

DOES TRAGIC DRAMA HAVE HEDONIC VALUE? THE SOCIAL ASPECTS OF  
HEDONIC MOTIVATIONS AND MEDIA ENJOYMENT

by

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A DISSERTATION

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## ABSTRACT

The hedonic principle, approaching pleasure and avoiding pain, governs human behaviors including media selection. However, the enjoyment of tragic drama poses a challenge to the hedonic principle. Two questions arise from this challenge: (1) why do people, particularly lonely individuals, select tragic content, and (2) why is the intensity of sadness positively associated with the degree of enjoyment of such negatively valenced content? Study 1 examined the first question, the selection of tragic drama. Study 2 investigated the second question, the enjoyment of tragic drama. In Study 1, compared to moderate-lonely individuals, high-lonely individuals selected more tragic drama of which the main theme is positive human relationship that can meet the need for relatedness. Low-lonely individuals did not vary from either high- or moderate-lonely individuals in selecting tragic drama. The treatment of social isolation had effects on the selection of tragic drama among moderate lonely individuals, but not among high- and low-lonely individuals. Moderate-lonely individuals in the inclusion condition watched more tragic drama than did individuals in the neutral condition. In Study 2, individuals were placed in two conditions: self- and other-focused motivations. After watching a sad film, other-focused individuals felt more other-centered sadness, experienced more enjoyment, and had better self-regulation than did self-focused individuals. Other-centered sadness correlated with self-centered sadness and enjoyment, whereas self-focused sadness did not correlate with enjoyment. The two studies suggest that other-focused sadness represents the hedonic value of tragic drama. Theoretical implications and limitations were discussed.

## DEDICATION

This dissertation is dedicated to all the lovers who could not be together in life.

## LIST OF ABBREVIATIONS AND SYMBOLS

- $\alpha$  Cronbach's index of internal consistency
- $\beta$  Beta coefficients or standardized coefficients: the estimates resulting from an analysis performed on variables that have been standardized so that they have variances of 1
- $df$  Degrees of freedom: the number of values free to vary after certain restrictions have been placed on the data
- $\eta^2$  Eta squared: the ratio of variance explained in the dependent variable by a predictor while controlling for other predictors
- $F$  Fisher's  $F$  ratio: A ration of two variances
- $\Lambda$  Wilks' lambda: a test statistic used in MANOVA to test whether there are differences between the means of treatment groups
- LSD Fisher's LSD (Least significant difference): a method for comparing treatment group means
- $M$  Mean: the sum of a set of measurements divided by the number of measurements in the set
- $p$  Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
- $r$  Pearson product-moment correlation
- $R^2$  R-squared: the square of the correlation coefficient between the dependent variable and the estimate of it produced by the regressors

*SD* Standard deviation: a measure of dispersion in a sample or population

*SE* Standard error: the estimated standard deviation

*t* Computed value of *t* test

< Less than

= Equal to

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## CHAPTER 1

### INTRODUCTION

Pleasure and pain provide a barometer that leads humans to approach helpful objects, as well as to avoid harmful objects and environments (Kubovy, 1999; Rozin, 1999). The notion of the hedonic principle can be traced back to a Hellenic philosophical work, Aristotle's *Nicomachean Ethics*. Aristotle suggested that the pursuit of happiness "is a first principle, for it is for the sake of this that we all do all that we do" (Aristotle, trans. 1994a, para. 12). The basic idea is that the desire for happiness or pleasure as a motivation is a basic human need, and other motivations are built upon this cornerstone. Humans seek various goals ranging from attaining health and wealth, to establishing affiliations, which help humans to maximize the odds of survival and reproduction. During the course of evolution, humans have felt good or pleasure about the experiences that contribute to enhancing long-term survival and reproduction fitness (Fredrickson, 1998).

The hedonic principle as a basic motivation governs media selection such as entertainment fare (e.g., Bryant & Zillmann, 1984), music (e.g., Knobloch & Zillmann, 2002), news (e.g., Biswas, Riffe, & Zillmann, 1994), the Internet (e.g., Mastro, Eastin, & Tamborini, 2002), and advertising (e.g., Chang, 2006). The theory of affect dependent stimulus arrangement (Zillmann & Bryant, 1985), widely known as mood management theory (Zillmann, 1988a, 1988b, 2000), suggests that individuals are motivated to arrange and rearrange their exposure to external stimuli to maximize the hedonic objective. The determining factors of media selection do not lie

in the hedonic value of the external stimuli, but in people's subjective affective states. For example, a professional football game is a popular source of enjoyment. However, for over-stimulated individuals, such exciting entertainment fare may not provide a good means to meet their needs. Indeed, stressed individuals (e.g., those performing complex tasks under time pressure) were less likely to select an exciting football game program than were bored individuals (Bryant & Zillmann, 1984). Conversely, bored individuals (e.g., those performing simple tasks without time pressure) were less likely to select a calming program than were stressed individuals.

From experiments to surveys, the wide array of selective exposure to media content has demonstrated the value of mood management theory (Knobloch-Westerwick, 2006). However, the persistent use of tragic content (e.g., "tearjerkers") challenges the hedonic principle and mood management theory, which is premised on the principle, because tragic content intensifies adverse affective states. A tragedy typically ends with unfortunate events of protagonists with whom audiences have established rapport. Tragic content of poignant affect, such as sadness, typically does not help viewers to feel good. Paradoxically, extant research has reported that the degree of sadness was positively associated with the degree of enjoyment (de Wied, Zillmann, & Ordman, 1994; Mills, 1993; Oliver, 1993). Furthermore, such paradoxical uses of sad entertainment were salient among individuals who were in a negative affective state. For example, Mares and Cantor (1992) found that lonely elderly individuals tended to select television programs that portrayed unhappy characters, especially those characters who were similar to the elderly participants. Nabi, Finnerty, Domschke, and Hull (2006) reported that individuals who regretted cheating on their romantic partners tended to be interested in watching storylines that closely represented their own experiences. Music selection by lonely individuals

showed similar patterns to television program or movie selection. Knobloch and Zillmann (2003) reported that romantically deprived college students preferred to listen to love-lamenting songs, especially when performed by same-sex singers. In a survey at a local video rental store (Strizhakova & Krcmar, 2007), people who felt sad tended to choose dramas or crime dramas. Conversely, those who felt sad tended to avoid dramatic comedies.

Understanding the enjoyment of tragic content has both theoretical and practical implications. Theoretically, the test of the enjoyment of tragic drama can contribute to the understanding of whether the hedonic motivation is a truly fundamental motivation that will not be reducible to other motivations. Two distinctive views have been investigated to attempt to discover these motivations (Ryan & Deci, 2001). The first one is hedonism, which claims that human behaviors are fundamentally driven by one motivation: seeking pleasure (e.g., Kahneman, Diener, & Schwarz, 1999). The second one is eudaimonism, which claims that humans have an additional fundamental motivation: actualization or fulfilling of human potential which is not necessarily driven by the hedonic motivation (e.g., Waterman, 1993). Given that tragic content has a low level of hedonic value, understanding the enjoyment of tragedy provides an opportunity to test whether individuals are motivated by either hedonic or non-hedonic motivation. If hedonic motivation drives the use of tragic content, mood management theory can be substantiated beyond the current literature. On the other hand, if non-hedonic motivations drive the use of tragic content, the boundaries of mood management theory may be uncovered.

The enjoyment of tragic drama has practical implications for strategic communication through which individuals or organizations persuade or inform their various publics including consumers and employees. In delivering messages, incorporating hedonic components into strategic messages is one way of increasing the probability of public exposure to the messages

and potential attitude change. As such, understanding the hedonic value of tragic content can open a new perspective in delivering negatively valenced messages, especially when messages are intended to discourage risky behaviors, such as smoking or drug uses. When discouraging risky behaviors, messages are typically negatively valenced, such as by framing the negative consequence of risky behaviors (Kahneman & Tversky, 1984; Pechmann, Zhao, Goldberg, & Reibling, 2003; Witte & Allen, 2000). Thus, understanding the nature of enjoyment of tragic drama can contribute to the literature by explaining how incorporating hedonic components may be useful when designing threatening messages.

The goal of this research is to find possible answers to questions that arise from the paradoxical uses of tragic content such as sad films. Specifically, this project seeks to answer the following questions: (1) why do people, particularly those who are experiencing negative affect (e.g., sadness), seek tragic content, and (2) why is the intensity of this negative affective state (e.g., sadness) positively associated with the degree of enjoyment of such negatively valenced content? To that end, this project will critically review previous resolutions for the selection and enjoyment of tragic drama, conceptualizing enjoyment as subjective experiences of satisfaction from meeting individuals' different needs, and will discuss possible resolutions for the selection and enjoyment of tragic content.

## CHAPTER 2

### THEORETICAL BACKGROUND

#### Previous Resolutions

There are three possible resolutions for the alleged paradox (i.e., the selection and enjoyment of tragic drama). The first approach is to focus on the positive aspects of sad media content. For instance, tragic drama is not purely negative, but contains positive components as well. When positive components outweigh negative ones, it is possible that individuals enjoy negatively valenced media content by focusing on the positive components of the message. The second approach is to put an emphasis on the subjective interpretation of feeling sad. If people interpret feeling sad positively, it is not necessarily a paradox for individuals to enjoy sad media content. The third approach is to find motivations other than the hedonic motivation. If non-hedonic motivation as well as hedonic motivation governs human behaviors, selection of tragic content is not necessarily a paradox.

Extant research on the paradoxical uses of tragic content has pros and cons (see Table 1). The catharsis, play, conversion, reappraisal, and eudaimonic accounts provide resolutions for the positive association between the intensity of sadness and the enjoyment of tragic content. However, these accounts do not provide a resolution for why tragic content appeals to individuals who are experiencing negative affect. Conversely, the downward-social-comparison account resolve the question of why tragic content appeals to individuals who are experiencing

negative affect, but not of the positive association between the intensity of sadness and the enjoyment of tragic content. The following section will review previous approaches in detail.

Table 1. *Comparisons of Each Account for Explanatory Scope of the Appeal of Tragic Content*

Accounts	Rationale	Appeal of tragedy	Appeal of tragedy for lonely individuals	Correlations between sadness and enjoyment
Catharsis	Purging pity and fear by experiencing such emotions	Yes	No	Yes
Excitation Transfer (de Wied et al., 1994)	Hedonic conversion of excitation induced by tragic events	Yes	No	Yes
Play (Goldenberg, Pyszczynski, & Johnson, 1999)	Building capacity to handle the fear of death by experiencing death vicariously in a safe way	Yes	No	Yes
Telic Hedonism (Zillmann, 2000)	Delaying immediate gratification for later greater pleasure	Yes	No	No
Comparison (Mares & Cantor, 1992)	Getting comfort by comparing others who are in worse situation	Yes	Yes	No
Need for Companionship (Finn & Gorr, 1988)	Gratifying lonely individuals' need for companionship	No	Somewhat	No
Reappraisal (Mills, 1993; Oliver, 1993)	Feeling good by cherishing empathic sensitivity	Yes	No	Yes
Eudaimonia (Oliver, 2008)	Gratifying from meaningfulness drives individuals to seek tragic content	Yes	No	Yes

## *Positive Aspects of Experiencing Sadness*

### *Catharsis Account*

Catharsis refers to “purgation” of pity and fear through the experiences of the same emotions. In *Poetics*, Aristotle wrote that tragedy induced pity and fear, through which individuals could purge such emotions. The catharsis doctrine has been broadly interpreted by suggestion that all dramas evoking aversive emotions can diminish such emotions. For instance, experiencing pity and fear may enable individuals to purge these emotions instead of evoking apprehension or sensitivity (see Zillmann, 1998, for overview). Despite the intuitive appeal regarding the idea of purging aversive emotions, the results of scientific research are mixed (Tamborini, 2003). The studies on aggression point to an oppositional view of the catharsis doctrine. When provoked participants vented their anger (e.g., hitting a bag while thinking about their criticizers), such expressive behaviors of anger enhanced anger and aggression, rather than mitigating or “purging” their anger (Bushman, 2002).

