing their leisure activities into the academic setting.

Another online application frequently used in the active learning is Kahoot, which is a poll-based games for teachers to ask their students to vote for the choice answers. Kahoot with both audio beeping and point showing helped increase students’
enjoyment, because it yields class interaction and expression without disclosing the students’ name (Wang & Lieberoth, 2016).

Participating in learning activity with anonymity, like in Kahoot, can help motivate students to answer the questions without being shy regarding incorrect answers. Using online course is another way to heighten students’ enjoyment, but in online course, Hicks and Klemmer (2016) found only the relationship between enjoyment and learning motivation, but not learning outcome. However, in another study, the high grade or academic performance can be predicted by enjoyment, self-regulated learning, and motivation (Mega, Ronconi, & De Beni, 2014). This could be supported by the study of Cho and Heron (2015), who found the link between positive emotion and students’ motivation in the class with self-regulated learning.

Without electronic media use in classroom, students could experience enjoyment and learning motivation, too. Myers, Goodboy, and Members of COMM 600 (2014) discovered that teachers’ clarity, humor, and caring could benefit students’ learning outcome, positive emotion, and learning motivation. To involve game into physical education class is a way to make the lesson more challengeable, which is a kind of motivation (Dismore & Bailey, 2011). To include both positive and negative emotion in the same research model, MacIntyre and Vincze (2017) found that positive emotion could describe a larger amount of variances in learning motivation than negative emotion. Moreover, enjoyment in learning also helped reduce anxiety (Dewaele & MacIntyre, 2014), which is the obstruction of learning motivation (Hong, Mason, Peng, & Lee, 2016). Learning motivation, which was also found as the cause
of self-efficacy, could perform as the mediator between positive emotion and academic achievement (Mega, Ronconi, & De Beni, 2014).

For the area of fandom, the motivation of binge watching behavior is driven by media enjoyment and fan identity (Shim & Kim, 2018). As for video game players, identification with a game character led them to have more enjoyment, more involvement, and higher effort to play game. Hence, all of these mentioned studies in this section helped construct the ninth hypothesis that enjoyment positively results in learning motivation.

H9: Enjoyment can explain the variances in learning motivation.

RQ7: Is the influence of fan activities in class on learning motivation mediated by expression?

Based on the reason of maintaining fan identity and self-esteem, fans communicate to other people in several ways to improve both their identity and self-esteem. This communication can be in various forms of expression, include joining online discussion board, joining cosplay event, writing fan fiction, and creating other fan works. Fan fiction is a form of self-expression (Berkowitz, 2012), that fans express their need, their idea, and their culture, and it also allows fans to receive feedback about their expression (Black, 2009a). Fan fiction is written by using inspiration, opinion, and the idea both against or extending the original plot (Leavenworth, 2015). The literature, even fan fiction, can reflect authors’ identity, social status, believe, culture, and religion (Black, 2009b; Schaenen, 2013).

Berkowitz (2012) reviewed fanfiction community as a safe place for adolescents to express their opinion regarding their object of interest. One of the
reasons that fan community could be safe for young children is that people can remain anonymous in social network, like a blog or forum. It can increase participation and self-expression of young people with trait shyness (Simon, 2012). This method has been successfully used in classroom. Not only anonymity or expression through pseudonym, communication in fan community is an easy way for expressing themselves regarding art, idea, and other shared creative content, without the restriction of age, gender, and social status (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2009).

Another reason that fan activities should be employed as class activities is that teachers should communicate through the media with which their students are familiar. Facebook group which is the online service that most students have used could help improve the communication between teachers and students and also helped students to engage more in class activities (da Cunha, van Kruistum, & van Oers, 2016). Facebook as classroom medium could also bring students with lack of confidence in foreign language use to write more and submit the assignment in time (Buga, Căpeneata, Chirasnel, & Popa, 2013). These could be the evidence that students’ familiar media could bring students to engage in class and communicate more to their teachers. For students with fan identity, their familiar form of communication is fan creations, that they create and express their idea and imagination for other fans to see.

Fan art is a kind of creations whose artists are inspired by popular media. Since fan art is artwork and its fan creator is artist, a fan creator would need to show their artwork to public in the same way as do general artists. In other words, the need
to show one’s own artwork is a form of the need to express oneself. Artists with trait exhibitionism may not want themselves to be standing out of the crowd or provide a speech to people, but they would prefer expressing themselves through the piece of art, instead, regardless of physical appearance and gender (Arunrangsiwed, 2015a). This might be that the artists could have their full control in making artwork. This means their artwork could reflect who they are better than their appearance or photograph. The informant in Roozen’s study (2009) could serve as an example of a young fan who expects other people to see her fan art on websites. Similarly, cosplay event, as a part of fan community taken place in real world setting, is the place where fans can express themselves by acting in hand-made costumes (Lamerichs, 2011). And as mentioned earlier, fans construct their second identity used in both online and real-world meeting, and they also trust other fans with the second identity, and this situation is not easy to find in other cultures. Moreover, after fans have expressed themselves in a fan community, they have more confidence when they have to express themselves in the real-world society (Chen, 2007; Lamerichs, 2011).

The way fans express their identity to others does not limit to inside fan community. Whether in online or real world contexts, some fans showed the give-away objects for anybody to recognize them as fans. This is because they wanted to interact with new people who had the similar fan identity (Chadborn, Edwards, & Reysen, 2017). This could be considered as a purposeful identity expression.

To use fan activities in class, Zimmerman (2014) suggested that students should be assigned to draw fan art regarding the literacy or poem that was used as class lesson. Drawing as a form of expression will help improve the level of students’
comprehension for the teacher to fulfill the difficult knowledge for them before the exam. Fan fiction was the fan activity that was most frequently suggested to use as in-class activities (Bahoric & Swaggerty, 2015; Black, 2009a; Land, 2010; Manifold, 2009). Form of fan activities in class might be understood as silent expression that students did not need to speak, but only in writing and drawing. Sauro and Sundmark (2016) have suggested another way to use fan activities in class, that is to let students do the role-play voicing of the giving text and at the same time, they might be asked to compose the alternative version of the text in the literary class. While these fan scholars believed that fan activities should be able to help improve teacher-student communication and academic motivation, none of them have tested this positive effect. Therefore, it should be hypothesized that fan activities in class had positive influence on student’s expression.

H10: Fan activities in classroom have a positive impact on students’ expression.

Because learning motivation can bring about learning outcome (Singh, Granville, & Dika, 2002) which is believed to be a part of life achievement, various studies have been conducted based on this reason, as seen in the literature review of Trautwein and Ludtke (2009). However, academic achievement as class performance was hard to include in the current study that tested the effect of fan activities in class from world-wide fan creators. This is because different schools and different levels of course have different difficulty, content, and grading system, so learning motivation became the main dependent variable.

In-class expression could be done by various forms of communication. In-depth discussion between teacher and students could increase students’ learning
motivation (Jurik, Gröschner, & Seidel, 2014), as well as the discussion among the
students to solve the given problem that was similarly able to improve their
motivation, too (Pan & Wu, 2013). Moreover, mobile device could be an effective
medium for students to communication to their teacher (Ciampa, 2013).
Comparatively, the interactivities between teacher and students in Twitter could
improve students’ class engagement. Since the learning strategies and social-media-
involving learning were examined in previous studies, students’ expression through
fan activities should be tested, too. Fan fiction, as a part of class assignment, could
motivate students to write longer than general writing assignment (Schattenherz,
2016). This shows that fan activities help students to be able to express their idea
better, and their ability to write longer papers could describe their improved learning
motivation. Therefore, the following hypothesis was constructed.

H11: Students’ expression can help improve learning motivation.

The current study primarily examines the effect of using fan activities in
classroom on learning motivation, mediated by uncertainty, self-esteem, enjoyment,
and expression. Moreover, this study will be conducted by using a quantitative
approach to test the conceptual model. Generally, quantitative approach can be found
in sport fan studies, but it is rarely found in active-fan studies, such as the research on
fan art, fan fiction, cosplay, and other creative practices. Active-fan studies are often
done by textual analysis and interview. There are only some active-fan scholars using
the quantitative approach, such as Campbell, Aragon, Davis, Evans, Evans, and
Randall, (2016) who identified the characteristics of fan fiction feedback and its
frequency; Maslej, Oatley, and Mar (2016) who examined the relationship among
trait, character development, reading and writing habit; and Arunrangsiwed’s studies (2015b; 2016) that confirmed and disproved the prior belief about Slash fan creation.

The quantitative research design is important to be conducted, because the issue which will be confirmed is increasingly concerned by education scholars. The strategies to improve learning motivation have several effects on students’ academic achievement and their lifelong learning. Finally, the researcher expects that the current study will help describe and confirm the roles of fandom, fan identity, and fan activities in academic setting, especially to improve students’ learning motivation, self-expression, self-esteem, and also their enjoyment.
CHAPTER 3

METHOD

This chapter includes the details regarding research method, which are participants, tools, validity and reliability test, procedure, and analysis, respectively.

Research Design

The quantitative approach was used (1) to identify the influence of fan identification on the amount of fan activities in class; (2) to test the effect of both mentioned variables on students’ learning motivation (the main dependent variable); (3) to examine the effect of fan activities in class on four mediating variables (uncertainty, self-esteem, enjoyment, and expression); and (4) to indicate the contribution of four mediators on students’ learning motivation.

Participants

The population of the present study was fans who were college students taking at least one art class or other related courses. The samples were drawn from online fan community. Online participants were used in the current study because most of active fans can be found in online fan community, but they are rarely found in general real world setting beside Cosplay events. Moreover, using online participants allowed the research findings to be able to generalize better than using the group of fans in Cosplay events. Hence, an online questionnaire was employed for the actual data collection. The online fan community selected for the data collection was the website, DeviantArt.com, because this website allowed fans and general artists to post various kinds of artwork, including drawing, painting, fiction, photography of cosplayers,
photography of hand-made dolls, and other forms of artwork. For the privacy of this website, all of these works have to be made by fans or artists. The screen shot from original media or artwork created by others are unpermitted to upload.

Inclusion Criteria:

(1) The participants were users in DeviantArt.com.

(2) The participants had done at least one piece of fan creation. These fan creations could be any form of art, such as painting, cosplay, fan fiction, or Flash game.

(3) The participants were students who enrolled in art-related class or art-related program.

(4) The participants were active users, not lurkers, since the researchers could recruit their usernames when they were online.

Exclusion Criteria:

(1) The researcher did not select the users who had no artwork in their online galleries.

(2) The researcher did not select the users whose age shown in their profile was less than 18 years old.

G* Power was used to estimate the number of sample size based on the medium effect size. The researcher input 17 as the number of predictors. Although there were 6 predictors in the research model (Fig 2.1), most measurements contained more than one dimension, and 17 were the total number of all dimensions in all
predictors. The model of the current study required at least 208 participants for the analysis and actual power was .950. Using online questionnaire, indeed, might result in low response rate due to the lack of trustworthiness (Na Songkhla, 2014; Surinwarangkul, 2014). The researcher expected only 50% response rate. Hence, a private message was sent to up to 420 users, and the researcher stopped sending the message whenever she had at least 208 respondents. This means the researcher could send the private to 420 users or less. These 420 usernames were randomly selected based on users’ login time. The researcher selected 6 users every four hour in a week, until the number of users in the list reaches 420. Each respondent received 100 points (around 45 baht) from the researcher if only when they completed all items in measurement part of the questionnaire. Points are the medium of exchange in DeviantArt.com, which was the place for data collection.

To qualify for this study, the participants was informed in both private message and on top of the questionnaire that they needed to be fan creators, who were in an art school or enrolled in an art-related class during the time of their participation. The questionnaire that they were asked to complete consisting of demographic data, the measurement of fan identification, fan activities in class, uncertainty during academic course, self-esteem, class enjoyment, academic expression, and learning motivation. After the researcher sent the message to 352 users, 240 participants completed the questionnaire with 23 invalid cases. Therefore, the researcher did not send any private message to the remaining of users in the prepared list. The final number of cases used in the analysis was 217. Invalid cases that were found in this data collection were caused by the participants who did not properly read the items (filled out the entire questionnaire with the same answer) and those who submitted the
questionnaire with missing items. The cases with missing data in the variable measurement part were considered as invalid cases, but the cases with only missing demographic data were used in the analysis.