On the other hand, studies on the effects of crying, which is typically induced by sad films, produced mixed results (see Rottenberg, Bylsma, & Vingerhoets, 2008, for a review). Studies in a laboratory setting and in a naturalistic setting produced different results. In a laboratory study (Gross, Fredrickson, & Levenson, 1994), individuals who cried after watching sad films typically felt sadder and greater distress than those who did not cry. In a study of a naturalistic setting, such as survey or diary research (Bylsma, Vingerhoets, & Rottenberg, 2008), individuals typically felt good after crying when criers received social support, or when the cause of crying was controllable or resolvable. Rottenberg et al. (2008) suggested that such inconsistent results might be due to experimental contexts around crying incidents (e.g., devoid of social support and feeling embarrassment of crying during the participation of an experiment),

and the timing of measures of the effects of crying. Crying involved both arousing effects (e.g., increased heart rate) and soothing effects (e.g., slowed breathing) (Hendriks, Rottenberg, & Vingerhoets, 2007). Notably, the soothing effects associated with crying persisted two to three minutes longer than the arousing effects. That is, the beneficial effects of crying can be measured two to three minutes after the crying incident, which was not the case of previous laboratory studies that typically measured the effects of crying immediately after crying incidences.

The beneficial effects of crying can explain the association between the intensity of sadness and the enjoyment of a tragedy. Individuals who feel sad tend to cry, and may have benefits from crying. As such, individuals who feel intensely sad may have benefits from crying, which may contribute to the enjoyment of tragic drama. However, the catharsis account does not provide a clear explanation for why individuals, particularly those who are experiencing negative affect, select negatively valenced content. Although individuals who are experiencing negative affect may want a chance to cry, individuals who are prone to be in negative affective state (e.g., depression or anxiety) typically do not have beneficial effects from crying (Rottenberg, Bylsma, Wolvin, & Vingerhoets, 2008). Individuals who suffer from depression and anxiety typically experience worse moods after crying.

#### *Play Account*

The play account is a variation of the catharsis account in that individuals can build capacities to handle pity or fear by experiencing such emotions. The play account is rooted in Aristotle's idea of *mimesis*, translated as imitation (Aristotle, trans. 1994b). Individuals can experience mimicked events and actions in a simulated environment, as if such events and actions were real and actual. As such, entertainment as play serves as a safe simulated environment (Stephenson, 1967; Vorderer, Steen, & Chan, 2006). Through pretense play at a

physical playground, children can build capacities for handling real situations that they will encounter (Steen & Owens, 2001). Narrative stories have a similar function to children's pretense play. That is, a story can serve as a "mental playground" in which individuals can safely build capacities for handling real situations. In this sense, tragic drama can serve as a "mental playground" where individuals can experience fatal incidents (i.e., death) safely, and through which individuals can build capacities to cope with the terror of death (Goldenberg et al., 1999).

The play account can explain the appeal of a tragedy and the positive association between feeling sad and enjoyment. However, it is not sufficient to explain why individuals, particularly those who are experiencing negative affect, select tragic content, let alone why mood affects media choice. If tragic content serves as play, the influence of individuals' affective states on media selection may not be related to the appeal of tragic content.

#### *Excitation Transfer Account*

Excitation transfer theory focuses on the hedonic conversion of excitatory residual (Zillmann, 1983). Elevated sympathetic activity decays slowly, whereas cognitive appraisal adjusts to environmental changes rapidly. When favored protagonists undergo harm, empathic distress elevates excitation. Elevated excitation persists for some time even after the tragic incidents are resolved. While a viewer's affect is adjusted to positive resolutions, excitation from the previous distressing scene decays and combines with current excitation produced by a gratifying resolution. As such, residual excitation induced by tragic events serves to intensify positive feelings at the end of tragic drama, which yields greater enjoyment (de Wied et al., 1994). The excitation-transfer account provides a resolution for why the intensity of negative emotions is positively associated with the enjoyment of tragic drama. However, the excitation-transfer account does not provide a resolution for why individuals who are experiencing negative

affect select tragic drama. In addition, the excitation-transfer account depends on satisfactory resolutions of tragic drama, which limits the scope of the excitation-transfer account. Not all tragic dramas feature satisfactory resolutions of tragic drama.

#### *Downward-Social-Comparison Account*

The downward-social-comparison account is useful in resolving the paradoxical uses of tragic content among those who are experiencing negative affect. According to the downward-social-comparison account, the source of enjoyment is savoring the observation of other individuals' unfortunate events rather than feeling compassion from the observation (Mares & Cantor, 1992). Applying Festinger's (1954) social comparison theory that posits a motivation to evaluate one's relative status by comparing oneself to others, Wills (1981) suggested that individuals often seek self-enhancement by comparing themselves to others who are in worse situations. These downward social comparisons enable the individuals to feel better. Mares and Cantor (1992) found that lonely elderly individuals showed greater interest in viewing television programs that negatively featured elderly individuals who were similar to them. It is plausible that lonely individuals may feel better about themselves by viewing others who are worse off than they are, which can explain why negatively valenced content is selected by individuals in a negative affective state. However, downward social comparisons do not explain the positive association between the intensity of sadness and enjoyment.

Enjoyment often accompanies involvement in a story line (Wirth, 2006). When involved in a story, audiences empathize with characters (Zillmann, 2006a). Reading a novel or watching drama immerses an individual in a storyline as if audiences actually experience the events by becoming characters in the story. Such immersive experiences are analogous to being transported inside the world of a story (Green, Brock, & Kaufman, 2004). If audiences experience immersion

or transportation while consuming a story, comparing the self with an unfortunate protagonist may not be enjoyable. Through the experiences of immersion or involvement, audiences have to share emotional experiences with the protagonist in the story, which is one of the critical elements of enjoyment. Thus, the downward-social-comparison account only provides the resolution for the selection of tragic content, not for the enjoyment of tragic drama.

#### *Need-for-Companionship Account*

Uses-and-gratifications research has focused on the motivation of media consumption, identifying various motives for media use (Rubin, 2002). One of them is the need for companionship. Individuals who experience loneliness or social isolation may increase media use to gratify their needs for companionship (e.g., Finn & Gorr, 1988; Perse & Rubin, 1990; Tsao, 1996). This line of research contributed to identifying the need for social belonging as a motive for media uses, especially among socially isolated individuals. However, the need for companionship account does not provide a resolution for why individuals select tragic content over amusing content, or an explanation of why the intensity of sadness is positively associated with the gratification of tragic content.

#### *Telic Hedonism Account*

Individuals may be able to enjoy negatively valenced content by delaying immediate gratification, because the individuals can have later gratification with greater magnitude. Zillmann (2000) suggested that choices of mood-affecting behavior are bound by the evaluations of anticipatory pleasure, distinguishing between telic and spontaneous hedonism. Spontaneous hedonism refers to immediate gratification, whereas telic hedonism refers to delayed gratification. As such, individuals typically forego immediate gratification for later gratification, if the benefits of delaying immediate gratification outweigh the costs of the delay (Frederick, Loewenstein, &

O'Donoghue, 2003). Such intertemporal choices (i.e., decisions involving trade-offs between costs and benefits occurring at different points in time) are ubiquitous. Individuals always have to choose, either consciously or unconsciously, whether they will do “this” now or later.

There is criticism that telic hedonism does not fall under mood management theory, because delayed gratification does not contribute to optimizing mood at the point of making a choice (e.g., Nabi et al., 2006). On the contrary, delayed gratification constitutes emotional experiences at the point of making a choice. That is, a choice of either delaying or non-delaying gratification engages individuals' affective system at the point of making the choice. If the sum of the costs and benefits of delaying gratification is positive, individuals typically feel better from delaying gratification. Such “feeling better” typically guides media selection. For example, when an individual is scheduled to take an exam the next day, playing a video game instead of studying typically makes the individual feel bad, such as guilty. If feeling guilty outweighs the possible fun from playing a video game, individuals typically do not play the video game because thinking about undesirable outcomes and feeling bad from an inappropriate choice outweighs the immediate fun gained by playing the video game.

The telic hedonism account provides logical foundations for the accounts of paradoxical uses of negatively valenced content, such as the play account. According to the play account, individuals need to experience pain to build capacity to handle with actual challenges, which is to putting off immediate hedonistic outcomes for having later gratification with greater magnitude.

### *Positive Interpretation of Feeling Sad*

The second approach in resolving the paradoxical uses of tragic drama is to focus on the subjective interpretation of feeling sad. If people reappraise feeling sad positively, individuals can have enjoyable experiences from watching tragic drama.

#### *Reappraisal Account*

Reappraisal refers to the cognitive evaluations of the feelings as a way of reframing the meaning of emotional experiences (Gross & Thomson, 2007). Feeling sad per se may not be entertaining, but interpreting the experience of sadness can be positive. If individuals focus on the positive aspects of experiencing sadness from viewing tragic content, individuals may experience enjoyment from the tragic content. One of the earliest ideas of reappraisal is the conversion of empathic grief to positive states such as amusement. McDougal (1922) suggested that people convert their empathic grief to positive affect to prevent excessive co-suffering with painful experiences of others. That is, people tend to reappraise others' aversive affective states by construing as self-inflicting and deserved by them, which enable people to free from empathic distress (Zillmann & Knobloch, 2001).

The idea of conversion of distress to positive affect can be applied to the enjoyment of tragic drama. In attitude terms, Mills (1993) suggested that individuals might find a tragedy appealing, because feeling sad could provide individuals with the sense of feeling good about themselves. When someone is suffering, it is good to feel bad through empathizing with the person who is suffering. To test this idea, Mills (1993) compared empathic sensitivity (measured by self-described sensitivity to others' experiences) of viewers who watched a high tragic film with those who watched a low tragic film. Although participants felt worse after watching a high tragic film, positive disposition toward their own empathic sensitivity positively correlated with

the appeal of tragedy for those who watched a high tragic film at a higher level than those who watched a low tragic film. Mills (1993) suggested that sad films could be appealing because sad films could provide individuals with a chance to cherish their lives by being sensitive to others' suffering.

Oliver (1993) proposed the similar resolution for the paradoxical uses of sad entertainment in a meta-emotion (i.e., evaluation of feeling emotions) term. Applying the concept of metamood by Mayer and Gaschke (1988), Oliver (1993) suggested that a positive interpretation of feeling sad (i.e., positive meta-emotion) could provide positive or pleasant experiences to the viewers of sad films. Oliver (1993) examined the association among individuals' empathy trait, emotions (e.g., sadness and happiness), the evaluation of feeling emotion (i.e., meta-emotion), and the enjoyment of a sad film. Female viewers showed high empathic tendencies, reported positive evaluations of feeling sad (i.e., high meta-emotion on sadness), felt sadder, and experienced more enjoyment when watching a sad film.

However, the reappraisal accounts do not provide a resolution for why people, particularly those who are experiencing negative affect, select tragic content, because the idea of reappraisal focuses on the processes of consuming sadness after the selection of tragic content. Despite the limitation, the reappraisal accounts have advantages in explaining why the intensity of negative affect is positively associated with the degree of enjoyment. According to Mills (1993), individuals who cherish empathic sensitivity should experience more sadness than those who do not, and the intensity of sadness should be associated with the degree of enjoyment of a tragedy. Likewise, according to Oliver (1993), individuals who have higher tendency to empathize should experience sadness more intensely than those who have lower tendency to

empathize, and such tendency of empathizing should be associated with the degree of enjoyment of a tragedy.

### *Non-Hedonic Motivation*

The third approach of the resolution of the paradoxical uses of tragic drama is to find non-hedonic motivations that may also govern human behaviors. If people's selection of tragic drama is governed by non-hedonic motivation, the selection and enjoyment of tragic drama is not necessarily a paradox.

### *Eudaimonic Account*

Distinguishing eudaimonic happiness, such as greater insight, self-reflection, or meaningfulness, from pleasure is one way of explaining the paradoxical uses of tragic content. If eudaimonic happiness is not pleasure and eudaimonic motivations drive individuals to select tragic content, the uses of tragic content are not necessarily a paradox. Oliver (2008) suggested that attraction to entertainment can best be understood with two distinctive motivations for pleasure and for meaningfulness. Individuals may choose comedies or action dramas driven by hedonic motivations like seeking joy, mirth, or excitement. On the other hand, selecting sad films or dramas that portray love or devotion may be driven by eudaimonic motivations like seeking greater insight, self-reflection, or meaningfulness.

The conceptual distinction can be traced back to Aristotle's usage of the term, *happiness*. In *Nicomachean Ethics*, the term *happiness* is the English translation of the Greek word, *eudaimonia*, which can also be translated to well-being, flourishing, or meaningfulness, distinguishing eudaimonia from bodily pleasure (Waterman, 2008). Contemporary philosophers and psychologists interpret eudaimonia as objective states, such as individuals' fulfilling, human potential, or self-actualization (Ryff & Singer, 1998; Waterman, 1993), not as subjective mental

states, such as attaining desire or fulfilling needs. In this sense, the eudaimonic view on pleasure is called objectivism, as compared to subjectivism (or mentalism) which views pleasure as subjective mental states (Kahneman et al., 1999). According to the eudaimonic account, the enjoyment from consuming a tragedy is not hedonic pleasure or hedonia, but eudaimonic well-being or eudaimonia. Oliver (2008) suggested that individuals who enjoy sad entertainment do so, because they can experience meaningfulness, such as feeling compassion, that may arise from watching a sad film. As such, the use of tragic content is not necessarily a paradox, because it is not “pleasure” that individuals seek from consuming tragic content.

Although a eudaimonic approach is tempting in resolving the alleged paradox, this research will not be theoretically grounded using the eudaimonic account. Most of all, distinguishing the meaning of life from pleasure creates unnecessary costs (Kashdan, Biswas-Diener, & King, 2008; see Waterman, 2008, for responses to the critique). Eudaimonic happiness is one of the sources of pleasure. Indeed, the measures of eudaimonia and hedonia are highly correlated. For example, Waterman (2008) reported that hedonic enjoyment correlated with eudaimonia, ranging typically from  $r = .75$  to  $.85$ . As such, eudaimonia is not a separate and independent construct from hedonia; rather, eudaimonia is one aspect of pleasure. This notion is consistent with a eudaemonist philosopher, Telfer (1980) who observed that eudaimonic happiness was a sufficient, but not a necessary, condition for hedonia or hedonic pleasure. There are four possible circumstances that individuals can experience: (1) both hedonia and eudaimonia; (2) hedonia, but not eudaimonia; (3) neither hedonia nor eudaimonia; and (4) not hedonia, but eudaimonia. Logically, the fourth case is a null category, if one agrees with Telfer’s categorization (Waterman, 2008).

This approach is consistent with recent findings from neurophysiological studies that the indicators of the meaning of life, such as social cooperation and compassion, directly act on the brain's pleasure system (Lieberman & Eisenberger, 2009; Sanfey, 2007). One of the main brain areas that process rewards is the striatum that responds to concrete rewards, such as money or food. The striatum also responds to abstract rewards such as social cooperation (Rilling et al., 2002) and charitable donations (Harbaugh, Mayr, & Burghart, 2007; Moll et al., 2006). The hedonic aspect of social cooperation and compassion can also be explained by the role of oxytocin, a neuropeptide and hormone that is associated with social affiliation and love (Carter, 1998; Uvnas-Moberg, 1998). Oxytocin prompts social affiliation such as long-term bonds, commitments, or compassion, in conjunction with the brain reward system (i.e., dopamine and opioid systems) (Depue & Morrone-Strupinsky, 2005; Skuse & Gallagher, 2009; Taylor, 2006; Taylor et al., 2000). That is, oxytocin promotes social connection by inhibiting negative reactions other individuals and by linking the inhibition with the brain reward system (Skuse & Gallagher, 2009). Therefore, if individuals experience eudaimonic happiness such as feeling compassion from watching a tragedy, it is logical to infer that the individuals experience hedonic pleasure, too.

### *Summary*

The paradoxical aspects of the enjoyment of tragic drama are twofold: the selection of tragic content and the positive association between sadness and enjoyment. None of the previous research provides resolution for both puzzles. The catharsis, excitation-transfer, play, reappraisal, and eudaimonic account can explain the positive association between sadness and enjoyment, but not the appeal of tragic drama for sad individuals. Conversely, the downward-social-comparison can explain the appeal of tragic drama for sad individuals, not the positive association between

sadness and enjoyment. Despite these deficiencies regarding the paradoxical uses of tragic content, previous accounts have contributed to identifying sociality, forming and belonging to a social group, as an important component in understanding enjoyment. The downward-social-comparison accounts identified social relations as a source of the enjoyment of tragic content. Similarly, the two reappraisal accounts focus on the role of empathy in the enjoyment of tragic content. Likewise, the eudaimonic account identified compassion or sympathy as a reason for the appeal of tragic content. Empathic sensitivity, compassion, and sympathy are affective states that arise from social interaction. Based on these findings, this research will identify the need to belong as a basic human need, conceptualizing enjoyment as the satisfaction of the need.

#### The Hedonic Value of Tragic Drama

The appeal of tragic content can be explained in two ways. First, tragic content can have rewarding components by providing what people need. This approach provides an explanation for why tragic content appeals to individuals who are experiencing negative affect, such as sadness or loneliness (see Figure 1).

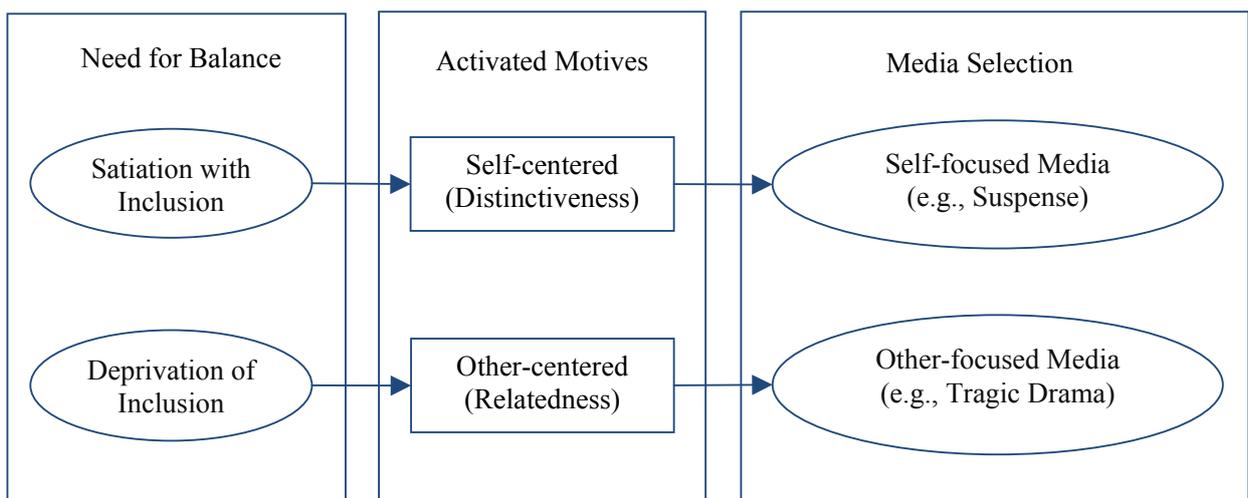
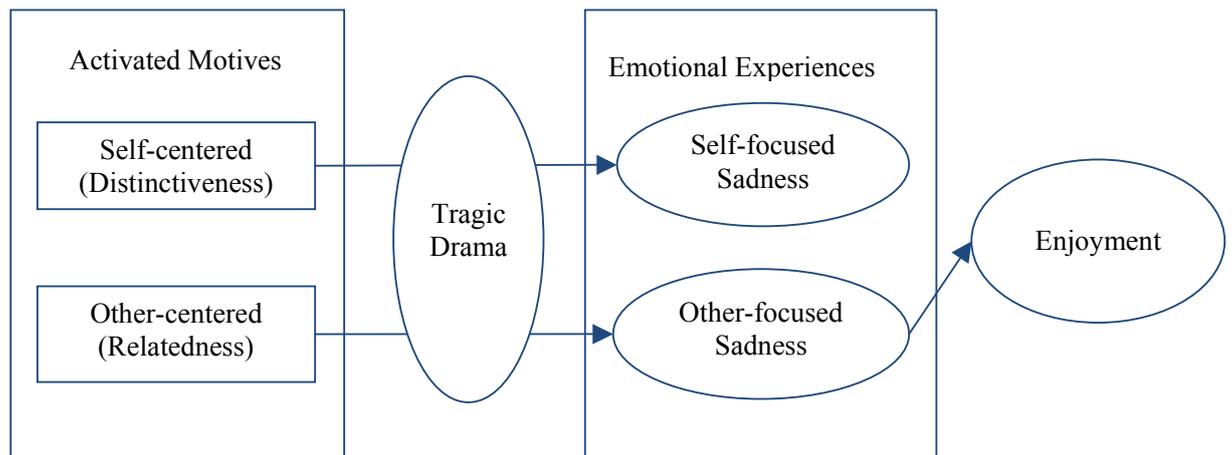


Figure 1. Processes of the Selection of Tragic Drama (i.e., Other-focused media)

Second, feeling sad per se can be rewarding. This approach provides an explanation for the positive association between the intensity of sadness and the enjoyment of tragic content (see Figure 2). The next part of this proposal will discuss the two approaches in detail.