Tools

The current study used 7 scales to measure the value of all variables in the model. Every scale has 4-point Likert-type items (4 = Agree; 3 = Somewhat Agree; 2 = Somewhat Disagree; 1 = Disagree). The first part of the questionnaire was demographic data, which included the items of gender, age, country, number of artwork in DeviantArt account, and length of period being user of DeviantArt.com. Before the participants answered each item of this questionnaire, they were asked to type down the name of objects of which they were the fans. For example, they could write the name of their favorite music bands, cartoon characters, movie stars, or even the titles of TV shows. This way may help remind the participants of their fan object while filling in the questionnaire.

(1) Fan identification: 5-dimensional fan identification (5FI) was constructed to measure the level of fan identification. This scale consisted of 15 items, where 3 items was used to measure each dimension. These 5 dimensions are (1) self-identified fan identity (2) identity constructed toward hegemony (3) in-group identity (4) out-group --general people-- identity, and (5) identity constructed against enemy or rival. This scale was modified based on sport spectator identification scale (Wann & Branscombe, 1993), identity salience (Callero, 1985), and need for identification (Mayhew, Gardner, & Ashkanasy, 2010). All of the items in these mentioned scales were rearranged into 5 dimensions. The researcher removed some similar items and
added some more items related to the given dimensions. The highest possible score is 60, and the lowest is 15. The example of items in this scale are “I have a lot in common with other people who like them (in in-group identity dimension)”, and “I hate to display their apparel or cloth for others to recognize (reversed item in out-group --general people-- identity dimension).”

(2) Fan activities in class (FAiC): Fan activities in class is the scale first written specifically for this study. The purpose of this scale was to measure the perceived amount of fandom-related activities that each student had previously done in class. This scale has 8 items, and 2 dimensions, forces activities (such as assignment or class project) and self-selected activities. This implies that each dimension consists of 4 items. The highest possible score is 32, and the lowest is 8. The examples of items in this scale are “I submit fan fictions as assignments to my teachers (in forces activities dimension)” and “I draw fan art as doodle in my own book during lecture (in self-selected activities dimension).”

(3) Uncertainty: Uncertainty in the current study referred to uncertainty during learning. The measurement was modified based on the uncertainty scale of Carleton, Norton, and Asmundson, (2007), the intolerance of uncertainty questionnaire of Freeston and his colleagues (1994), and anxiety test of Sarason (1977). Some repeated items were removed while the researcher also wrote some additional items for this scale. Uncertainty during academic course scale consists of 4 dimensions which are (1) insufficient information, (2) perceived unsecured, (3) being in dilemma and crisis, and (4) losing social or meaningful object. All items were arranged into these dimensions which were constructed based on the conclusion of the researcher’s
previous study (Arunrangsiwed, 2017). Each dimension contains 4 items. The examples of items in this scale are “I worry about unpredictable class activities (in insufficient information dimension)”, and “Without close friends, I got nervous in group assignment (in losing social or meaningful object dimension).”

(4) Self-esteem: The current study used Rosenberg's self-esteem scale (1965) to measure the value of the self-esteem. Although this scale was first written in 1965, it has been widely used for data collection in the area of psychology and education until today. These studies have tested its reliability and construction validity and found that both of them were acceptable. For example, Zhang, Xuan, Chen, Zhang, Lou, and Wang (2016) and Martin-Albo, Nunez, Navarro, and Grijalvo (2007) tested its construction validity and their findings revealed that $\chi^2(20)=167.34; \text{RMSEA}=0.03$ and $\chi^2(35)=367.06; \text{RMSEA}=.15$, respectively. For reliability, recent studies that used this scale revealed acceptable Cronbach’s alphas which were .93 (Campbell, 2016), .85, .88 (Martin-Albo, Nunez, Navarro, & Grijalvo, 2007), .71 (Noor, Bashir, & Earnshaw, 2015), .80 (Palermi, Servidio, Bartolo, & Costabile, 2017), .77 (Wang, Xia, Li, Wilson, Bush, & Peterson, 2014), .81 (Yu, Li, Wang, & Zhang, 2016), and .81 (Zhang, Xuan, Chen, Zhang, Lou, & Wang, 2016).

(5) Class enjoyment: After reviewing previous papers of other researchers, Fu, Su, and Yu’s scale for measuring learners’ enjoyment of e-learning games (2009) was suitable to adapt into the current study better than the single-item scale of Barr-Anderson, Neumark-Sztainer, Lytle, Schmitz, Ward, Conway, and Pate (2008). After modification, class enjoyment finally consisted of 9 items with 3 dimensions, 3 items per each dimension. These dimensions are (1) enjoyment regarding activities or
assignment, (2) enjoyment regarding classmate, and (3) general class enjoyment. The examples of items in this scale are “I feel cooperative toward other classmates (in the dimension of enjoyment regarding classmate)” and “I forget about time passing during class period (in the dimension of general class enjoyment).”

(6) Academic expression: Academic expression scale was modified based on the dimension of extraversion in Big 5 personal traits of John and Srivastava (1999). This scale consisted of 12 items. The researcher adapted the items in this scale to meet classroom context. Moreover, since fan activities included drawing, writing, and other kinds of expressions, the researcher added the items regarding art expression into the scale. For instance, there are the items, “I tend to be quiet when my classmates ask me questions (reversed item)” and “I am frustrated, when I have to draw things for my assignment (reversed item).”

(7) Learning motivation: Short-version of learning motivation scale was rewritten according to students’ motivation towards science learning (SMTSL) of Tuan, Chin, and Shieh (2005). The original scale was constructed to use in science courses and consists of 35 items with 6 dimensions. The number of items in the scale used in the current study was reduced to be 15 items with 5 dimensions. The original 6 dimensions were (1) self-efficacy, (2) active learning strategies, (3) science learning value, (4) performance goal (5) achievement goal, and (6) learning environment stimulation, and the removed dimension was performance goal. This is because this dimension consists of 4 reversed items, where in fact, they could be read as extrinsic motivation, not reversed items. The examples of items in this scale are “When I find the content difficult, I always try to learn it (in the dimension of self-efficacy)” and “I
feel most fulfilled when I feel confident about the content (in the dimension of
achievement goal).”

Validity and Reliability of the Instrument

Before sending this questionnaire to the actual participants whose results
would be used to test the research model, all scales were tested by using factor
analysis and reliability test. One hundred undergraduate students who initially drew
fan art or wrote fan fiction were asked to complete the questionnaire. The result of
factor analysis and reliability test allowed the researcher to use all scales in the actual
data collection. KMO values were ranged from .669 to .859, and all Cronbach's alpha
values were above 0.7 (Warner, 2012), ranging from .740 to .864, which was
acceptable.

Table 3.1: Factor Analysis, Pretest with 100 Undergraduate Students

<table>
<thead>
<tr>
<th>Scale Name</th>
<th>Cronbach's Alpha</th>
<th>KMO</th>
<th>KMO p-value</th>
<th>Determinant Value</th>
<th>Extraction (min)</th>
<th>Extraction (max)</th>
<th>Corr. between items (min)</th>
<th>Corr. between items (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumption</td>
<td>&gt;.7</td>
<td>&gt;.5</td>
<td>&lt;.05</td>
<td>&gt;.00001</td>
<td>&gt;.3</td>
<td>-</td>
<td>-</td>
<td>&lt;.8</td>
</tr>
<tr>
<td>Fan activities</td>
<td>.740</td>
<td>.735</td>
<td>.000</td>
<td>.171</td>
<td>.366</td>
<td>.648</td>
<td>.025</td>
<td>.467</td>
</tr>
<tr>
<td>Fan Identity</td>
<td>.815</td>
<td>.751</td>
<td>.000</td>
<td>.005</td>
<td>.469</td>
<td>.759</td>
<td>.000</td>
<td>.635</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>.814</td>
<td>.767</td>
<td>.000</td>
<td>.007</td>
<td>.365</td>
<td>.739</td>
<td>.005</td>
<td>.558</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>.864</td>
<td>.859</td>
<td>.000</td>
<td>.013</td>
<td>.518</td>
<td>.701</td>
<td>.061</td>
<td>.668</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>.744</td>
<td>.740</td>
<td>.000</td>
<td>.115</td>
<td>.320</td>
<td>.783</td>
<td>.002</td>
<td>.562</td>
</tr>
<tr>
<td>Expression</td>
<td>.815</td>
<td>.741</td>
<td>.000</td>
<td>.017</td>
<td>.418</td>
<td>.736</td>
<td>.015</td>
<td>.615</td>
</tr>
<tr>
<td>Motivation</td>
<td>.754</td>
<td>.669</td>
<td>.000</td>
<td>.010</td>
<td>.326</td>
<td>.818</td>
<td>.000</td>
<td>.752</td>
</tr>
</tbody>
</table>
Procedure and Participant Recruitment

All measurements mentioned earlier were translated into Thai and translated back into English to check for meaning discrepancy with the original version. This process was done by a language expert who knows both Thai and English languages. For Thai version, the researcher revised the items and rewrote some sentences, in case she found their meaning shift. After questionnaire preparation, the researcher submitted the application for approval to Ethics Committee for Human Research in Bangkok University, and got the approval that this study would do no harm whatever to the subjects of this study.

The researcher conducted the validity and reliability test of the instrument as mentioned earlier. Then, the final version of questionnaire was posted in Google Forms. The researcher started sending private message including the link of consent document and questionnaire in late September, 2017. At the time that the messages were sent to 352 DeviantArt users, the numbers of respondents reached 240. Because this number was larger than the expected sample size, the researcher stopped sending private message to other users in the list. After examining the collected data, 23 cases were identified as invalid cases. Therefore, the total number of cases used in the data analysis was 217.

Data Analysis

Path analysis was used to examine the effects among the variables based on the hypotheses. Six univariate regression analyses were employed to construct the overall model. The predictors and dependent variable of each sub-model were shown in Table 3.2. Since the same samples and data were tested 6 times, Bonferroni
correction was used to reduce Type I Error by decreasing the alpha value from 0.05 to be 0.0083 (0.05 multiplied by the number of regression analyses, which is 6).

Additional analyses that helped describe the data were also used, such as bivariate correlation. The distribution of residuals was also reported. Assumptions of regression regarding homoscedasticity and multicollinearity, were tested to see if the regression was suitable for the current analysis. However, if these tests turned out unexpected results, the researcher planned to keep and discuss the findings, but the statistical problem must be reported. As reported in the next chapter, chapter 4, the data did not violate the assumptions of regression, both homoscedasticity and multicollinearity. Therefore, there was not problematic statistical results presented in the research findings.

Table 3.2: Predictors and Dependent Variable of Sub-Model in Path Analysis

<table>
<thead>
<tr>
<th>Model #</th>
<th>Predictor</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fan identification</td>
<td>Fan activities in class</td>
</tr>
<tr>
<td>2</td>
<td>Fan activities done in class</td>
<td>Uncertainty</td>
</tr>
<tr>
<td>3</td>
<td>Fan activities done in class</td>
<td>Self-esteem</td>
</tr>
<tr>
<td>4</td>
<td>Fan activities done in class</td>
<td>Enjoyment</td>
</tr>
<tr>
<td>5</td>
<td>Fan activities done in class</td>
<td>Expression</td>
</tr>
<tr>
<td>6</td>
<td>Fan identification Fan activities done in class</td>
<td>Learning Motivation</td>
</tr>
</tbody>
</table>
CHAPTER 4

RESULTS

This part of dissertation would begin with assumption testing for regression analysis to show if this data analysis could be properly used in the current study, and followed by the main analysis for hypothesis testing.