*Figure 2. Processes of the Enjoyment of Tragic Dramas*

### *Media Selection from Balance*

Excitatory homeostasis is one of key principles of mood management theory. Excitatory homeostasis refers to individuals' tendency to seek balance for their excitation level by choosing particular types of entertainment (Bryant & Davis, 2006). That is, overstimulated persons tend to choose calming media content, whereas understimulated persons tend to select arousal materials in achieving mood optimization. A study by Bryant and Zillmann (1984) is an excellent example of the drive potentiated by excitatory homeostasis. Participants were placed in a state of either boredom or stress. After the boredom or stress induction procedure, participants were given an opportunity to watch television programs that were pre-categorized into arousing and calming ones via pre-test. The patterns of participants' program selection were unobtrusively recorded.

The results revealed that bored participants selected arousal materials and avoided relaxing ones. On the other hand, stressed individuals selected relaxing programs more than did bored individuals. People seek homeostasis in choosing entertainment, because maintaining balance between extremes helps them to achieve mood optimization objectives. Seeking balance in maintaining an optimal level of pleasure is not uniquely limited to the cases of excitation. Most extremes typically cause the end of pleasure and the beginning of pain, which actually serves as a signal for individuals where to stop. Thus, the principle of excitatory homeostasis can be applied to a social dimension, distinctiveness from others and relatedness with others.

#### *Sociality as the Basic Human Need*

Sociality constitutes one of the most fundamental aspects of human nature. The need to belong is the basic motive that may not be reducible to other motives (Baumeister & Leary, 1995; Bowlby, 1969). Forming and sustaining social bonds are benefits of survival and reproduction to social beings. Such traits of forming social bonds have been inherited and have become affective mechanisms that reward social affiliations and punish social exclusion (Panksepp, 1998). Rewarding mechanisms enable humans to experience pleasure from social connection and pro-social behaviors. Across cultures and generations, helping others, cooperation, and concern for others are norms that guide human behaviors. Such norms are not only culturally and socially constructed, but also are rooted in neurophysiological systems. That is, social affiliation and pro-social behaviors reward individuals by not only positive feedback or expectation of feedback from others or a society, but also by the actual experiences of pleasure. The same pleasure systems in the brain that process physical rewards such as food or sex also respond to pro-social behaviors such as social cooperation and charity (Harbaugh et al., 2007; Moll et al., 2006; Rilling et al., 2002; Sanfey, 2007).

Along with rewarding mechanism for social affiliation, humans have punishment system for social exclusion. MacDonald and Leary (2005) proposed that physical pain mechanisms provided foundations for detecting and coping social exclusion during the course of evolutionary development. As such, social exclusion or the anticipation of exclusion typically causes individuals to experience aversive emotional experiences akin to physical pain (MacDonald & Leary, 2005; Panksepp, 1998). Although such social pain (i.e., aversive emotional states caused by social exclusion) does not refer to the physical sensation of pain such as tissue damage, “hurt feelings” from social exclusion is not just metaphor but an actual experience of pain. When emotions are associated with the future implications of physical sensations, individuals typically experience painful feeling without accompanying physical sensation of pain (Eisenberger, Lieberman, & Williams, 2003). Social exclusion functions as one of the most devastating pains for humans (Williams, 2007a). Williams (2007b) described social exclusion as social death. Thus, individuals depend on their affective system (i.e., feeling pleasure and pain) in monitoring social value so as not to be excluded socially (Leary & Cox, 2008; Leary, Tambor, Terdal, & Downs, 1995).

### *Two Aspects of Sociality*

Belonging to social groups poses adaptive challenges to an individual, such as in forming and maintaining cooperative alliances, protecting oneself from threats, gaining and maintaining status, or attracting and retaining mates (Bugental, 2000; Kenrick, Li, & Butner, 2003). In each domain of social life, individuals typically have two different needs and motives: distinctiveness and relatedness. When individuals engage in gaining status or attracting mates, individuals need to differentiate themselves from others so that they could increase the odds of winning against others. On the other hand, when individuals engage in forming alliances or protecting themselves

from threats, individuals need to tune into others to facilitate cooperation. Therefore, sociality creates tension between distinctiveness from others and relatedness with others.

It should be noted that distinctiveness is not the antithesis of belonging but the way of maximizing individuals' value to the group to enhance their belonging, because differentiation enables individuals to be uniquely valued (Leary & Cox, 2008). Both needs for distinctiveness and relatedness can coexist within the same individuals by maintaining balance between the two needs, rather than seeking either one or the other (Brewer, 1991). Thus, when individuals are socially excluded, individuals are likely to be motivated to seek rebuilding relatedness with others. Conversely, when individuals are satisfied with their level of inclusion, individuals are likely to be motivated to seek distinctiveness from others (Maner, DeWaal, Baumeister, & Schaller, 2007). In this sense, individuals' seeking equilibrium between distinctiveness and relatedness can be referred to as being in "social" homeostasis, as compared to excitatory homeostasis (DeWaal et al., 2008).

Depending on affective traits, stable predispositions of emotional responses (Rosenberg, 1998), individuals may place different value on distinctiveness and relatedness. Individuals have different affective traits; some are prone to be compassionate, whereas others are predisposed to be proud (Shiota, Keltner, & John, 2006). Compassion is typically other-focused emotion in that compassion arises from concerning others in suffering, and motivates individuals to enhance the welfare of the others (Eisenberg, 2000). Pride is typically self-focused emotion in that pride arises from focusing on the achievement or the triumphant of the self over others, and motivates individuals to enhance the value of the self (Lazarus, 1991; Tracy & Robins, 2007). Differences in affective traits shape individuals predispositional tendencies in construing social environment (Keltner, 2003). Therefore, self-centered individuals who are high in trait pride may put more

weight on distinctiveness, whereas other-centered individuals who are high in trait compassion may weigh relatedness more highly.

### *Two Kinds of Enjoyment*

Enjoyment does not come from monolithic, but from multiple, mental processes, although the word “enjoyment” reflects a positive affective state such as joy. For example, an exciting professional football game is generally more enjoyable than a relaxing nature documentary program, especially when people are placed in boredom. However, when people were placed in stress, people experienced enjoyment from a relaxing program as much as from an exciting program (Bryant & Zillmann, 1984). This finding is important in conceptualizing enjoyment, because the study provides one of the earliest empirical grounds in conceptualizing enjoyment as a subjective mental state, which is the result of satisfying needs (i.e., relieving stress or avoiding boredom). Studies on mood management theory have consistently found that individuals’ differential affective needs produced different experiences of enjoyment. For example, when participants were exposed to joyous music, people in bad moods listened to joyous music longer period of time than did people in neutral and good moods, and people in good moods listened to joyous music for shorter time period than did people in neutral and bad moods (Knobloch & Zillmann, 2002). Similarly, women’s preference for certain types of media content is typically influenced by their affective needs. Women tended to prefer comedy when their menstrual cycle made them most likely depressed (Meadowcroft & Zillmann, 1987). On the other hand, women tended to choose suspense during the libidinal peak of menstrual cycle (Weaver & Laird, 1995).

In line with these findings, Reeve (1989) distinguished enjoyment as need satisfaction from interest that involves the anticipation of need satisfaction. Nabi and Krcmar (2004)

understood enjoyment as a favorable evaluation of an object in attitude terms. Raney (2004) conceptualized enjoyment as the sense of pleasure from satisfactory story lines that align with a viewer's affective disposition toward characters. Vorderer, Klimmt, and Ritterfeld (2004) identified various manifestations of enjoyment, such as serenity, suspense, tenderness, sensory delight, and sense of achievement, from individuals' responses to specific media offering. Thus, media enjoyment can be defined as subjective mental states of pleasurable responses to media stimuli that can meet the need of the users of the media stimuli. Media content provides experiences that can meet the needs for achieving both distinctiveness and relatedness. As such, media enjoyment can be categorized into two types: enjoyment from meeting the need for distinctiveness and from meeting the need for relatedness.

Distinctiveness puts the self at the center of social interaction, so the enjoyment derived from meeting the need for distinctiveness is self-centered enjoyment. Enjoyment from amusement, mirth, or excitation is self-centered enjoyment, because the function of such affect is pleasing the self, not others. Thus, media content that provides self-centered enjoyment, such as comedy, action drama, or sports play, can be classified as self-focused content. Distinctiveness is closely associated with the need for competence; distinctiveness is not just differentiated with others, but also having distinctive competence over others. In this sense, media content focusing on performance or competition is also self-focused. On the other hand, relatedness puts others at the center of social interaction, so the enjoyment from meeting the need for relatedness is other-centered enjoyment. Enjoyment from compassion is other-centered enjoyment, because viewers who experience compassion put themselves in others' position and share others' emotional experiences. In this sense, media content, such as sad films or tragedies, that provides other-centered enjoyment can be classified as other-focused content.

The psychophysiological processes of self-centered enjoyment and other-centered enjoyment are different. Excitation is one of main factors of self-centered enjoyment, whereas other-centered enjoyment mostly comes from regulating excitation. For example, when people observe others suffering, a typical other-focused response is feeling compassion that shares others' negative emotional states, trying to alleviate others' suffering. To achieve the goal, individuals have to regulate their excitation (emotional distress) that can arise from sharing negative emotional states (Eisenberg et al., 1991). This regulatory aspect of other-centered enjoyment is closely related to distinguishing sadness into two types (see the following sections for more discussion).

#### *The Appeal of Tragedy to Sad Individuals*

Feeling lonely or sad typically serves as a warning signal of a problem such as social exclusion or the deprivation of social inclusion (Izard & Ackerman, 2000). Loneliness and sadness are closely related, because sadness arises from loss including the loss of a loved one (Lazarus, 1991). Sadness is characterized by separation distress (Panksepp, 1998). A function of feeling sad is to help an individual to communicate with others so as to escape from a problem such as social exclusion (Izard & Ackerman, 2000). Expressing sadness such as crying typically makes others provide solace (Nelson, 2005; Provine, Krosnowski, & Brocato, 2009). Thus, it is reasonable to believe that sad individuals are motivated to seek social relatedness. Media content, especially tragic drama, typically provides sad individuals with opportunities to experience warm social connection. A typical tragic story portrays human relations positively. The factor of determining the positivity and negativity of content is not whether a drama features positive or negative content (e.g., sadness or separation), but whether contents (e.g., human relations) are portrayed negatively or positively. The distinction of the portrayals on human relations between

a hostile comedy and a tragedy is a good example. A comedy features positive emotions such as amusement, whereas a tragedy features negative emotions such as sadness. However, a hostile comedy features human relations negatively by portraying disparagement between characters. Thus, individuals who experience negative human relations (i.e., being insulted) tend to avoid such funny content, whereas individuals who did not experience negative human relations (i.e., being frustrated but not insulted) did not avoid the content (Medoff, 1982; Zillmann, Hezel, & Medoff, 1980). On the other hand, a victim in a tragedy has positive social bonding with others (i.e., positive portrayals of human relations). In a typical tragic story, protagonists choose tragic paths for the sake of others whom they love or care for, not for their own interests. Witnessing such tragic, but touching, events often causes viewers, especially females who are empathically sensitive, to cry and to feel connection with the victim and other characters around the victim (Oliver, Weaver, & Sargent, 2000).