Assumption Testing

Homoscedasticity

The present study tested the conceptual model by using path analysis, in which 6 regression sub-models were conducted. The major statistical assumption of regression analysis is homoscedasticity, which refers to the homogeneity of variances. This implies that the residuals of regression line have to be in normal distribution.

After using a statistic package to print all residuals of all 6 sub-models into a spreadsheet, descriptive analysis was employed for the researcher to make a decision, if all models had homoscedasticity and not violate the assumption of regression. The finding of this part revealed that all sub-models did not violate the assumption. The skewness values of residuals in the first to sixth sub-models were .289, -.220, -.136, -.019, .287, and -.428, respectively. None of these values was larger than 1.96 or -1.96 (Kim, 2013), so all skewness values were not significant. The skewness values showed that the residuals were fit in a normal distribution.
Table 4.1: Skewness and Kurtosis Values of Residuals in all 6 Models

<table>
<thead>
<tr>
<th>Model #</th>
<th>Predictor</th>
<th>Dependent Variable</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>o Fan identification</td>
<td>Fan activities in class</td>
<td>.289</td>
<td>-.126</td>
</tr>
<tr>
<td>2</td>
<td>o Fan activities done in class</td>
<td>Uncertainty</td>
<td>-.220</td>
<td>-.269</td>
</tr>
<tr>
<td>3</td>
<td>o Fan activities done in class</td>
<td>Self-esteem</td>
<td>-.136</td>
<td>-.782</td>
</tr>
<tr>
<td>4</td>
<td>o Fan activities done in class</td>
<td>Enjoyment</td>
<td>-.019</td>
<td>-.425</td>
</tr>
<tr>
<td>5</td>
<td>o Fan activities done in class</td>
<td>Expression</td>
<td>.287</td>
<td>-.378</td>
</tr>
<tr>
<td>6</td>
<td>o Fan identification o Fan activities done in class o Uncertainty o Self-esteem o Enjoyment o Expression</td>
<td>Learning Motivation</td>
<td>-.428</td>
<td>.397</td>
</tr>
</tbody>
</table>

Table 4.2: Descriptive Statistics of all Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>S.D.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan identification</td>
<td>15</td>
<td>41.235</td>
<td>21</td>
<td>60</td>
<td>8.508</td>
<td>-.069</td>
<td>-.575</td>
</tr>
<tr>
<td>Fan activities in class</td>
<td>8</td>
<td>16.608</td>
<td>8</td>
<td>29</td>
<td>5.165</td>
<td>.452</td>
<td>-.481</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>16</td>
<td>42.797</td>
<td>19</td>
<td>59</td>
<td>8.254</td>
<td>-.482</td>
<td>-.176</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>10</td>
<td>26.654</td>
<td>11</td>
<td>40</td>
<td>7.392</td>
<td>-.127</td>
<td>-.759</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>9</td>
<td>23.562</td>
<td>11</td>
<td>36</td>
<td>5.601</td>
<td>-.034</td>
<td>-.717</td>
</tr>
<tr>
<td>Expression</td>
<td>12</td>
<td>32.318</td>
<td>16</td>
<td>48</td>
<td>6.898</td>
<td>.208</td>
<td>-.621</td>
</tr>
<tr>
<td>Learning Motivation</td>
<td>15</td>
<td>43.585</td>
<td>26</td>
<td>60</td>
<td>5.930</td>
<td>-.096</td>
<td>-.080</td>
</tr>
</tbody>
</table>

Note: All variables are measured with 4-point Likert scale.
For kurtosis values, none of them showed the violation of regression assumption as well as skewness ones. The kurtosis values of all 6 sub-models were -.126, -.269, -.782, -.425, -.379, and .397, respectively. Negative values of kurtosis imply that the curve of actual data was flatter than normal distribution, but all these values were in the acceptable level. None of them was greater than 1.96 or -1.96 (Ghasemi & Zahediasl, 2012; Kim, 2013). This means the collected data did not violate the assumption of regression.

Multicollinearity Test

Multicollinearity test is another important part of analysis to test the assumption of regression. Multicollinearity could occur when there are too high correlations among independent variables. For the pairwise correlation between independent variables and dependent variable, variance inflation factor (VIF) values were also calculated. There was no VIF value in the current analysis higher than 10 (Slinker & Glantz, 1985). This indicates that there was no multicollinearity found among the variables. VIF values of all models with single predictor were ranged from 1.003 to 1.348, as presented in Table 4.3. For the last model with 6 predictors, VIF values were ranged from 1.490 to 1.832.
Table 4.3: Variance Inflation Factor (VIF) Values of Regression Models

<table>
<thead>
<tr>
<th>Model #</th>
<th>Predictor</th>
<th>Dependent Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>o Fan identification</td>
<td>Fan activities in class</td>
<td>.742</td>
<td>1.348</td>
</tr>
<tr>
<td>2</td>
<td>o Fan activities done in class</td>
<td>Uncertainty</td>
<td>.949</td>
<td>1.054</td>
</tr>
<tr>
<td>3</td>
<td>o Fan activities done in class</td>
<td>Self-esteem</td>
<td>.997</td>
<td>1.003</td>
</tr>
<tr>
<td>4</td>
<td>o Fan activities done in class</td>
<td>Enjoyment</td>
<td>.936</td>
<td>1.068</td>
</tr>
<tr>
<td>5</td>
<td>o Fan activities done in class</td>
<td>Expression</td>
<td>.930</td>
<td>1.075</td>
</tr>
</tbody>
</table>

Table 4.4: Variance Inflation Factor (VIF) Values of Regression Model #6

<table>
<thead>
<tr>
<th>Model #</th>
<th>Predictor</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Fan identification</td>
<td>.661</td>
<td>1.512</td>
</tr>
<tr>
<td>6</td>
<td>Fan activities done in class</td>
<td>.671</td>
<td>1.490</td>
</tr>
<tr>
<td>6</td>
<td>Uncertainty</td>
<td>.651</td>
<td>1.627</td>
</tr>
<tr>
<td>6</td>
<td>Self-esteem</td>
<td>.552</td>
<td>1.813</td>
</tr>
<tr>
<td>6</td>
<td>Enjoyment</td>
<td>.607</td>
<td>1.648</td>
</tr>
<tr>
<td>6</td>
<td>Expression</td>
<td>.546</td>
<td>1.832</td>
</tr>
</tbody>
</table>
Another test for multicollinearity was bivariate correlation analysis, which was run to see the relationship among all predictors in the sub-model #6. Other sub-models did not require this analysis, because each of them consisted of only single predictor. The correlation between each couple of predictors in sub-model #6 were ranged from -.056 to .525, or they were shown in Table 4.5. There was no value higher than .7, so diagnosing regarding multicollinearity was not found (Warner, 2012).

Table 4.5: Correlation Matrix of Predictors

<table>
<thead>
<tr>
<th></th>
<th>Fan activities in class</th>
<th>Fan identification</th>
<th>Uncertainty</th>
<th>Self-esteem</th>
<th>Enjoyment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan identification</td>
<td>.508**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty</td>
<td>.226**</td>
<td>.241**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-.056</td>
<td>.065</td>
<td>-.482**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment</td>
<td>.254**</td>
<td>.272**</td>
<td>-.091</td>
<td>.468**</td>
<td></td>
</tr>
<tr>
<td>Expression</td>
<td>.264**</td>
<td>.285**</td>
<td>-.339**</td>
<td>.482**</td>
<td>.525**</td>
</tr>
</tbody>
</table>

**p<.01

Findings

Demographic Data Statistics

Demographic data presented in the current study consisted of 5 variables, gender, age, number of uploaded artwork, the length of time being in DeviantArt.com (in year), and country, which was later coded as continent. Out of 240 cases, 50 participants did not fill out any demographic item and many of them had more than 2
missing items. Considering only in the part of 217 valid cases, there were 27 cases with missing demographic data.

The majority of participants were female (N=91), followed by male (N=50), and other gender (N=16). Eighty-three participants did not provide their information about gender. There were 83 participants who provided the data about their age. Almost all of these participants were older than 20 years old (Mean=22.6; S.D.=3.751). The oldest participant was 30 years old, and the youngest was 18 years old. As the users of an online community, all selected participants had at least one artwork uploaded in their account. The largest number of artwork uploaded by a single user was 3,016 pieces, and the smallest number was 1 piece (Mean=219.59; Median=98; S.D.=347.709). Most participants had been users in DeviantArt.com between 1 year to 6 years (Mean=3.181; S.D.=2.872). The shortest length of time being in this community found in the data was 3 months or .25 year, and the participant that stayed in this website for the longest period had been there for 14 years.

The demographic data about the participants’ territory showed that most participants were from North America (N=118), including the United States, Canada, Mexico, Bahamas, and Barbados. Ninety-eight participant (40.833%) were from the United States, and this number was slightly close to 33.7 percent, which was the US users in DeviantArt.com among all users from worldwide (Alexa.com, 2017). The largest group of participants were female users from the United States (N=54), followed by male ones (N=27). For other continents, some participants were from Europe (N=16), such as United Kingdom, Germany, Ukraine, France, Estonia, and
Finland; and some were from Asia (N=13), including Philippines, Thailand, India, and Taiwan; some were from South America, such as Argentina, Bolivia, Chile, Colombia, and Paraguay; and few were from Australia (N=5), such as Australia, New Zealand, and Heard Island and McDonald Islands. Based on Alexa Traffic Analyzer (Alexa.com, 2017), most DeviantArt users were from the United States, followed by China, United Kingdom, Germany, and Japan. The samples of this study did not include users from China and Japan. This could result in lack of generalization in both mentioned countries. Other details regarding demographic data were presented in Table 4.6, 4.7, and 4.8.

Table 4.6: Descriptive Statistics of Participants’ Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent based on 217 cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>91</td>
<td>41.9</td>
</tr>
<tr>
<td>Male</td>
<td>50</td>
<td>23.0</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>7.4</td>
</tr>
<tr>
<td>Missing data</td>
<td>60</td>
<td>27.6</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.7: Descriptive Statistics of Participants’ Age, Number of Uploaded Artwork, Years in Deviantart.com

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>83</td>
<td>22.60</td>
<td>3.751</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Uploaded Artwork</td>
<td>181</td>
<td>219.59</td>
<td>347.709</td>
<td>1</td>
<td>3,016</td>
</tr>
<tr>
<td>Years as DeviantArt user</td>
<td>182</td>
<td>3.18</td>
<td>2.872</td>
<td>0.25</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 4.8: Descriptive Statistic of Participants’ Living Continent

<table>
<thead>
<tr>
<th>Continent</th>
<th>Frequency</th>
<th>Percent based on 217 cases**</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>118</td>
<td>54.4</td>
</tr>
<tr>
<td>Europe</td>
<td>16</td>
<td>7.4</td>
</tr>
<tr>
<td>Asia</td>
<td>13</td>
<td>6.0</td>
</tr>
<tr>
<td>South America</td>
<td>11</td>
<td>5.1</td>
</tr>
<tr>
<td>Australia</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Missing data</td>
<td>54</td>
<td>24.9</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Path Analysis

Regression analysis was used to test 6 models which were parts of the overall model in path analysis. Firstly, fan identification strongly predicted fan activities (F=74.661; R²=.258; p=.001), therefore the first hypothesis was supported. Next, 4 models were tested if fan activities in class could be an enabling predictor of 4
mediators. It was found that fan activities in class significantly described the variances in in-class uncertainty ($F=11.615; R^2=.051; p=.001$), academic enjoyment ($F=14.823; R^2=.064; p=.001$), and expression ($F=16.147; R^2=.070; p=.001$), but not in self-esteem ($F=.672; R^2=.003; p=.413$). This implies that H8 and H10 were supported, but the null hypothesis of H6 could not be rejected. However, the finding of this part has a reverse predicting direction compared to H4. Finally, the last sub-model of path analysis, that tested the influence of all predictors and mediators on learning motivation, is statistically significant ($F=37.735; R^2=.519; p=.001$). Medium effect size on learning motivation was found from 2 mediators, enjoyment ($\beta=.328; t=5.340; p=.001$) and expression ($\beta=.384; t=5.922; p=.001$), but not from all other mediating variables. There was no impact found from uncertainty ($\beta=.128; t=2.092; p=.038$), self-esteem ($\beta=.110; t=1.704; p=.090$), fan identification ($\beta=.130; t=2.211; p=.028$), and fan activities in class ($\beta=.009; t=.147; p=.883$) on learning motivation.

This path analysis revealed indirect effects of fan activities in class on learning motivation, which were mediated by enjoyment and academic expression. In conclusion, H1, H8, H9, H10, and H11 were supported, but H2, H3, H5, H6, and H7 were not. Surprisingly, a part of the findings and H4 were in an opposite direction. Fan activities in class did not help reduce uncertainty, but increase it instead.

To describe these findings as paths, two paths are statistically significant, and other four paths are somewhat significant. First, fan identification does not have a direct effect on students’ learning motivation. Second, fan identification could increase the amount of fan activities done in class, but fan activities in class could not describe students’ learning motivation. Third, as fan identification could promote fan
activities in class, fan activities in class cause a higher level of uncertainty in students, and the effect of this uncertainty on learning motivation was not found. Forth, fan identification could maximize fan activities in class, which have no influence on students’ self-esteem, and students’ self-esteem does not affect their learning motivation. Fifth, fan activities in class are described by fan identification, and they could improve students’ enjoyment, which leads to their learning motivation. Finally, fan identification helps promote fan activities in class, which have an effect on students’ academic expression, and this expression could increase their learning motivation.

Table 4.9: Sub-Models of Path Analysis

<table>
<thead>
<tr>
<th>#</th>
<th>Predictors / Dependent Variable</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fan identification</td>
<td>74.661</td>
<td>.508</td>
<td>.258</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Fan activities done in class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fan activities done in class</td>
<td>11.615</td>
<td>.226</td>
<td>.051</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Uncertainty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Fan activities done in class</td>
<td>.672</td>
<td>.056</td>
<td>.003</td>
<td>.413</td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fan activities done in class</td>
<td>14.823</td>
<td>.254</td>
<td>.064</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fan activities done in class</td>
<td>16.147</td>
<td>.264</td>
<td>.070</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Expression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Fan identification</td>
<td>37.735</td>
<td>.720</td>
<td>.519</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Fan activities done in class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Uncertainty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.0083
Table 4.10: Sub-Model #6 Learning Motivation as The Dependent Variable

<table>
<thead>
<tr>
<th>#</th>
<th>Predictors</th>
<th>β</th>
<th>t</th>
<th>r_{partial}</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fan identification</td>
<td>.130</td>
<td>2.211</td>
<td>.151</td>
<td>.028</td>
</tr>
<tr>
<td>2</td>
<td>Fan activities done in class</td>
<td>.009</td>
<td>.147</td>
<td>.010</td>
<td>.883</td>
</tr>
<tr>
<td>3</td>
<td>Uncertainty</td>
<td>.128</td>
<td>2.092</td>
<td>.143</td>
<td>.038</td>
</tr>
<tr>
<td>4</td>
<td>Self-esteem</td>
<td>.110</td>
<td>1.704</td>
<td>.117</td>
<td>.090</td>
</tr>
<tr>
<td>5</td>
<td>Enjoyment</td>
<td>.328</td>
<td>5.340</td>
<td>.346</td>
<td>.001*</td>
</tr>
<tr>
<td>6</td>
<td>Expression</td>
<td>.384</td>
<td>5.922</td>
<td>.378</td>
<td>.001*</td>
</tr>
</tbody>
</table>

*p < 0.0083
CHAPTER 5

DISCUSSION

This chapter was written to summarize this research study and describe research findings by using existing literatures. Moreover, implication, limitation, and future direction are also provided.

Both extrinsic and intrinsic motivation are the important factors that cause students’ academic achievement (Csikszentmihalyi & Wong, 2014), while learning motivation has been reduced during the semester (Busse & Walter, 2013), and when the students get older (Hagenauer & Hascher, 2010). Therefore, the current study sought the way to improve students’ learning motivation. Williams (2006) suggested that popular media as a part of class lesson could improve students’ motivation and class engagement. This might be because students were prior fans of media objects. Fan fictions, as the secondary text based on the primary text or original media, should be able to motivate young students to keep practicing writing and reading, especially those who avoid writing and reading assignment (Berkowitz, 2012). Hence, fan fiction should be used as the engaging element in class (Black, 2009a), and should be collected as a section in library (Land, 2010).

Fan fictions as a part of class activities should be able to increase students’ learning motivation because they need to use technology and they have a chance to incorporate their favorite text into class assignments which lead to the improvement of their enjoyment during the semester (Bahoric & Swaggerty, 2015). Similarly, many fan scholars believed that fan activities, such as writing fan fictions, drawing fan art, and making costumes for cosplay, could help support and develop students’ academic
skills (Chen, 2007; Land, 2010; Manifold, 2009; Roozen, 2009). They also found that skills developed during involving in fan activities could be used to achieve fan’s future career (Manifold, 2009). Neal Adams, for example, who was Batman fans and later became the penciller and comic writer for Batman story (Hebda, 2013), and Thomas Roy, a fan of Marvel comics, grew up and wrote the story of Avengers (Sweeney, 2013).

The current study mainly tested the effect of fan activities in class on learning motivation mediated by four mediators, uncertainty, self-esteem, enjoyment, and expression. After a cross-sectional study was conducted, both class enjoyment and in-class expression could perform as enabling mediators between fan activities in class and learning motivation, but not for other two mediating variables, uncertainty and self-esteem. Moreover, there was no direct effect found from both fan identification and fan activities in class on learning motivation, but there was a strong link between both of these predictors, fan identification and fan activities in class.

Figure 5.1: Research Model with Effect Sizes (β)
Table 5.1: The Results of Hypothesis Testing in Path Analysis

<table>
<thead>
<tr>
<th>Path</th>
<th>Hypothesis with Sig</th>
<th>Hypothesis with No Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan Identification</td>
<td>H1, H4</td>
<td>H5</td>
</tr>
<tr>
<td>Fan Activities done in Classroom</td>
<td>H1, H6, H7</td>
<td></td>
</tr>
<tr>
<td>Fan Identification</td>
<td>H1, H8, H9</td>
<td></td>
</tr>
<tr>
<td>Fan Activities done in Classroom</td>
<td>H1, H10, H11</td>
<td></td>
</tr>
</tbody>
</table>

Fan Identification, Fan Activities in Class, and Learning Motivation

Because students’ learning motivation could result in academic achievement (Csikszentmihalyi & Wong, 2014), which is the key to get into the organizations that the students dream of working for, it is important for teachers to enhance their learning motivation with any strategy that the class subject allows them to use. The findings of the current study show that fan identification could heighten the amount of fan activities done in class, but these fan activities could not improve students’ learning motivation. This path is shown in Figure 5.2.
Moreover, there is also no direct effect found from fan identification on learning motivation as seen in Figure 5.3.

This part of discussion mainly discusses the factors that may prevent both fan identification and fan activities in class to affect students’ learning motivation. First, the difference between the finding of the current study and other previous fan studies would be illustrated.

Unlike many previous studies, the present study found no influence from fan identification and fan activities in class on learning motivation. The type of fan activities that fan scholars suggested teachers to use as class engaging object is active fan activities. These activities are such as writing fan fiction, drawing fan art, creating fan video, and other creative and artistic works (Arunrangsiwed & Beck, 2016).
However, there was lack of fan study in this area that revealed the influence of fan identification on fan activities, but many of sport and music fan studies have constructed this causal relationship (Bodkin, Amato, & Peter, 2009; Phua, 2010; Taylor, 2015; Zhang, 2017). The output of the active fan activities could prove that fans need to have motivation to complete their tasks.

Doujinshi or comic book created by fans or amateurs is a good example for this case. To complete a book of doujinshi, fans need to compose a fan fiction and draw all the characters’ action in comic panels. This consumes a large amount of time and effort (Lam, 2010). Fan fiction authors also wish that their writing and plot development skills would be better (Bolt, 2004). Therefore, they asked others to critique their work to understand the mistake and the way to refine their writing ability (Lammers, 2016). Similar for fan artists, the capacity to draw on paper is not enough, since they try to be master their proficiency on tablet and computer software, too (Roozen, 2009). Music fans do practice their skills on playing musical instruments and composing some songs, and they hope that they would become famous artists in the future (Alvermann & Hagood, 2000). As mentioned earlier in this chapter, Academic papers on comics and fandom showed that people who had initially engaged in fan activities could be benefited from the improved skills and grow up to work in their interesting field, such as to become a game developer (Manifold, 2009) and comic book writers of their favorite characters (Hebda, 2013; Sweeney, 2013).

All of these studies could help draw the link from fan identification on fan activities and fan activities onto motivation to keep doing the particular activities and improving the skills of creating them. However, the finding of the present study
suggests that if fan activities actually have some relationship with fan motivation either inside or outside classroom, learning motivation might be something else that is not related to fan motivation, whether that fan motivation was caused in classroom or not. In other words, teachers may not be able to use fan motivation to do fan activities to enhance learning motivation, because both types of motivation were constructed for different purposes. Fans have fan motivation to express their love toward objects of interest and for other fans to see (Jenkins, 1992), while students have learning motivation to know, understand, and connect class lesson to their real life (Froiland & Worrell, 2016). Although motivated communicators or students are the same individuals, processes or fan activities as class assignment are the same, and the outcome of the activities is grade, fan motivation to do fan activities in class could not transfer to learning motivation which is other kind of motivation with a different goal. This helps support the theory regarding motivation that one motivation will help promote another motivation only if both motivations lead to a similar goal.

To support the aforementioned statement, Barton, Bates, and O’Donovan (2017) found that students joined volunteer activities that match their expected future careers and skills which they need to develop. This is how the motivation to do volunteer task matches the goal of students’ learning motivation. This case is different from game-based learning that students are motivated to review the lesson before playing game because they need to obtain a high score in the game (Jong, Lai, Hsia, Lin, & Lu, 2013). Although this process could improve their academic performance, it does not show the enhancement in learning motivation, but in game playing motivation. Hence, educational games should be designed to strengthen both students’ knowledge and also their perceived link between class activities (playing game) and
their academic goal (Eseryel, Law, Ifenthaler, Ge, & Miller, 2014). For Japanese language class, Han and Ling (2017) suggested that teachers should add manga and anime cartoon characters into the lesson to improve students’ learning motivation. This is similar to the research model of the current study, but it is not the same. To use Japanese cartoon characters in Japanese language lesson is the way to match students’ fan motivation and learning motivation in the same class activities. This is because many foreign students choose to learn Japanese language in order to understand more about Japanese pop culture, such as manga, anime, music, and celebrities. These pop cultures motivate them to register for a Japanese language class, and Japanese teachers could, in turn, motivate them by using their objects of interest portrayed in the lesson (Han & Ling, 2017). This is how both fan motivation and learning motivation lead to the same goal.

The next step is to solve the problem of transferring motivation in doing general fan activities in class to learning motivation. A strong connection between both fan and learning motivation should be built. First, it is important to understand the barriers that might prevent such the effect. Some researchers have described fan motivation in learning some particular skills to do a better fan work. In fan fiction community, for example, fan authors are motivated to practice their writing because of the positive comments and cheering from fan fiction audiences (Campbell, Aragon, Davis, Evans, Evans, & Randall, 2016; Magnifico, Curwood, & Lammers, 2015). Without a critical comment that suggested the way to be a good writer, positive feedback could result in fans’ higher motivation to write and to improve their writing (Schott & Burn, 2004). Gao and Zhang (2016) found a moderate link between being praised and intrinsic motivation, while Bear, Slaughter, Mantz, and Farley-Ripple
(2017) found that whether praise or reward could cause a stronger effect on extrinsic motivation, but a weaker effect on intrinsic motivation.