In sum, sad individuals who are deprived of social inclusion are typically motivated to rebuild social connections, and tragic content provides sad individuals with chances to experience warm social connection. Thus, tragic content can appeal to sad individuals. The remaining question is why the intensity of feeling sad is positively associated with enjoyment.

#### *Positive Association between Sadness and Enjoyment*

Although extant research provides various resolutions for the positive association between sadness and enjoyment, no study integrates the selection and enjoyment of tragic drama in a single theoretical frame (see Table 1). The possible reason for the failure of integrative approach to the selection and enjoyment of tragic drama is a monolithic understanding of sadness.

### *Two Kinds of Sadness*

Sadness can be categorized into two types: self-centered sadness and other-centered sadness (Barnett, Howard, Melton, & Dino, 1982; Barnett, King, & Howard, 1979). When individuals feel sad for the sake of themselves, it is self-centered sadness. A motivational goal related to self-centered sadness is to alleviate one's own aversive emotions. Self-centered sadness can be detrimental to individuals, because focusing on the self generates negative thoughts on the self, which exacerbates negative feelings, and again increased focus on self-blame and negative feelings (Pyszczynski & Greenberg, 1987; Sloan, 2005). When individuals are unable to cut the vicious cycle of feeling sad and focusing on self-blame, feeling sad typically exacerbates to depression. Because of this negative aspect of sadness, the enjoyment of tragedy becomes a paradox.

However, sadness does not always arise from loss. When observing other sad individuals, people typically feel sad without actual incidences of loss. Empathy enables individuals to experience sadness without an actual incidence of loss. Empathy refers to understanding and responding to another person's affective states (Decety & Jackson, 2006; Zillmann, 2006b). Despite various definitions of empathy, the core elements of empathy are other-orientation and agency-distinguishing (Decety & Jackson, 2006). Other-orientation refers to affective resonance of others' feeling and thinking (Preston & de Waal, 2002), and cognitive transposing of oneself into others' feeling and thinking (Cialdini, Stephanie, Lewis, Luce, & Neuberg, 1997). Agency-distinguishing refers to discerning the feeling of the self from that of others whom the self empathizes with (Decety & Jackson, 2006). Because empathic responses accompany the automatic mimicry of affective states through the activation of similar neural circuits in the brain, it is important to distinguish whether empathic feeling and thinking belongs to the self or others.

Without such distinctions, observing others' in pain can induce anxiety or distress, which is not the function of empathy. Thus, distinguishing agency is crucial for enjoyment of tragic drama. If feeling sad from tragic drama becomes distress or anxiety, individuals may not be able to enjoy tragic drama.

When individuals experience sadness from observing others in suffering, such sadness is not self-focused. Because individuals feel sad for the sake of others, it is other-centered sadness or empathic sadness (Izard & Ackerman, 2000). Other-centered sadness is fundamentally the same as self-centered sadness because of automatic mimicry or a simulation of bodily states or facial expression of sadness (Preston & de Waal, 2002). However, other-centered sadness can be distinguishable from self-centered sadness in three ways. First, other-centered sadness is not induced from actual loss but from observing others who are feeling sad; it is a simulation of feeling sad. Second, because of different orientation (self-orientation versus other-orientation) of sadness, a motivational goal of self- and other-centered sadness is different. A motivational goal in related to self-centered sadness is typically to alleviate one's own aversive affective states, whereas individuals who feel other-centered sadness are typically motivated to alleviate others' aversive emotions, feeling compassion. Third, because a motivational goal of other-centered sadness is to alleviate others' sadness, other-centered sadness has been found to increase pro-social behaviors (Barnett et al., 1979; Cialdini & Kenrick, 1976; Fabes, Eisenberg, Karbon, Troyer, & Switzer, 1994; Izard & Ackerman, 2000; Moore, Underwood, & Rosenhan, 1984). With these reasons, other-centered sadness has been equated with compassion (e.g., Eisenberg et al., 1991).

Other-centered sadness as a form of compassion can be rewarding. Feeling sad for others is similar to charity in that both other-centered sadness and charity consume individuals'

resources for others' interests, not for the interest of the self. Feeling sad is costly for individuals, but, by feeling sad together, individuals can provide solace to others who need emotional support. Pro-social behaviors such as charity are rewarding (e.g., Harbaugh et al., 2007). Pro-social behaviors are rewarding is not new. Previous studies found that individuals typically felt good after they helped others (e.g., Cialdini & Kenrick, 1976). The rewarding aspects of compassion are rooted in neurobiological systems. Compassion is associated with the brain's reward system via oxytocin and the vagus nerve. The vagus nerve is a parasympathetic nervous system; it slows down heart rate, and undoes the fight-or-flight excitation caused by a sympathetic system (Porges, 1995, 1998, 2007). The vagus nerve controls complex facial and vocal gestures that are used in social interactions such as love or compassion. As such, the vagus nerve is called the nerve of compassion (Keltner, 2009), or the nerve of love (Porges, 1998). The vagus nerve is connected with the networks of oxytocin receptors. Oxytocin is a neuropeptide and hormone that is associated with the regulation of separation distress and the formation of social affiliation (Carter, 1998; Panksepp, 1998; Taylor, 2006). Oxytocin prompts social affiliation such as long-term bonds and commitments by linking social interaction with the brain reward system (i.e., dopamine and opioid systems) (Depue & Morrone-Strupinsky, 2005; Skuse & Gallagher, 2009; Taylor, 2006; Taylor et al., 2000). Because of the overlap between other-centered sadness and compassion, other-centered sadness can be rewarding regardless of its negative aspects. If this is the case, it is a natural consequence that individuals who feel sadder can have greater enjoyment from tragic content than have those who feel less sad.

### *Positive Aspects of Sadness*

The dual nature of sadness has been manifested in previous studies on sadness. Film-induced sadness produced complex patterns of cardiovascular changes. For example, when

participants watched a sad film that featured a young boy who cried because of the death of his father, the participants revealed both increased sympathetic arousal and decreased sympathetic arousal (Fredrickson & Levenson, 1998). Kreibig, Wilhelm, Roth, and Gross (2007) found that, among 13 studies on heart rate (HR) change in response to sadness, four studies reported that sadness decreased HR, and nine studies reported that sadness increased HR. Both deceleration and acceleration of HR has been reported with film-induced sadness. This divergence of cardiovascular responses to sadness may represent two opposing aspects of sadness: negative aspects of self-centered sadness and positive aspects of other-centered sadness.

Psychological studies about emotions rarely disentangle sadness into self- and other-centered sadness; rather, most studies have compared sadness with other emotions, such as amusement or contentment. This procedure might prevent previous research from revealing the positive aspect of sadness. One of the functions of positive emotions is to undo psychological and physiological preparation for a specific action such as fight-or-flight, switching from action-readiness to quiescence in the service of homeostasis (Fredrickson & Levenson, 1998; Fredrickson, Mancuso, Branigan, & Tugade, 2000). Other-centered sadness also undoes sympathetic arousal via the activation of vagus nerve (Porges, 1995, 1998, 2007). If undoing is the function of positive emotion, other-centered sadness can serve as a positive emotion. Although few studies examined the positive aspects of sadness (see Barr-Zisowitz, 2000, for exception), the result of a study on the effect of positive emotion on restoring self-regulation implicates the positive aspect of sadness.

Self-regulation or self-control refers to the processes by which human beings exercise control over their functions, states, and inner processes either consciously or non-consciously (Baumeister & Vohs, 2004). Self-regulation is a limited resource, which is analogous to “mental

muscle” whose strength is reduced through fatigue and is restored through rest (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven & Baumeister, 2000). As such, self-regulation resources are depleted by effortful mental processes (e.g., suppressing negative emotions such as disgust) (Gailliot & Baumeister, 2007), and are restored by rest or relaxation (Tyler, 2008).

Tice, Baumeister, Shmueli, and Muraven (2007) tested whether positive emotions enable individuals to restore self-regulation resources after depletion. They reasoned that positive emotion could counteract the negative effects of mental or physical fatigue on self-regulation resources, because one of the roles of positive emotion is to return the body to its neutral state through undoing noxious levels of sympathetic arousal. Three conditions were compared: amusement (via a comic film), five-minute rest, and sadness (via a sad film). As predicted, amusement helped participants to restore self-regulation resources more than did sadness or rest. One notable result is null difference between the rest and the sad-film conditions. Participants who watched a sad video clip did not perform poorer than did those who rested. Rather, participants in a sad-film condition performed the self-regulation task slightly better than did participants in a rest condition, although the difference was not significant. Given that rest typically restores depleted self-regulation resources (Tyler, 2008), and negative emotions typically deplete self-regulation resources (Gailliot & Baumeister, 2007), it is surprising that participants who watched a sad video clip did not deplete self-regulation resources more than did participants who took a rest. Thus, it is possible to speculate that negative aspects of sadness depleted self-regulation resources, whereas positive aspects of sadness counteracted the depletion. If this is the case, it is possible to argue that other-centered sadness functions like positive emotions do. It can be hypothesized that disentangling sadness into self-focused and other-centered sadness may reveal the positive aspects of other-centered sadness.

## Rationale and Hypotheses

The purpose of this project is to examine the selection and enjoyment of tragic drama in the context of hedonic motivation. This project will examine whether motivations on social connection (i.e., satiation with social inclusion versus distress of social exclusion) predicts individuals' selection of media content (Study 1), and why the intensity of sadness is associated with the enjoyment of tragic content (Study 2).

In Study 1, this project will examine the effects of social isolation on the selection of media content, which is either self-focused (e.g., suspenseful films) or other-focused (e.g., tragic drama). Given that one of the most fundamental human needs is the need to belong, individuals presumably experience pleasure from social inclusion and pain from social exclusion. Aligning with mood management theory, this research proposes that individuals will select media content to maintain optimal affective states (i.e., maximizing social pleasure and minimizing social pain) in the service of “social” homeostasis. When individuals are satisfied with their level of inclusion, they are typically motivated to be distinctive from others. As such, socially included individuals will likely select self-focused media content that serves their self-interest (e.g., amusing self). On the other hand, socially excluded individuals, who are typically motivated to rebuild social connection with others, will likely select other-focused media content that portrays human relationships positively, even though the content features tragic portrayals. With this reasoning, hypotheses in Study 1 are:

H1a: Individuals will be less likely to select other-focused media content, tragic drama, when they are socially included than when they are excluded.

H1b: Individuals will be more likely to select other-focused media content, tragic drama, when they are socially excluded than when they are included.

Study 2 will examine the mechanisms of the enjoyment of tragic content. If individuals select other-focused media content regardless of tragic portrayals, there must be benefits in managing their affective states to an optimal level. Sadness can be categorized into self-centered sadness and other-centered sadness. Unlike self-centered sadness, other-centered sadness has rewarding value. Tragic content enables individuals to experience other-centered sadness when they focus on others' feelings. As such, the intensity of feeling sad (i.e., other-centered sadness) will be associated positively with enjoyment. However, when individuals focus on the self (i.e., being self-centered), individuals will less likely experience other-centered sadness, which made them experience less enjoyment. Given that a function of other-centered sadness resembles the function of positive emotions that help individuals to restore self-regulation resources, it can be hypothesized that individuals who experience other-centered sadness will likely perform self-regulation tasks better than will individuals who experience self-centered sadness (see Figure 1). From the reasoning, hypotheses in Study 2 are:

H2a: Other-focused individuals will be more likely than self-focused individuals to experience a higher level of other-centered sadness when watching tragic content.