Unlike environment in fan community, students may not always be praised in classroom. The negative feedback from teachers may diminish fan motivation, which is generally increased by positive feedback provided in fan community. It is worth to imagine what would happen to a fan creator who had received positive comments for one’s whole life in fan community, but a similar kind of fan work was suddenly blamed by a teacher. The differences of both doing fan activities and showing the output of the activities inside and outside classroom are not only about being praised or being blamed, but they are also other aspects. The main motivation of cosplayers to dress up and join the convention is to escape from everyday stress especially workplace and school (Reysen, Plante, Roberts, & Gerbasi, 2018). Fan activities used as class assignment may be opposite from mentioned phenomenon, because it is the way teachers bring a joyful activity into a stressful environment. This is supported by a Chen (2007)’s informant who said that art class was not enjoyable, but fan art was. Therefore, teachers and fan scholars should identify the strategies to create fan-community-like environment in classroom, and not let stressful class activities destroy students’ prior fan motivation.

A better learning environment could be promoted by positive relationship between teachers and students, and also among students in class (Valli, Stefanski, & Jacobson, 2016). Teachers could change their role to be learners who learn about students’ objects of interest (Valli, Stefanski, & Jacobson, 2016). This process could be called, student-centred learning, which caused a higher learning competence than
using teacher-centred strategy (Smit, de Brabander, & Martens, 2013). Based on these studies about learning environment, fan activities in class should be able to create a better class environment if teachers knew how to properly use them. However, learning environment was found as a weaker predictor on learning motivation, compared to students’ ability to connect class lesson to real-world issue (Cetin-Dindar, 2016). This might be another reason that fan activities in class could not achieve a higher learning motivation in students.

Moreover, the nature of fan-based assignment is mostly the work for individual students, not as group, while cooperative learning strategy (individuals use their skillful ability to solve the problem in group work) could enhance students’ interpersonal relationships, social skill, and learning motivation (Pan & Wu, 2013). Like, Roach and Utami (2017) suggested that multiplayer-educational game should be able to improve learning motivation and class environment better than single-user game. Although it might be hard for teachers to assign a group work to write fan fiction or to draw fan art, Lammers (2016) showed that some fans sought the cooperation from other fans such as critique and illustration to use in their fan fictions. This could be another strategy that teachers should test using it for fan activities in class to mimic online-fan environment.

The researcher of the current study would like to suggest that individual work could be assigned, but after all students finish their fan work, they would need to provide the critique for others or make fan art for others’ fan fiction. Teachers should perform as a coach for students who have never been experienced from online fan
community by guiding them to provide more positive comments and less negative
comments on classmates’ work.

Additionally, it is necessary to note that most fan studies and also this study
tend to discuss how teachers bring fan activities to use inside classroom, but lack of
studies mentions the way to bring the output of these fan-based assignments to the
public fan community. Fan scholars who are teachers should not forget that the
practice of fan creators is to create fan work by using artistic skills and show the
output in online space or in real-world convention. Sprague (2012) showed the
concern regarding the elementary students’ exposure to inappropriate online content,
so she created a new website for her students to post fan fictions. However, the older
students or the students who have used the mainstream online fan creation
community, like AO3, fanfiction.net, and DeviantArt.com should be encouraged to
upload their fan-based assignment onto the place they have been belong to. This
would help merging the academic goal of fan activities in class and fan goal of
expressing the opinion through fan work in online space. This final process of fan
activities in class may be able to construct the stronger influence of the amount of fan
activities in class on learning motivation, since teachers attempt to combine learning
motivation and fan motivation into the same activities and the final output.

Although the findings of path analysis show only the effect of fan
identification on the amount of fan activities done in class, but no effect of which on
learning motivation, the positive influence of fan activities in class on learning
motivation might be able to be constructed, if the suggestions given in previous
paragraphs were tested.
The Weak Influence of Fan Identification on Learning Motivation

Students may face a difficulty in combining their fan and academic identity while they are in classroom. This might be comparable to the failure of merging fan motivation and learning motivation in doing a fan activity in class. Another way to describe this is that because fan motivation and learning motivation are different, fan identification could not enhance learning motivation, but it could do only in fan motivation.

In fact, the current study sought for the combination of students’ fan identification and academic identification at the moment that they do fan activities in class, but these identities might be hard to be combined. Young (2007) differentiated identity into two types, which are choosing-change and force-change identity. Fan identity is a choosing-change identity which leads to fan motivation to create whatever fans wants to contribute to their objects of interest. On the other hand, academic identity, in most cases, is a force-change identity whether by the laws or the guide from family. This identification process might distract the effect of fan identification on learning motivation from classroom contexts.

Because identity provides people the lens to realize the world around them and to position themselves in social structure, students with fan identity may not totally leave their fan identity behind while they are in classroom. Simon (2012) found that his students paid more attention to the class after he showed his interesting in the students’ object of interest. This is similar to the researcher’s experience that three students chose to enroll in her class section because they were told by a senior student that the researcher is the teacher who loved to read manga or Japanese comics and
watch Japanese animation. They made a decision to separate themselves from all other friends enrolling in another section, just to be students in the class of the teacher with a similar identity. Although what they were told is not true, rather than disappointing, one of them kept drawing anime cartoon characters in every class worksheet, even it was not a requirement. This example is how a student seeks to combine their fan and academic identity and also their fan motivation and learning motivation.

Students’ perceived teacher identity does have an influence on their perceived teachers’ caring, class environment, and learning motivation (Mabin, 2016). Students with colors perceived less caring from white teachers, but more caring from teachers with colors whether their races are the same or not (Mabin, 2016). This could explain that when students identify with their teachers by using the shared identity as the source, they would be benefited by increased learning motivation and perceived better class environment.

Nevertheless, some fans do not need to disclose their fan activities and output of which to public. Like, some fan fiction authors, who wrote homosexual relationship based on real people such as celebrities or athletes, try to keep their group discussion and fictions as secret only for people in fan community to see (Wang, 2017). Many male comic fans, who discriminate against women as less knowledgeable and less commitment in comic fan community, also try to prevent female users to join their online community (Robinson, 2014). These studies show that not every student with fan identity would need to disclose their fan identity and
use it as the source of learning motivation in the class with the teachers who accept their fan culture.

To connect students’ fan identity with the expected level of learning motivation, teachers need to try even harder to be the ones that the students trust as the teachers are ones of the fans with similar objects of interest. The researcher believes that many fan qualitative studies that suggested teachers to use fan activities as engaging element in classroom also lead to a certain amount of bias.

These scholars found the successfulness of using such the activities in their class, so they wrote their academic papers. In contrast, if fan activities in class do not make any change in students’ learning motivation, the research papers may not be written.

The additional factors that caused the statistically insignificant path from fan identification and fan activities on learning motivation might be demographic variables. Van der Meij, van der Meij, and Harmsen (2015) identified the difference of female and male students in self-efficacy after using animation-based learning. This learning strategy is more effective for girls than for boys. Gender difference is considered as an important factor that causes varied level of learning motivation. It is the fact that there are a higher number of female fans in fan creation community than male fans. Therefore, fan activities in class may bring about different level of learning motivation on female and male students, even both might have the similar level of fan identification or do the same amount of fan activities in class.

Another important demographic variable is student age or class level. As well as the decreasing of students’ intrinsic motivation, self-efficacy (Busse & Walter,
2013), and enjoyment (Hagenauer & Hascher, 2010) which were found in longitudinal studies, students’ fan engagement and enjoyment in doing fan activities should also be varied by their age, too. This helps suggest future studies to include age or class level as control variable.

In conclusion, teachers should try to disclose their whatever fan identity which allows their students to build trust and willing to join fan activities in class in turn. The characteristics of assignment should be mixed between individual work and group work, such as encouraging each student to bring their fan work into a group discussion or other kinds of cooperative learning. The teachers also need to remind themselves and their students to provide positive comment on friends’ work in order to mimic the environment of online fan creation community. Last, the final output or in-class fan work should be uploaded into students’ familiar fan community. This will help connect their fan motivation and learning motivation together, because of the same goal. Although the findings of this part analysis did not reveal a direct effect of fan identification and fan activities in class on students’ learning motivation, the researcher hopes that the given strategies in this article will help create better students’ learning motivation and class environment.

Uncertainty

The current study helps construct the casual relationship from students’ fan identification on the amount of fan activities in class, which should be able to reduce students’ level of uncertainty, that is the important barrier of learning motivation. Although the effect of fan identification on fan activities in class was found, fan activities in class lead to the increasing of uncertainty, not to reduce it as it should
have been. Moreover, there is no influence found from uncertainty on learning motivation.

Fan activities as products of identification should be able to decrease students’ uncertainty, because they could remind students that they were a part of a larger community (Jetten, Hogg, & Mullin, 2000). Fan activities also help students to perceive that class activities are more similar to their casual activities, such as students with “manga” fan identity have been familiar with Japanese language before taking Japanese class (Williams, 2006), and fan fiction authors have been familiar with plots and fictional characters of their favorite text before doing the assignment for Creative Writing class (Jessop, 2010).

Moreover, students with fan creator identity also wear such the identity while they are in class, they use fan fiction and fan art as tools to help them remember difficult lessons, which is the way to free them from uncertainty (Roozen, 2009). Bahoric and Swaggerty (2015) have suggested that fan activities outside classroom generally brought fans to use technology both for creating fan works and publishing them on online space. They believe that students are familiar with technology use. Therefore, fan activities could help students feel familiar with class materials and assignments.

All of these studies supported that fan identification has an effect on fan activities in class, and which should reduce students’ uncertainty. The finding of the current study turns into the opposite direction, which might be explained by students’ anxiety regarding teachers’ attitude toward their objects of interest and fandom. Students may assume that older adults may have thought that consuming and
contributing to mainstream entertainment media is childish and not appropriate leisure activities.

The researcher found no research studies pointing the issue of students’ or children’s perceived adults’ bias toward their leisure activities, but some studies could provide the idea of how these younger people may feel about their parents’ or teachers’ expectation. Parental educational involvement was normally found as an effective strategy to heighten children’s class performance. One part of it is how parents prohibit their children from doing fan activities unless they finish their school assignment. However, Carranza, You, Chhuon, and Hudley (2009) found that this method does not have any effect on Mexican students.

For the study about the use of comic book in classroom, most parents have a positive attitude, such as comics should be able to please their children and comics help improve their children’s reading and vocabulary skills (Bischell & Crawford, 2018). On the other hand, some added that comics were not academic enough to be a part of class activities (Bischell & Crawford, 2018). Parents’ level of education is another important factor that may cause their bias toward children’s consumed media. Mothers with a higher level of education believe that TV watching is more beneficial for their children (İvrendi & Özdemir, 2010). Clark (2011) discussed Parental Mediation Theory which is the communication between parents and their children during media exposure and also their attempt to limit negative influence from media by limiting video-game playing time. Clark (2011) found that both parents and children would have negative feeling toward one another, such as frustration. A
participant (teacher) in the study of Lee, Lee, and Kim (2015) also reported that some parents do not like their children to use social network application.

The researcher of current study does not mean to imply that parents’ monitoring is harmful for children, but the negative feeling caused by the monitoring from both parents and teachers might be harmful. As it was generally known that violence and competitive video games could directly cause players’ aggression, and they are the risk factors for them to commit a violent crime (Ferguson, 2015), parents who understand these links would forbid their children from playing the particular type of video game (Shin & Huh, 2011). Parents’ monitoring could also prevent early sexual intercourse, even their children hang out with peers with active sexual activities (Bobakova, Geckova, Klein, van Dijk, & Reijneveld, 2013). With serious monitoring toward their own children, parents still worry if their children might be influenced by peers, whose parents do not guide them well (Tsfati, Ribak, & Cohen, 2005). The best way to improve the guiding and monitoring both by teachers and parents is to provide more time to explain the negative effect of media. If the children or students understand it, their frustration should be gone.

The researcher experienced talking with a student with the bias against teachers’ and parents’ monitoring. He enrolled the class, Digital Game Design with the researcher, and tried to create a violent game for the class project, including the bloody fighting between students in uniforms. He believed that his younger brother had a better critical thinking skill and other development better than him because his younger brother played violent video game with realistic scenes since preschool age. The researcher explained that this child development should be caused by the
communication between his brother and him, and also the parents who have been experienced from growing their first child. His brother may be able to develop more than the current stage if he had never played violent video games. However, this student did not believe the researcher. He thought that the researcher was an adult who did not understand children’s fun activities and have bias on what he preferred. To teach him, he should prove or discover the fact by himself, rather than just comparing himself with his younger brother.

The increasing level of uncertainty of students in doing fan activities in class is not only caused by their perceived teachers’ and parents’ bias against their leisure activities, but they may be afraid of school policy that does not allow students to use intellectual property without permission from copyrights’ owners. The violation of this school policy found in most research studies consists of two types, (1) plagiarism or derivation based on copyrighted materials which is submitted as class assignment, and (2) the copying of copyrighted materials for personal use, such as audio CD, textbook, and software.

Isiakpona (2012) found that most undergraduate students have a certain level of knowledge about copyright laws. They did not submit derivative or plagiarized work to their teachers, but mostly they photocopied the expensive textbook. Some commit the academic dishonesty, plagiarism, because they are afraid of low GPA (Tella & Oyeyemi, 2017). However, in some countries, students do not have much knowledge about copyright infringement and plagiarism, and this leads to a higher level of dishonesty (Ramzan, Munir, Siddique, & Asif, 2012). Babalola (2012) supported that the students who often submit copyrighted material for class work do
not know school policy, related laws, and the way to paraphrase and cite the original work. Sometimes it is hard to change students’ misbehaviors in copyright infringement, because of the spreading of illegal movies and music on DVD and copied brand-name products consumed by most of their neighbors (Aboyade, Aboyade, & Ajala, 2015).

Because the major participants of the current study were from North America, they have better understanding on copyright laws than those mentioned in the study of Aboyade and his colleagues (2015). This may cause the participants of the current study high in uncertainty when they do fan activities in class. Moreover, Razera, Verhagen, Pargman, and Ramberg (2010) pointed out that teachers have various ways to catch the plagiarism or copyright infringement, such as unedited website format in Microsoft Word file, variety of languages in one single essay, the use of ancient words or too-professional words, the use of the work that teachers are familiar with, and students’ missing process in their essay development.

Cyber-plagiarism has been found in educational institutes since the early widespread use of the internet. It is easy and fast for students to copy both images and text from online sources (Scanlon, 2003). Teachers should take the role to teach them the responsibility and laws or drop their grade before sending them to the actual punishment such as detention, suspension, and expulsion (Scanlon, 2003).

To let students use Academic Integrity Modules or online quiz about plagiarism could help increase their awareness of plagiarism and copyright infringement (Curtis, Gouldthorp, Thomas, O’Brien, and Correia, 2003). Cuevas (2010) found that the high level of this awareness could reduce the frequency of
illegal photocopying, and female students have a higher awareness than male ones. It is important to note that most fan creators are female, too. They may be guilted by doing fan activities for class. This is because almost all fan creations are derivative text based on copyrighted media (Romanenkova, 2014). Although many media production organizations found that they have been benefited from fan activities such as cosplaying (Madonia, 2016), teachers and school faculty members may not feel the same way. Moreover, Land (2010) found that most fan creators always provide the credit under their uploaded fan work by naming the media production organizations, characters’ owners, or comic book writers. This shows that students who do fan activities in class know that their work is transformed from copyrighted text, and this would violate school policy and affect their teachers’ attitude.

Although fan identification is an enabling predictor of fan activities in class, which brings about a higher level of uncertainty, instead of reducing it, and the effect of uncertainty on learning motivation is not also found.

This part of finding could be explained by the early studies that are consisted of both positive and negative outcomes of uncertainty in academic area. First, Ozcelik, Cagiltay, and Ozcelik (2013) found that students with uncertainty would provide a precise answer, because uncertainty drove them to spend more time in finding the right answer. Uncertainty regarding a technical skill also leads to the motivation to develop the particular skill to erase away the uncertainty stage (Arunrangsiwed, 2017). Moreover, uncertainty also forces people to interact with others to find out the missing information (Wiseman & Koester, 1993). Likewise, in classroom, the students would be pushed to learn and ask teachers more questions.
Similarly, female students in Foreign Language class who are high in anxiety are also high in enjoyment and interest (Dewaele, MacIntyre, Boudreau, & Dewaele, 2016). This process could be explained by the original uncertainty reduction strategies of Berger and Calabrese (1975), that the more information lead to the less uncertainty. However, some previous research studies found this relationship in the opposite direction. That is, the students who are high in anxiety would be low in learning motivation (Hong, Mason, Peng, & Lee, 2016).

Some students who have a certain level of uncertainty might decide to give up regarding an academic goal (Arunrangsaiwed, 2017). The high level of uncertainty could be generally found among students in art school (Carabine, 2013), of which one of the selection criteria of the current study is that the participants needed to enroll in art-related class at the time that they filled in the questionnaire. Therefore, the finding of the current study failed to support that uncertainty should motivate students to learn. The effect of uncertainty on learning motivation might be mixed between both positive and negative effects, so the link shown in the analysis turns to be non-significant.

To consider this part of finding with the blending between fan and classroom context, uncertainty might be caused from the mentioned school policy, perceived teachers’ bias against fandom, and also identity uncertainty. Fan identity uncertainty could be raised when fans feel that their identity was not acceptable in school context. This implies that fans may in uncertain stage before, during, and after they do fan activities in class, following the path of the research model, as shown in figure 5.4.
Therefore, this process could not bring about their learning motivation. Students’ learning motivation might be predicted by other variables outside this research model, such as prior class performance, perception regarding school policy, perceived positive teachers’ characteristic, perceived teachers’ strictness, and other related variables. To establish the link from fan activities in class to uncertainty and from uncertainty to learning motivation, future researchers may need to include these variables as control ones in their research models. Another way to test these suggested research models with less number of control variables is to test this path in the class with a trained teacher, who has a positive attitude and acceptance toward fan activities and fandom, and also a certain communication skill to interact with students with various fan identities.

Self-esteem

In the path analysis model, self-esteem is the only variable without any significant relationship both from the predictor and on the dependent variable. Although fan identification can predict fan activities in class, but which has no influence on self-esteem, and self-esteem describes lack of variances in learning motivation. This finding is different from the role of self-esteem in sport fandom. Sport fan identification has a very strong relationship to both self-esteem and media consumption (Phua, 2008) and this could also result in their social well-being (Phua,
Fan identification could provide fans with a sense of belonging to fan community and cause a higher self-esteem (Wann, Hackathorn, & Sherman, 2017). Similarly, in classroom context, Bahoric and Swaggerty (2015) suggested that writing fan fiction as class activities allow students to be a specialist and expert in canon, even over their teacher.

![Path Analysis Diagram](image)

**Figure 5.5: The Result of Path Analysis with Self-Esteem as a Mediator**

The question regarding this part of research discussion concerns the reason that makes self-esteem an ineffective mediator. Self-esteem as the important part of maintaining fan identity might not be transferred to fans when they were in the academic contexts. That is, some sport fans who could not find the success in their real life would attend the sport match to fulfill the missing part of their self-esteem (Rhee, Wong, & Kim, 2017). Similarly in fan fiction community, fan fiction authors might have low social status in their work place, but their work could be acceptable and provide them a better reputation in fan community (Jenkins, 1992, p. 159). This implies that the effect of doing fan activities in class might only be able to strengthen self-esteem as fans, but not as students in the academic contexts. To use two different scales to measure fan-esteem and general self-esteem might be able to make the findings clearer.

It is important for teachers who plan to use fan activities in class to think that students with fanon (knowledge about their object of interest) expertise may not
perceive that they are the expert in class lessons. Fanon knowledge may only help them in doing fan activities in class, but does not help them to be better in other class assignments. This implies that fans would not earn both self-efficacy and self-esteem as a student, but their prior academic knowledge, learning ability, and academic-related identities might be better predictors of self-esteem.

Number of students in a class or class size should be another important factor that students with fan identify and a large amount of fan-based class exercise are not able to be high in self-esteem. Although class size has no effect on academic achievement of students who enrolled in online course (Bettinger, Doss, Loeb, Rogers, & Taylor, 2017), the larger class size lead to numerous negative effects on students in general classroom, such as lower learning and teaching quality (Schanzenbach, 2014), slower teaching process due to all students’ readiness to learn (Harfitt & Tsui, 2015), and worse relationship among students, classmates, and teacher (Harfitt & Tsui, 2015). In a large class, teachers will lose their opportunity to treat students as individuals. This is not only because they have less time for each or they could not remember their students’ names, but they cannot prepare learning material matching each students’ learning style (Garcia, 2016). Even if teachers allow students to express their fan identity or doing fan work as class assignment, students could not earn a higher self-esteem from it, unless teachers could remember their object of interest and recognize their fanon expertise.

In other words, without perceived teachers’ caring or sign of recognition, students with fan identity could not be high in self-esteem as the result of being a part of fandom, and their self-esteem could not result in learning motivation, because of
lack of teachers’ acknowledgement regarding their fan identity and their object of
interest. Hence, class size and perceived teachers’ recognition regarding students’ fan
identity should be worth to add into the current research model.

To arouse students’ fan identity by allowing them to do fan activities in class
certainly remind them that they are a part of a larger social group, a fan community.
To be a part of a large group should be able to increase the level of self-esteem.
However, this might be a double-edged sword phenomenon. The object of interest of
some student may not be liked by anyone in class including the teacher. Generally,
self-disclosure should help narrow identity gap among students (Rhodes, 2014), but
some object of interest consists of a large number of anti-fans. This implies that to
disclose fan identity may bring about more social isolation and loneliness for a
particular student. As the result of this, that student may be low in self-esteem.

Nadal, Wong, Griffin, Davidoff, and Sriken (2014) found that an unintentional
or unconscious discrimination against people with different racial identity is
associated with lower self-esteem of the discriminated victim. This effect could be
applied to the communication between people with fan identity and anti-fan identity,
too. This reminds the researcher of her experience in her middle school when she was
the only one in her class who liked Thai country music. After being negatively treated
by classmates who looked down Thai country music, she could feel that there was
something wrong with her. To solve this possible problem in employing fan activities
into classroom, teachers should actively preview students’ fan work before letting
them share theirs with classmates, especially those with object of interest with a large
number of anti-fans.
It should be noted that generally, self-esteem could strongly contribute to learning motivation (Supple, Su, Plunkett, Peterson, & Bush, 2013; Topçu & Leana-Taşçılar, 2018; van der Kaap-Deeder, Wouters, Verschueren, Briers, Deenren, & Vanteenkiste, 2016), and also academic performance (Arshad, Zaidi, & Mahmood, 2015; Giunta, Alessandri, Gerbino, Kanacri, Zuffiano, & Caprara, 2013). However, the findings of the current study do not show any influence of self-esteem onto learning motivation.

Self-esteem refers to the perception of self-worth, and in the school context, it is closed to self-efficacy in solving difficult problems and ability to independently learn (Nadal, Wong, Griffin, Davidoff, & Sriken, 2014). Fan identity and fan activities may not be able to fulfill this part. Therefore, self-esteem is not enhanced and this lead to unchanged level of learning motivation. To make this link clearer, self-esteem as students and self-esteem as fans should be separated to be two variables.