H2b: Other-focused individuals will be more likely than self-focused individuals to experience a higher level of enjoyment when watching tragic content.

H2c: The effect of being other-centered individuals (versus being self-centered individuals) on the level of the enjoyment of tragic content will be mediated by the level of other-centered sadness.

H3: Other-focused individuals will be better than self-focused individuals in performing self-regulation tasks after watching tragic content.

## CHAPTER 3

### STUDY 1

#### Purpose and overview

The purpose of Study 1 was to understand why people, particularly lonely individuals, seek negatively valenced content (e.g., tragedy) by examining whether motivations in relation to social inclusion and exclusion predicted individuals' selection of media content (e.g., tragic or non-tragic content). Participants' selection (i.e., length of exposure) of media content was measured unobtrusively, while participants freely browsed through a movie web site.

#### Methods

##### *Participants*

One hundred seventy five students at a large Southeastern university in the United States participated in Study 1 either for the course requirement of research participation or for extra course credit in undergraduate communication courses. Participants were randomly assigned to one of three conditions: social inclusion, exclusion, and neutral. Six students were excluded, because one student slept during the survey, and another five students failed to follow the instructions properly. Thus, in Study 1, the data from 169 participants (44 males and 125 females) were analyzed. Ages ranged from 17 to 36 ( $M = 19.48$ ,  $SD = 2.2$ ).

## *Design*

This study employed a 3 x 3 between-group design, with social connection (social inclusion versus social exclusion versus neutral) and trait loneliness (low versus moderate versus high loneliness) as between-subject variables in predicting the exposure time to tragic drama.

## *Procedures*

### *Background Questionnaires*

Participants visited the computer lab two times. The computer lab was equipped with 15 identical personal computers with 19-inch CRT monitors, headphone sets, and *MediaLab* software [Empirisoft]. During the first visit, participants completed questionnaires about individual differences in trait loneliness (e.g., frequency of feeling lack of companionship), trait compassion (e.g., “I often notice people who need help”), trait pride (e.g., “Many people respect me”), the need to belong (e.g., “I have a strong need to belong”), and self-control (e.g., “I say inappropriate things”).

Trait loneliness was measured by the UCLA Loneliness Scale (Russell, 1996) composed of 20 four-point scales ( $\alpha = .93$ ) ranging from 1 = “Never” to 4 = “Frequently” (see Appendix A). Trait compassion ( $\alpha = .83$ ), and trait pride ( $\alpha = .75$ ) (Shiota et al., 2006) were measured by 10 five-point items ranging from 1 = “Not at all” to 5 = “Very Much” (see Appendix B). The need to belong was measured by three 5-point items ( $\alpha = .84$ ) selected from the Need-to-Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2007) ranging from 1 = “Not at all” to 5 = “Very Much.” The three items were “I want other people to accept me,” “I have a strong need to belong,” and “My feelings are easily hurt when I feel that others do not accept me.” Self-control was measured by four 5-point items ( $\alpha = .80$ ) selected from Brief Self-Control Scale (Tangney, Baumeister, & Boone, 2004) from 1 = “Not at all” to 5 = “Very Much.” The four items were “I

say inappropriate things,” “I do certain things that are bad for me, if they are fun,” “Pleasure and fun sometimes keep me from getting work done,” and “I have trouble concentrating.”

Participants’ affective states, such as sadness, good, distressed, tired, angry, proud, excited, amused, and lonely, were measured using 5-point scales ranging from 1 = “Not at all” to 5 = “Very Much.”

#### *Induction of Social Inclusion and Exclusion*

One week after the completion of questionnaires about individual differences, participants re-visited the same computer lab. A researcher randomly assigned participants to computers. Participants followed the procedure displayed on the computer screens. Participants were greeted with the welcome page that displayed a brief introduction to the study, risks, benefits, and confidentiality. The experimental conditions of social exclusion and social inclusion were induced by bogus feedback about their future lives, following the procedure used by studies on social exclusion (Twenge, Baumeister, Tice, & Stucke, 2001; Williams, 2007a). Participants completed a personality questionnaire (Eysenck & Eysenck, 1975), and received false feedback on their future lives: either “future alone” or “future belong.” The accurate scores of extroversion and the length of time spent for completing the questionnaire were provided to the participants, which could increase the credibility of the false feedback. Out of possible 100, participants who scored above 75.1 received feedback that they were introvert ( $N = 24$ ), and participants who scored below 75 received feedback that they were extrovert ( $N = 145$ ). In the social exclusion condition, participants read the “future alone” message, “The analysis of your responses suggests that you have a personality type according to which you would end up ALONE later in life.” In the social inclusion condition, participants read the “future belong” message, “The analysis of your responses suggests that you have a personality type according to

which you can anticipate POSITIVE and LASTING relationships throughout life.” Participants in the control condition read only the score about their extroverted personality without the messages about their future lives. The manipulation message had been displayed for one minute before the participants could click the continue button to proceed. After the manipulation, participants’ affective states (e.g., sad, good, distressed, tired, angry, proud, excited, amused, and lonely) were measured with nine five-point items ranging from 1 = “Not at all” to 5 = “Very Much.”

### *Experimental Materials*

Six 9-minute segments of film clips were selected as stimuli via a pretest. Three of the film clips portrayed warm relations around tragic events: a death of a father (*Click*), a death of a mother (*Radio*), and a death of a close friend (*Titanic*). The remaining three film clips portrayed hostile relations: conflicts among the members of a jury and a judge (*Runaway Jury*), clashes between a commander and his executive commander (*Crimson Tide*), and violent altercations among criminals after a botched jewel heist (*Reservoir Dogs*). Six film clips were presented on a web site that simulated the look and feel of online movie sites such as *Fancast.com* and *Blip.tv*. The experimental web site consisted of seven HTML pages: one page served as the directory that introduced the six film clips, and the other six pages embedded each film clip. Participants could select other film clips on the embedded pages as well as on the directory page.

*Pretest for the selection of experimental materials.* Experimental film clips were pretested two months prior to the main experiment. Thirty-five undergraduates who enrolled in communication courses rated the eight film clips: four film clips that portrayed warm relations around tragic events, and four film clips that portrayed hostile relations. The raters watched film clips and rated each immediately after they watched. The film clips were evaluated with ten

descriptions, *liking*, *interesting*, *absorbing*, *boring*, *ridiculing*, *hostile*, *affectionate*, *friendly*, *sad*, and *amused*, using the five-point scale ranged from 1 = “Not at all” to 5 = “Very much.” Two film clips were discarded because they were rated as less “liking” compared to other six film clips. Thus, there was no significant difference between the two groups (i.e., sad vs. hostile film clips) of selected six film clips in terms of ratings of *liking*, *interesting*, *absorbing*, and *boring*. Sad film clips and hostile film clips were significantly different in terms of ratings of *ridiculing*, *hostile*, *affectionate*, *friendly*, *sad*, and *amused*. Descriptive statistics are summarized in Table 2.

Table 2. *Ratings of Film Clips*

Ratings	Warm Relations						Hostile Relations					
	<i>Click</i>		<i>Radio</i>		<i>Titanic</i>		<i>Crimson Tide</i>		<i>Reservoir Dogs</i>		<i>Runaway Jury</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
liking	3.90	1.02	3.90	1.24	3.76	1.32	4.00	1.18	3.64a	1.22	4.50A	.65
interesting	4.22	.79	4.00	1.18	4.10	1.10	4.00	1.18	3.79	1.25	4.43	.85
absorbing	4.12	.87	4.10	1.11	4.10	.96	3.57	1.09	3.36	1.22	4.07	1.21
boring	1.61	.80	1.93	1.21	1.80	1.11	2.07	1.38	2.21	1.37	1.64	.93
ridiculing	2.12ab	1.14	1.29Ab	.64	1.39Ab	.89	4.00B	1.35	4.50B	.65	3.86B	1.10
hostile	2.61ab	1.28	1.32Ab	.65	1.32Ab	.69	4.36B	.84	4.79B	.43	3.57B	.85
affectionate	3.83ab	1.34	4.85Ab	.36	4.85Ab	.36	2.00B	.78	1.43B	.76	2.07B	.62
friendly	2.98ab	1.21	4.68Ab	.62	4.15Ab	1.05	1.79B	.70	1.29B	.47	2.14B	.66
sad	4.56b	.71	4.78b	.47	4.56b	.81	1.93B	.83	2.29B	.99	1.43B	.65
amused	2.10b	1.28	1.88b	1.21	2.05b	1.41	3.36B	1.34	3.21B	1.12	3.92B	1.19

Note: M = means, SD = standard deviations.

Five point scale ranging from 1 = “Not at all” to 5 = “Very much”

Using repeated measures by row, statistical comparisons are between the two groups (i.e., warm vs. hostile relations) of film clips (vertical). Means with same alphabet with different case subscripts differ significantly by *F* test at  $p < .05$  (between a and A), and at  $p < .001$  (between b and B).

### *Selective Exposure*

Participants' movie selection was measured following the selective-exposure methods used by previous studies (Bryant & Zillmann, 1984; Knobloch-Westerwick & Alter, 2007). Participants watched film clips while they freely browsed through an experimental movie web site that presented two types of six short film clips (nine minutes long). Three film clips portrayed hostile relations, and three film clips featured warm relations. Each film clip was presented with the images from a scene from each film clip and with brief descriptions about the clip (see Appendix C). The order of the presentation of two types of films was mixed. Browsing through the movie site, participants could freely select to watch all or some of six stimuli for 21 minutes. While participants watched film clips, the software logged the starting time and the length of stay for each film clip unobtrusively. After the 21 minutes of film viewing, the computer automatically ended the film-viewing session and uploaded the questionnaires.

### *Affect and Enjoyment*

After watching the film clips, sadness and other affective states were measured by fourteen 5-point items. Other-focused sadness was measured by two items, "compassionate" and "sympathetic" ( $r(62) = .70, p < .01$ ). Self-centered sadness was measured by a single item, "sad." Other affective states measured were *gloomy, hopeless, distress, nervous, good, proud, exciting, amused, angry, and tired*. All measures were 5-point scales ranging from 1 = "Not at all" to 5 = "Very much."

After watching the film clips, affective states were measured by fourteen 5-point items: *compassionate, sympathetic, sadness, gloomy, hopeless, distress, nervous, good, proud, exciting, amused, angry, and tired*. All measures were 5-point scales ranging from 1 = "Not at all" to 5 = "Very much." Three types of enjoyment of the movie were measured: general enjoyment, the

meaning dimension of enjoyment, and the fun dimension of enjoyment adapted from the Enjoyment Scale (Bartsch & Oliver, 2008). Because watching tragic drama is not obviously fun, the three items, “The movie was entertaining,” “I had a good time watching the movie,” and “I enjoyed watching the movie” ( $\alpha = .73$ ), were classified as general enjoyment, distinguishing from the fun dimension of enjoyment measured by two fun items “I had fun watching this movie,” and “The movie like this is fun”  $r(62) = .70, p < .01$ . (From now on, “enjoyment” without the modification such as “fun dimension” or “mean dimension” will indicate general enjoyment).