Another evidence that helps describe this non-significant relationship is that uncertainty is positively predicted by fan activities in class, and in the correlation matrix (Table 4.5), there is a negative association between uncertainty and self-esteem (r=-.482; p=.001). Since the level of uncertainty and self-esteem goes in the opposite direction, some students who have high anxiety based on fan activities might be low in self-esteem. These descriptions leave self-esteem the only non-significant variable in the model of path analysis.
Enjoyment

The statistically significant causal relationship was constructed from the predictor, fan identification on fan activities in class, which results in students’ enjoyment, and this enjoyment helps produce their learning motivation. According to several studies mentioned in chapter 2, enjoyment was included in the research model, such as in sport fans (Scanlan & Lewthwaite, 1986) and game players (Chumbley & Griffiths, 2006; Cohen, 2014). In the area of fan creation and its academic use, Jessop (2010) described that writing fan fiction and drawing existing fictional characters could help improve students’ enjoyment by reducing their stress regarding the obstruction in plot and character development. Fans also join fan community, do fan activities, and consume media, because of the need to entertain themselves, to comfort their stress, and to escape temporarily from the real world. Enjoyment would be caused when the need is satisfied (Reeve, 2005; Tamborini, Bowman, Eden, Grizzard, & Organ, 2010). In other words, fans expect the enjoyment of doing fan activities, and they receive their expected enjoyment after doing these activities, and earn another part of enjoyment, because their expectation is completed. Moreover, this positive emotion could also develop their desire to repeat the similar activities if they have a chance in the near future. This is similar to the finding of the current study that doing fan activities in class could bring a higher level of students’ enjoyment, and because of enjoyment, students are increasing in learning motivation.

A prior study in the area of education also showed the effect of enjoyment on learning motivation (Dewaele & MacIntyre, 2014; Hick & Klemmer, 2016). Enjoyment also has a positive link with academic challenge (Choi & Kim, 2013).
which is a part of learning motivation. Enjoyment could also cause other related positive learning outcomes such as class involvement, students’ excitement, and willingness to develop skills and knowledge in the future (Ainley & Hidi, 2014). The current study contributes to these existing links with the suggestion that students’ preferable and familiar leisure activities could help improve their in-class enjoyment and finally, learning motivation.

Figure 5.6: The Result of Path Analysis with Enjoyment as a Mediator

In fan community, fans might not be specialists in canon knowledge, but in classroom, they could be, because not all students would have the similar knowledge regarding their object of interest (Bahoric & Swaggerty, 2015). For example, a girl may be a fan of a video game and another boy may be a fan of a rock band. Both of them are expert in different areas of pop culture. The girl is more expert than the boy in video games, but the boy is more expert than her in rock music. This is how a student could be the most expert one in the class based on their object of interest.

Enjoyment could be caused by perceived self-expertise. That is, young students who are high in reading skills would have more enjoyment in reading-related classes (McGeown, Johnston, Walker, Howatson, Stockburn, & Dufton, 2015). Comparatively, students who perceived their own skill and strength in sports could have a greater enjoyment during learning Physical Education than others without this perception (Cairney, Kwan, Velduizen, Hay, Bray, & Faught, 2012). This could be
concluded that both entertainment factor and perceived self-expertise might be the reason that causes a significant effect of fan activities in class on students’ enjoyment, which supported the hypothesis H8.

To enjoy the class and to be knowledgeable at something that could be used in class would help student develop their learning motivation. They would need to repeat the experience of enjoyment and doing something that they are good at. Enjoyment should be able to increase intrinsic motivation, and perceived self-expertise among all other classmates could help heighten extrinsic motivation. This is how fan activities in class does not only improve students’ enjoyment, but this enjoyment could bring about their later learning motivation.

Expression

The final part of the research model is to test the mediation effect of in-class expression between fan activities in class and learning motivation. Path analysis shows that fan identification helps generate the higher amount of fan activities in class, which support students’ level of academic expression that results in learning motivation. This finding helps support the suggestion in early qualitative fan studies, that fan community is the place where young adolescents could easily express themselves in the forms of fan creation and discussion (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2009). Writing about students’ fan objects would increase their self-expression and reduce their shyness, since they have enough knowledge to describe their idea and opinion (Simon, 2012). Moreover, some fans could not find a way to express who they are in the real-world context, but fan activities, such as in cosplay event, allow them to express themselves in the form of both stage
performance and craft skill on costume making (Chen, 2007). These previous studies and the findings of the current study help support one another that fan identification has an effect on fan activities in class, and which could promote students’ expression that could improve their learning motivation. This might be because they have knowledge about their object of interest; fan activities are consisted of many forms of expression; and fan activities in class help imitate the environment in fan community, which helps arouse fans to communicate without struggle.

![Figure 5.7: The Result of Path Analysis with Expression as a Mediator](image)

The significant effect of expression on learning motivation was also found in the research model. Chen (2007) and Lamerichs (2011) described that the expression in a cosplay event could heighten fans’ confidence to communicate in real-world society. If students could express their opinion well through fan activities, they would have more confidence to communicate with their teachers in other forms too, which might be able to improve their learning motivation. Zimmerman (2014) also suggested that students should draw fan art or write fan fiction based on the famous literature, because it helps teachers to indicate their understanding regarding the lessons. If teachers could identify students’ knowledge at the time, they would be able to plan the lesson for the upcoming class which would also benefit students, too.

According to the result of the present study, if teachers provide their students an opportunity to do fan activities in class, it would help enhance their enjoyment and
lead them to express their idea and opinion, both of which would result in the academic motivation. With lack of quantitative confirmation study in the area of fan creation, the present study helps contribute to the knowledge for this area. It solidifies the process and outcome of fan identification and makes it comparable to other sub-areas of fandom, such as in music fans (Driessen, 2015; Perkins, 2012) and sport fans (Phua, 2010).

Implication

Involving fan activities in class could improve students’ enjoyment and academic expression, however, it also increases their uncertainty. Therefore, scholars and teachers should identify the way to solve this problem regarding increased uncertainty and anxiety according to doing fan activities as class exercises. Teachers’ clear informing at the beginning of the class is important. They should directly tell if their students are allowed to make fan art or write fan fiction for class without violating by the copyright infringement policy of school. The researcher expects that this problem regarding increased uncertainty could be fixed by teachers. Teachers would not be only the one who assigns students the fan-related class exercise, but they could also advise their students the direction that does not interrupt both their identities as fans and as students.

Teachers may also describe themselves to their students that they are also fans of something, including their experience of being a part of fan culture. As the result of this, students who are high in fan identity should have a lower level of uncertainty because of their perceived similarity toward their teachers (Santos, 2014). One thing that teachers should not do is to act as an anti-fan or hater. Teachers cannot know if
something they hate may be loved by their students. When teachers are anti-fans of
students’ object of interest, students will construct a barrier to separate teachers from
their world. This would reduce their learning motivation and positive feeling toward
class. In media studies class, it might be important for teachers to blame some movies
or comics that the students love. Likewise, the researcher blamed Deadpool film in
her class that this movie promoted unreasonably justified massacre, which is
unsuitable for people with trait aggressiveness and those who might cause an actual
violence in their real life. To prevent students to establish the barrier, teachers need to
provide a deep reason for all students to understand the inappropriate elements in
media, and should also suggest the way to improve the particular media. This process
could be seen in the articles written by feminist researchers in their media-based
studies, both for comics and Disney films (Avery-Natale, 2013; Wilde, 2014).

In higher-level courses, teachers could assign college students to write fan
fiction to promote gender equality, anti-racism, and anti-stereotype (Bahoric &
Swaggerty, 2015), since many mainstream media have still reinforced these myths
and fault beliefs. For example, the students could rewrite the plot of the movie, The
Huntsman: Winter’s War (2016) to provide more appropriate roles for women with
power; redesign the only female animal character, Lupe (the calming goat), in
Ferdinand animated film (2017) to have a better appearance and habits; improve the
problematic family communication between father and daughter in both Ice Age:
Collision Course (2016) and The Croods (2013); and remove obesity discrimination
in Jumanji (2017) and 9 Satra (2018). Since writing anti-stereotype fan fictions could
certainly benefit students’ worldview and media literacy skills, this learning strategy
should be promoted. Moreover, the findings of the current study show that writing fan
fictions in class could improve students’ academic expression. This might result in a better reconstruction of narrative to critique the mainstream media, since the students would openly discourse their opinions through the joyful activities.

Theoretical Implication

The findings of the current study contribute to social learning theory which was written by Bandura (1969). The original social learning theory consists of four processes, (1) attention, (2) retention, (3) production, and (4) motivation. To employ fan activities into classroom, could switch the first two processes, attention and retention. This is because students who have been fan creators or doing fan creations for their leisure activities know how to complete the particular class activities before teachers introduce them in class. This switched processes help make the whole four processes faster. This is the positive outcome of fan activities used in class. Teachers become more like the instructors to direct students to do what they have done, but in academic ways. Moreover, teachers should be able to take a shorter time to gain the attention from their students especially from those who initially enjoy fan activities.

Akers and Jennings (2015) and Johnson (2014) explained social learning theory that people would weigh the expected favorable and unfavorable experiences. If favorable one is more powerful than the unfavorable one people will move from attention to retention stage and begin to change their behaviors. The findings of the current study suggest that fan activities in class could improve students’ enjoyment, which is a part of favorable experience. This means the use of fan activities in class does not only shorten the process between the attention and retention stage, but also among retention, production, and motivation stage.
The researchers of future studies should identify measurable difference between the general learning process and the process with fan activities in class by using variables such as learning duration and learning outcome.

Limitations

Shifting away from the fact that the findings of this study contributed to the knowledge and practical use of fan activities in classroom, there were several limitations that should be explained and provided with the suggestion for future studies. First, all participants were drawn from only online community, which was DeviantArt.com. Although DeviantArt has a ton of fan creations and it is the largest online community for artists, most of fan creations on this website are fan art, cosplay, and photoshop manipulation, but fan fictions are rarely found. In fact, fan fiction has a longer history and more number of scholar article than other kinds of fan creations. Most of fan authors are in FanFiction.com. This means the selected participants of the current study may not represent the group of fan authors.

Second, the term of fan creation in this study is limited to artistic creation, but not covering other kinds of contribution, such as movie critique, fan wiki-article, fan site, Facebook fan page, etc. In other words, fan creations and fan activities mentioned in the current study are all about fanon, but lack of canon activities or geek in fan community. The findings of the current study could be applied to use in art, literature, and media studies class, but may not be able to use in other fields.

Third, there might be some limitations in methodology of this study about the lack of participants from China and Japan, both of which are the country with fan cultures studied by many fan scholars (Lamerichs, 2013; Tian, 2015; Wang, 2017;
The way to solve this limitation is to translate the questionnaire into Chinese and Japanese, since some of them might have difficulty in reading the questionnaire in English. Moreover, both countries may have different major websites for online fan community. This could be noticed from the fact that Yahoo is not so popular in other countries besides Japan, and many websites or applications have been blocked by the Chinese government. To recruit these participants, the researcher may need to contact local colleagues to help collect the data.

Another noticeable limitation is in the part of demographic data. There are a certain number of missing data in this part. This could affect the generalization. Like, those who need to use the results of the current study in their country, may be unsure about the effectiveness of fan activities in class, if it would work well in their countries. Additionally, the results from factor analysis were based on questionnaire pretesting with Thai undergraduate students. Although all of them have initially engaged in fan activities, they may have some difference apart from the participants in the major study.

Future Direction

Based on the aforementioned limitation that most DeviantArt users were fan artists, but not fan authors, researchers of future studies may draw the samples in both DeviantArt and FanFiction.com. Another way is that they may use only DeviantArt as in the current study, but they need to add an extra sample selection method, which is to select the participants based on the type of their most frequent fan creations. For example, if there are 100 participants, researchers may divide them into 4 groups of
25 participants per each group. Each group is likely to create different types of fan creation, such as fan fiction, fan art, cosplay, and manipulation, respectively.