The meaning dimension of enjoyment was measured by six items “I found this movie to be very meaningful,” “There was no meaningful purpose to this movie,” “I was moved by this movie,” “The movie was thought provoking,” “This movie provoked deep feelings in me,” and “I could not take this movie seriously.” ( $\alpha = .87$ ). All measures were 5-point scales ranging from 1 = “Not at all” to 5 = “Very much.”

Finally, participants completed questionnaires about liking of genre and prior viewing of the films that this study used. Finally, participants’ sociodemographic data were collected. The participants were debriefed about the nature of manipulation of bogus feedback about their future lives, and dismissed.

## Results

To examine how loneliness was associated with exposure time (seconds) to sad films featuring warm relations over suspenseful films portraying hostile relations, this study employed a 3 x 3 between-group design with the manipulation of social inclusion, social exclusion, and neutral, and with the individual differences in trait loneliness. Participants’ trait loneliness was classified into low, moderate, and high loneliness based on the scores of the UCLA Loneliness

Scale. The mean of all participants' trait loneliness was 36.05 of a possible 80 ( $SD = 9.6$ ). The mean score was 4.03 point lower than the that of the student sample ( $M = 40.08, SD = .9.50$ ) by Russell (1996). Fifty-five participants who scored on the loneliness scale in the top 33% were classified as high lonely ( $M = 46.77, SD = 7.27$ ), fifty-one participants between 33% and 67% were classified as moderate lonely ( $M = 36.1, SD = 2.11$ ), and sixty-three participants in the bottom 33% were classified as low lonely ( $M = 26.7, SD = 2.96$ ).

### *Preliminary Analyses*

A multivariate analysis of variance (MANOVA) was conducted to examine the effect of the manipulation of social isolation on affective states. The participants in the exclusion condition felt more sad ( $M = 2.37, SE = .12$ ) than did the participants in the inclusion condition ( $M = 1.47, SE = .13$ ), than did the participants in the control condition ( $M = 1.72, SE = .13$ ) at  $p < .05$ . There was no difference on feeling lonely among the participants in the exclusion condition ( $M = 2.04, SE = .13$ ), in the inclusion condition ( $M = 1.71, SE = .13$ ), and in the control condition ( $M = 1.91, SE = .14$ ). Details are summarized in Table 3.

Pearson correlations (two-tailed) were conducted among variables such as trait loneliness, trait compassion, trait pride, the need to belong, trait self-control, feeling sad, feeling lonely, and exposure time to tragic dramas. The exposure time to tragic drama positively correlated with feeling lonely  $r(167) = .17, p < .05$ , but did not correlate with any of these variables such as trait compassion  $r(167) = .07, p = .35$ . The need to belong negatively correlated with trait pride  $r(167) = -.15, p < .05$ , but did not correlate with any of other variables such as trait loneliness  $r(167) = .06, p = .48$ . Details are summarized in Table 4.

Table 3. Means of Affective States of the Social Isolation Manipulation and Trait Loneliness.

	Treatment	<i>M</i>	<i>SE</i>	Trait Loneliness	<i>M</i>	<i>SE</i>
Sad	inclusion	1.47a	0.12	low	1.51a	0.12
	control	1.72b	0.13	mid	1.83b	0.13
	exclusion	2.37ab	0.12	high	2.21ab	0.13
Good	inclusion	4.05ab	0.12	low	4.01a	0.11
	control	3.70bc	0.13	mid	3.71b	0.13
	exclusion	3.31ac	0.12	high	3.34ab	0.12
Distressed	inclusion	2.30	0.15	low	1.97ab	0.14
	control	2.46	0.15	mid	2.72a	0.16
	exclusion	2.54	0.15	high	2.60b	0.15
Angry	inclusion	1.40a	0.11	low	1.26a	0.10
	control	1.45b	0.12	mid	1.76b	0.12
	exclusion	1.85ab	0.11	high	1.69ab	0.11
Amused	inclusion	2.90	0.15	low	2.878 <sup>a</sup>	0.14
	control	2.55	0.16	mid	2.893 <sup>a</sup>	0.16
	exclusion	2.90	0.15	high	2.589 <sup>a</sup>	0.16
Lonely	inclusion	1.71	0.13	low	1.35ab	0.12
	control	1.91	0.13	mid	1.74bc	0.14
	exclusion	2.03	0.13	high	2.55ac	0.13

Note: *M* = means, *SE* = standard errors.

Means with same lower case subscripts differ significantly by *F* test at  $p < .05$ .

Table 4. Correlations among Main Variables

	1	2	3	4	5	6	7	8
1. Time to Tragic Drama	-	.09	.07	-.04	.12	.00	-.13	.17 *
2. Trait Loneliness		-	-.19 *	-.41 **	.05	-.18 *	.25 **	.47 **
3. Trait Compassion			-	.52 **	.13	.15 *	-.20 **	-.16 *
4. Trait Pride				-	-.15 *	.30 *	-.33 **	-.31 **
5. Need to Belong					-	-.09	.10	.14
6. Trait Self-Control						-	-.12	-.23 **
7. Feeling Sad							-	.57 **
8. Feeling Lonely								-

Note: \*  $p < .05$ , \*\*  $p < .01$  (two-tailed)

### *Time of Exposure*

Hypothesis 1 predicted that individuals would be more likely to select other-centered media content such as tragic drama when they were socially excluded than when they were included. An analysis of variance (ANOVA) was conducted to examine the effects of social isolation on the exposure to time. There was a main effect of trait loneliness on the time of exposure to tragic drama after controlling for participants' age, prior viewing of the film clips, liking of genre, and the time of study participation (e.g., morning or evening)  $F(8, 160) = 3.6, p < .05, \eta^2 = .04$ . Pairwise comparisons revealed the significant difference was between participants with high and moderate trait loneliness. As predicted by hypothesis 1, participants with high trait loneliness watched more tragic drama ( $M = 743.74, SE = 47.86$ ) than did participants with moderate trait loneliness ( $M = 571.14, SE = 49.25$ ) at  $p < .05$ . Exposure time to tragic drama between participants with low trait loneliness ( $M = 652.66, SE = 43.74$ ) and participants with moderate trait loneliness ( $M = 571.14, SE = 49.25$ ) was not significant ( $p = .22$ ). There was no main effect of the treatment of social isolation on the exposure time to tragic drama  $F(8, 160) = .51, p = .60$ , and no interaction between the treatment of social isolation and trait loneliness  $F(8, 160) = 1.06, p = .38$ . At the level of  $\alpha = .05$ , power was .66. Levene's test of equality of error variance indicated that the error variances of the dependent variable (i.e., exposure time to tragic dramas) were equal across the conditions  $F(8, 160) = .65, p = .73$ . The descriptive statistics of the exposure time to tragic dramas across conditions are summarized in Table 5 (see also Figure 3).

To rule out a possible impact of gender on the exposure time to tragic drama, an ANOVA was conducted among female participants, because the number of male participants was too small ( $N = 44$ ) compared to the number of female participants ( $N = 125$ ). Although the main

effect became marginal  $F(8, 116) = 2.91, p = .06, \eta^2 = .05$ , the significant difference between participants with high and moderate trait loneliness remained. Female participants with high trait loneliness watched more tragic drama ( $M = 849.29, S.E. = 54.87$ ) than did female participants with moderate trait loneliness ( $M = 653.7, S.E. = 61.4$ ) at  $p < .05$ . Among male participants, there was no main effect  $F(8, 35) = .77, p = .47$ , although the pattern of exposure time to tragic drama was similar to the pattern of female participants.

Table 5. *Exposure to Other- and Self-Centered Content as a Function of Social Isolation*

Trait Loneliness	Content Type		
	Tragic Drama	Suspenseful Films	Directory
Low	652.66 (43.74)	620.01 (43.98)	15.36 (1.29)
Moderate	571.14 (49.25) a	703.37 (49.46) b	13.50 (1.46)
High	743.74 (47.86) a	529.71 (48.07) b	14.55 (1.41)

*Note:* Exposure time is in seconds. Maximally possible time was 1288 seconds or 21 minutes. Using LSD, statistical comparisons are within content type (horizontal). Means with same lower case subscripts differ significantly by  $F$  test at  $p < .05$ . Numbers in parenthesis are standard errors. Directory indicates an HTML page that displays the descriptions of each film clips.

Also, to rule out a possible impact of the personality feedback (i.e., introvert or extrovert) on the exposure time to tragic drama, an ANOVA was conducted among participants who received the extrovert feedback, because the number of introvert feedback was too small ( $N = 24$ ) compared to the number of extrovert participants ( $N = 145$ ). The pattern of exposure time to tragic drama of extrovert participants was similar to the pattern of all participants. There was a main effect  $F(8, 136) = 2.99, p = .05, \eta^2 = .04$ , and the difference was between participants with high and moderate trait loneliness. Extrovert participants with high trait loneliness watched more tragic drama ( $M = 780.97.29, S.E. = 65.76$ ) than did extrovert participants with moderate trait loneliness ( $M = 573.24, S.E. = 53.2$ ) at  $p < .05$ . Among introvert participants, there was no main

effect  $F(8, 15) = .01, p = .99$ , and the pattern of exposure time to tragic drama was similar to the pattern of extrovert participants.

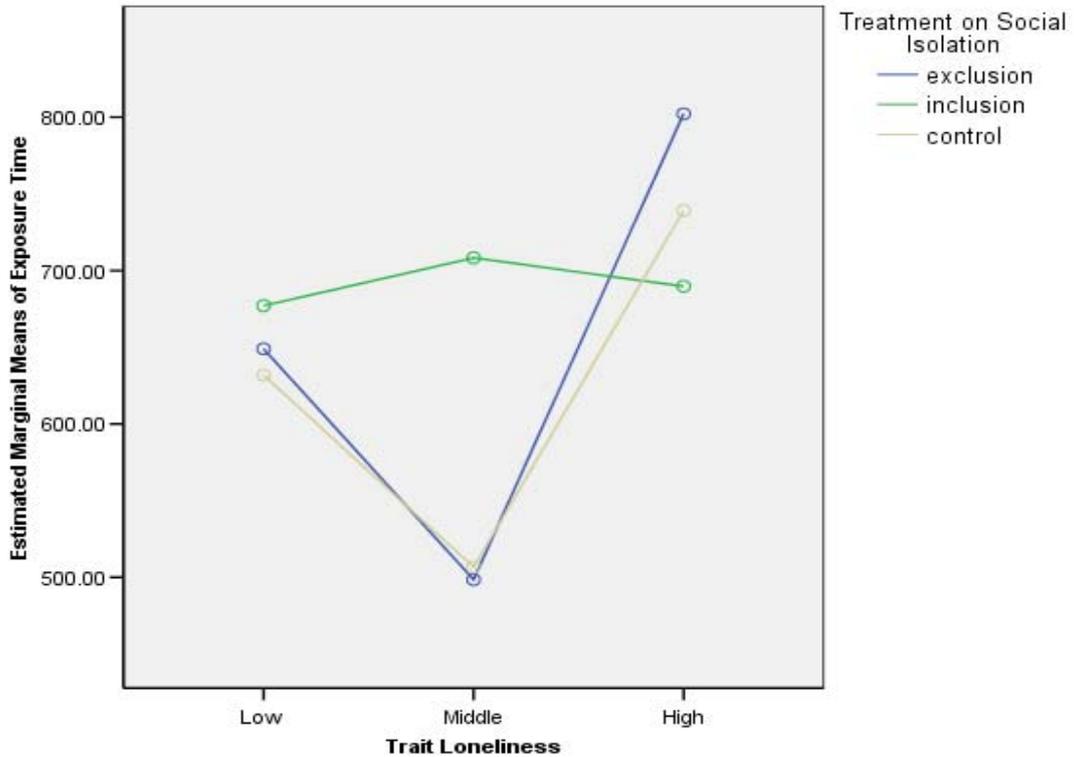


Figure 3. Exposure Time to Tragic Dramas

To examine the variation of exposure time combining the effect of the treatment of social isolation and trait loneliness, contrast analysis was conducted across nine groups (the combination of the three treatments of social isolation and the three degrees of trait loneliness). The contrasts revealed no main effect of exposure time to tragic dramas across nine groups  $F(8, 160) = 1.16, p = .33$ . However, a significant difference was found among participants with moderate trait loneliness (see Table 6).