Another limitation is that the type of fan creators in this study is those who contribute to their object of interest by making the creative works, which is not related to another type of fan contribution, such as movie reviews or critique. Although both fan artistic creation and geek expression are hard to be mixed in the same study especially for quantitative approach, future researchers may conduct a qualitative study to compare both of these practices, and their characteristics related to fans’ gender. Fan creations, such as fan art and fan fiction are generally created by female fans (De Kosnik, 2009), while movie critique, toy figure review, and detailed character history are mostly created by male fans (Reagle, 2015). Based on this fact, it helps raise another research topic to discover if power imbalance between both gender in fan community is still existing. This is because earlier, gender discrimination in fan practices was discussed in research studies of Kohnen (2014) and Alvermann and Hagood (2000). Male fans might construct fangirls’ stereotype in their community, which prevents female fans from joining a geek community without being insulted. Some male fan scholars also had this negative attitude, too (Stanfill, 2013). To understand gender norm of fans might help suggest the way to solve this problematic sexism in fan community. This is because either female or male fans have their own expertise in fan contribution. Although both fan creation community and comics or video game nerd community seem to be homosocial, both groups of fans should find the way to respect each other, regarding their different worldview, skills, belief, representation, and the way to display their emotional attraction to object of interest.
Other than the future directions given to solve the limitation of the present study, the suggestion for conducting the research to improve learning quality by using fan activities should be also provided. Since the influence of fan identification on fan activities in class was supported by the research findings, future studies should test using fan activities in an actual classroom to see if people with high fan identity salience might be more productive in fan creations than people with low fan identity salience, and vice versa for non-fan creation or general class assignment. As a result of this suggested testing, teachers or university lecturers would be able to identify the equilibrium point of the amount of fan activities and usual class activities. They could also assign students with low and high fan identity salience with different class works. This way can be considered as one of the appropriate characteristics of teachers, that they should treat their student as an individual, not as a group (Coombe, 2014).

Another part of research findings is that fan activities in class plays an important role to improve students’ enjoyment. Teachers and researchers of future studies may use in-class observation to discover the topic being discussed with positive emotion by students after fan activities are assigned as class work. This way would help explain the findings of this study, if fan activities in class heighten students’ enjoyment based on fun interaction about their object of interest or just general topics of how to complete class work. Comparatively for the items in academic expression measure, there is no term regarding fan activities in this part of the questionnaire. This provides an opportunity for future studies to explore if students are high in academic expression because they write, present, draw, and communicate in fan-related topic, or they do these in other topics.
Although it might be guessed that students who do fan activities for class would enjoy expressing things related to their fan objects, the researcher suggested that teachers may find out that they communicate to one another about academic-related topics after finishing fan-activity assignment. Fans, as the specialists of their favorite texts, may be able to finish the fan-related exercise before others who work on general assignment. This would provide fans more time to discuss their work with others or review their own work. To review one’s own work might be the cause of enjoyment, since the state of disembodiment provides students the opportunity to experience being praised by others (Kim et al., 2012).

For other kinds of identities besides fandom, identity-related class assignment should be also promoted and tested in future research studies. According to a direct experience of the researcher as an animation instructor, an undergraduate student asked me to allow him to make a motion graphic video about his hometown, Southern of Thailand. Three months later, he finished his project with full of artistic and identity expression. This included his own drawing, voice-over, and under-water footage that he shot with waterproof cell phone when he was back to his hometown. He pointed out the problem that humans caused in ocean environment. His strong identity as a person living near the coast, an underwater diver, and an animation student, together constructed an incredible work expressing his need and presenting the way to help the environment. This could be an example that the power of identity works outside the boundary of the world of fandom, but still inside a classroom.

Another part of research methodology was to test multicollinearity which provided the association among all predictors in research model. Correlation matrix
(Table 4.5) showed a moderate relationship between class enjoyment and academic expression ($r=.525; \ p=.001$). This could confirm that the link between two mediators is existing. Future studies should mainly test the effect of enjoyment on academic expression, either with a cross-sectional questionnaire or an experimental research design. The educational scholar may consider using both variables in the topic, such as active learning, problem-based learning, and 21st century skills.

Finally, the major unexpected result is the positive influence of fan activities in class on uncertainty. Students who do fan activities for class might be high in uncertainty because they are unsure of teachers’ perspective regarding their fan-related creative work. Therefore, future studies may include the variable, “teachers’ permission to do fan activities for class” into the model as the control variable. The result of the analysis might turn into the negative influence, and show the importance of teachers’ clarity, as reported in other educational studies (Titsworth, Mazer, Goodboy, Bolkan, & Myers, 2015).
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Appendix A

Questionnaire

*Grey-highlighted items are reverse items.

** The actual version used in data collection does not show the name of each measurement.

Before filling in this questionnaire, please make sure that you are a fan artist or fan author who is currently studying in art-related class. You will be received 100 points within 24 hours after you completed all rating-scale items.

Gender □ Female □ Male □ Other

Age ____________ years old

Country ____________

How many pieces of art did you post in your account? ____________

How long have you been in DeviantArt.com? ________ years _________ months

For the following item, you could answer more than one thing. The answers can be the name of your favorite bands, cartoon characters, movie stars, TV shows, and other things that you like.

**You are the fan of__________________________________________

Now, remember what you have written, and answers the following items.
(1) Fan Identification

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Self fan identity</td>
<td>Hegemony</td>
<td>In-group</td>
<td>Out-group (general people)</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A1</td>
<td>Being a fan of them is an important part of who I am.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>They are something I rarely think about.</td>
<td></td>
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</tr>
<tr>
<td>A3</td>
<td>Being their fan provides me with an identity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>I wish they would know that I am a huge fan of them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>It will be great if I have an opportunity to work with them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>I want them to know what I have devoted for them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>I honor people who like them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>I have a lot in common with other people who like them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>I enjoy being with other who like them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>I hate to display their apparel or cloth for others to recognize.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>I want the world to know the reason that I like them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>Other people should know how great we are. (we, as their fans).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1</td>
<td>I detest people who hate them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>We (as their fans) are smarter than their anti-fan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td>One day, those who said bad things about them, will know that it is the mistake.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(2) Fan Activities in Class (FAUC)

<table>
<thead>
<tr>
<th></th>
<th>A = forced activities (assignment)</th>
<th>B = self-selected activities</th>
<th>never</th>
<th>rarely</th>
<th>often</th>
<th>always</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I submit fan fictions as assignments to my teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>I submit fan art as assignments to my teachers.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A3</td>
<td>I make fan videos as class projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A4</td>
<td>I do other fan activities for class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B1</td>
<td>I draw fan art as doodle in my own book during lecture.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>I present my fan identity in classroom</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B3</td>
<td>I interact with other fans with the same object of interest in classroom</td>
<td></td>
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</tr>
<tr>
<td>B4</td>
<td>I communicate with my teachers about something/someone I am a fan of.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(3) Uncertainty during academic course

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I worry about unpredictable class activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A2</td>
<td>I am frustrated when I do not know that my classmates know.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A3</td>
<td>I will feel comfortable if I know what would happen in tomorrow class.</td>
<td></td>
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</tr>
<tr>
<td>A4</td>
<td>I want to know some more information about the class, so my life is going to be easier.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B1</td>
<td>I worry about my teachers' decision.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>B2</td>
<td>Class activities make me anxious or unsecured.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B3</td>
<td>In class, I have lack of confidence.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B4</td>
<td>During tests, I find myself thinking of the consequences of failing.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C1</td>
<td>I can easily move forward in the class lesson.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C2</td>
<td>I am stressed if I found a difficult problem.</td>
<td></td>
<td></td>
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<tr>
<td>C3</td>
<td>The assignment allows me to feel a sense of control of it.</td>
<td></td>
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<tr>
<td>C4</td>
<td>I worry if there is an immediately change in class activities.</td>
<td></td>
<td></td>
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<tr>
<td>D1</td>
<td>I am anxious when my classmates leave me alone.</td>
<td></td>
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<tr>
<td>D2</td>
<td>It is okay if my class preparation does not match others’.</td>
<td></td>
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<tr>
<td>D3</td>
<td>I had been in a better status in previous class.</td>
<td></td>
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<tr>
<td>D4</td>
<td>Without close friends, I got nervous in group assignment.</td>
<td></td>
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</tbody>
</table>
(4) Rosenberg's Self-Esteem Scale (RSE)

<table>
<thead>
<tr>
<th></th>
<th>Disagree 1</th>
<th>Somewhat Disagree 2</th>
<th>Somewhat Agree 3</th>
<th>Agree 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>On the whole, I am satisfied with myself.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>At times I think I am no good at all.</td>
<td></td>
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<tr>
<td>3</td>
<td>I feel that I have a number of good qualities.</td>
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<tr>
<td>4</td>
<td>I am able to do things as well as most other people.</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>I feel I do not have much to be proud of.</td>
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<tr>
<td>6</td>
<td>I certainly feel useless at times.</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>I feel that I’m a person of worth, at least on an equal plane with others.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>I wish I could have more respect for myself.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>All in all, I am inclined to feel that I am a failure.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I take a positive attitude toward myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(5) Class enjoyment

<table>
<thead>
<tr>
<th></th>
<th>Enjoyment regarding activities/assignment</th>
<th>Enjoyment regarding classmate</th>
<th>Happiness/ General Enjoyment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>I become involved in class activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>The challenge of class activities is adequate, neither too difficult nor too easy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>I feel bored with things done in classroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>I feel cooperative toward other classmates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>I have positive feeling toward most of my classmate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>I have fun interacting with my friends in class period.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>I forget about time passing during class period.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>I become unaware of my surroundings while joining class activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>In the class time, I temporarily forget worries about everyday life.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### (6) Academic Expression

<table>
<thead>
<tr>
<th></th>
<th>A = Speaking</th>
<th>B = Writing and Drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>It is easy for me to make a presentation in front of the class.</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>I have full of energy expressing my opinion in class.</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>I tend to be quiet when my classmates ask me questions.</td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>I am shy when my teachers ask me in front of my classmates.</td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td>I can describe things I know to my friends.</td>
<td></td>
</tr>
<tr>
<td>A6</td>
<td>People in classroom understand me, because I express to them directly.</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>I got a lot of enthusiasm to write things in my assignment.</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>If I got a writing assignment, I can write longer than teachers' expectation.</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>It is easy to write about my own opinion.</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>I can list down the reason why I like or dislike something.</td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td>I am frustrated, when I have to draw things for my assignment.</td>
<td></td>
</tr>
<tr>
<td>B6</td>
<td>Whether I am good or bad at drawing, I can use drawing as a tool to communicate to my teachers.</td>
<td></td>
</tr>
</tbody>
</table>
(7) Learning Motivation

<table>
<thead>
<tr>
<th></th>
<th>A = Self-efficacy</th>
<th>B = Active learning strategies</th>
<th>C = Science Learning Value</th>
<th>D = Achievement goal</th>
<th>E = Learning environment stimulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Whether the content is difficult or easy, I am sure that I can understand it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>When I find the content difficult, I always try to learn it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>During class activities, I prefer to ask other people for the answer rather than think for myself.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B1</td>
<td>When learning new topics, I connect them to my previous experiences.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B2</td>
<td>When I am confused, I would discuss with the teacher or other students to clarify my understanding.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>When I make a mistake, I try to find out why.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C1</td>
<td>I think that knowledge and academic skills are important because I can use it in my daily life.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C2</td>
<td>Class activities are important because I can learn to solve problems.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>C3</td>
<td>It is important to participate in inquiry activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>I feel most fulfilled when I feel confident about the content.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>D2</td>
<td>During the course, I feel most fulfilled when I am able to solve a difficult problem.</td>
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<tr>
<td>D3</td>
<td>During the course, I feel most fulfilled when the teacher or classmates accept my ideas.</td>
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<tr>
<td>E1</td>
<td>Fan activities in class make the content more exciting.</td>
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<tr>
<td>E2</td>
<td>Assignments with fan activities are challenging.</td>
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<tr>
<td>E3</td>
<td>Fan activities help improve my class involvement.</td>
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</tbody>
</table>
BIODATA

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