Table 6. *Exposure to Tragic Drama as a Function of Social Isolation*

Contrast	<i>M</i>	<i>SE</i>
Excluded + Low Loneliness	651.51	82.68
Included + Low Loneliness	689.89 a	79.05
Control + Low Loneliness	701.81 b	82.28
Excluded + Moderate Loneliness	594.15	74.73
Included + Moderate Loneliness	704.76 c	76.90
Control + Moderate Loneliness	476.28 abcde	75.02
Excluded + High Loneliness	736.15 d	88.65
Included + High Loneliness	675.82	85.03
Control + High Loneliness	754.52 e	98.62

*Note:* Exposure time is in seconds. Maximally possible time was 1288 seconds or 21 minutes. Using least significant difference (LSD), means with same lower case subscripts differ significantly by F test at  $p < .05$ . *M*: means, *SE*: standard errors

Participants with moderate trait loneliness in the control condition ( $M = 476.28$ ,  $SE = 75.02$ ) watched tragic drama less than did participants with moderate trait loneliness in the inclusion condition ( $M = 704.76$ ,  $SE = 76.9$ ) at  $p < .05$ . No significant difference was found among participants with low trait loneliness, and among participants with high trait loneliness. Levene's test of equality of error variance indicated that the error variances of the dependent variable were equal across nine conditions  $F(8, 160) = .89$ ,  $p = .53$ .

Therefore, hypothesis 1 was partially supported. Participants with high trait loneliness watched tragic dramas more than did participants with moderate trait loneliness, which is consistent with hypothesis 1. Unexpectedly, the exposure time to tragic drama of low trait loneliness was in the middle of that of high and moderate trait loneliness. There was significant difference neither between participants with low and high trait loneliness, nor between participants with moderate and low trait loneliness.

### *Enjoyment of the Program*

To examine whether meeting the need for belonging could increase the enjoyment of watching tragic dramas, A MANOVA was conducted by contrasting the six groups on the three types of enjoyment, general enjoyment, the fun dimension of enjoyment, and the meaning dimension of enjoyment. The six groups were created, in combination with three groups of trait loneliness (i.e., low, moderate, and high loneliness), and the two groups in terms of the exposure time to tragic dramas. Eighty-six participants who watched more than 689 seconds (top 50%) were classified as high exposure to tragic drama, whereas eighty-three participants who watched less than 689 seconds (bottom 50%) were classified as low exposure to tragic drama. There was a main effect  $F(5, 163) = 1.8, \Lambda = .85, p < .05, \eta^2 = .06$ . Univariate tests revealed that there was no main effect on general enjoyment  $F(5, 163) = .48, p = .79$ , and there was no main effect on the fun dimension of enjoyment  $F(5, 163) = .90, p = .48$ . There was a main effect on the meaning dimension of enjoyment  $F(5, 163) = 2.70, p < .05, \eta^2 = .08$ . Pairwise comparisons revealed that participants who consumed high amount of tragic drama with low trait loneliness ( $M = 4.10, SE = .13$ ) experienced the meaning dimension of enjoyment more than did participants who consumed low amount of tragic drama with low trait loneliness ( $M = 3.54, SE = .16$ ). Among participants with moderate trait loneliness and with high trait loneliness, there was no significant difference in term of the amount of watching tragic drama.

### Discussion of Study 1

The purpose of Study 1 was to examine whether tragic drama was appealing to lonely individuals. The results supported hypothesis 1 that high lonely individuals watched tragic drama more then did low lonely individuals. The results suggested that high lonely individuals who were deficit in social connection selected tragic drama so that they could meet the need for

belonging. However, the selection pattern of participants with low loneliness was somewhat devious from hypothesis 1. The exposure time to tragic drama of low lonely individuals was different neither from high nor from moderate lonely individuals. The implication of this result will be discussed in the section of general discussion in detail.

Notably, the treatment of social isolation produced effects only among participants with moderate trait loneliness. Among the participants with high and low trait loneliness, the manipulation of either social isolation or social exclusion did not influence participants' exposure to tragic dramas. Among the participants with moderate trait loneliness, those who received the feedback of "future belong" watched tragic dramas more than did participants who received neutral feedback, which is the opposite from hypothesis 1. These results suggest that individuals who have strong dispositions of either high loneliness or low loneliness may rarely be influenced by external factors such as situational loneliness. On the other hand, individuals whose loneliness is moderate may be prone to either low or high lonely. As such, it is possible that the messages about social connection, especially "future belong" manipulation, served to activate the need for belonging. That is maybe why participants in the control condition spent the least amount of time in watching tragic drama.

Among three types of enjoyment, there was no significant difference in general enjoyment and the fun dimension of enjoyment. Only the meaning dimension of enjoyment was significantly different between participants with low trait loneliness who watched more tragic dramas and the participants who watched less tragic dramas. There was no significant difference between participants with moderate and high trait loneliness who watched less tragic dramas and participants who watched more tragic dramas. These results indicate that moderate and high

lonely individuals might find meaning from media content compared to low lonely individuals, even though they consumed more suspenseful films than sad films.

## CHAPTER 4

### STUDY 2

#### Purpose and overview

The purpose of Study 2 was to examine the mechanisms of tragic drama. All participants watched the same sad film clip. To examine the effect of self- and other-focused motivations on the association between sadness and the enjoyment of tragic drama, participants were instructed to focus on the feelings either of the self or of others. The measures of self-regulation resources served as an indication for whether other-centered sadness functioned as a positive emotion or not.

#### Methods

##### *Participants*

Seventy students at a large Southeastern university in the United States participated in this study for extra course credit in undergraduate communication courses. Six participants were excluded, because they watched the stimuli prior to this survey. The data from 64 participants (24 males and 40 females) were used. Ages ranged from 17 to 29 ( $M = 19.93$ ,  $SD = 2.1$ ).

##### *Design*

This study employed a between-subject design varied by self- and other-focused motivations that predicted other-centered sadness, enjoyment, and self-regulation.

### *Procedure, Measures, and Stimulus*

Participants completed four tasks the same day of the survey: (1) filling out background questionnaires, (2) watching a sad film, (3) completing the survey about their experiences of watching the sad film clip, and (4) performing self-regulation tasks. During the first task, participants completed the background questionnaires about individual differences in trait loneliness ( $\alpha = .92$ ), and affective states such as sad, good, distressed, tired, angry, proud, excited, amused, and lonely. Other background questionnaires were measured when participants signed-up for this survey via a web-based sign-up site approximately a week prior to the main survey. These were trait compassion ( $\alpha = .80$ ), trait pride ( $\alpha = .75$ ), the need to belong ( $\alpha = .81$ ), and self-control ( $\alpha = .78$ ). The background questionnaires were the same as in the Study 1.

#### *Manipulation*

Immediately after completing the questionnaires, participants were instructed to focus on either their own feelings or others' feelings. In the self-focused condition, the computer screen displayed the instruction, "Experience emotions in the film as MY own feeling, not as others. Focus on MY own feeling." In the other-focused condition, the instruction was, "Emotions in the film are not your own feeling, but others'. Focus on how others would feel." The computer screen had displayed the instructions for fifty seconds until the stimulus (i.e., the tragic film clip) automatically played. During the second task, participants watched the film clip that portrayed a tragic event for twelve minutes. The tragic episode was edited from the movie, *The Hours*. The film clip portrayed friendship between a male and a female protagonist, and a tragic life of the male protagonist. The stimulus was edited to end with a tragic scene that the male protagonist committed a suicide by throwing himself out of a window in front of his close friend.

### *Dependent Variables*

After watching the film clip for twelve minutes, three types of enjoyment, other-focused sadness, and other affective states were measured in the same way as in Study 1. Self-regulation resources were assessed by two self-regulation tasks: a price assignment task, and a lexical generation task. A previous study (Ackerman, Goldstein, Shapiro, & Bargh, 2009) had validated both a price assignment task and a lexical generation task as measures of self-regulation resources; Individuals spent more money on products during a price assignment task, and generated fewer words during a lexical generation task, when individuals depleted their self-regulation resources than when individuals did not. This study adopted the same procedure. During a price assignment task, participants viewed 12 color images of products (e.g., watches, stoves, boats, and cars) that varied from mid- to high-price, and listed the price that they would be willing to pay for each item. During a lexical generation task, participants were asked to generate new words using source words. Five source words were presented, one by one for one minute. The same source words in the previous study (Ackerman et al., 2009) were presented (*answer, behavior, bimodal, igneous, and raincoat*). While the source word was presented, participants constructed as many new words as possible using at least four letters from the source word. For example, when the word *answer* was presented, a participant might generate *swan, wear, and swear*.

Finally, participants filled out questionnaires about their liking of genre and prior viewing the film that this study used. After participants' sociodemographic data were collected, the participants were debriefed and dismissed.

## Results

To examine the enjoyment of tragic drama, this study employed a between-subjects design with self- and other-focused motivations in predicting other-centered sadness, enjoyment, and self-regulation.

### *Preliminary Analyses*

Pearson correlations (two-tailed) were conducted as preliminary analyses. Self-centered sadness correlated with other-centered sadness  $r(62) = .25, p < .05$ , but not with general enjoyment  $r(62) = -.01, p = .97$ , and not with the enjoyment of meaning dimension  $r(62) = .19, p = .14$ . Trait loneliness did not correlate with these variables. Correlations among variables are summarized in Table 7. The descriptive statistics of other-centered sadness, the enjoyment of the tragic drama, the meaning dimension of enjoyment, the fun dimension of enjoyment, self-centered sadness, and feeling lonely after watching the film are summarized in Table 8.

### *Hypotheses Test*

A MANOVA was conducted to test the hypotheses with two fixed factors (self- and other-focused motivation and gender) and two covariates (age and the liking of genre) on six dependent variables, other-centered sadness, self-focused sadness, general enjoyment, the meaning dimension of enjoyment, the fun dimension of enjoyment, and two indicators of self-regulation (lexical generation tasks and price assignment task). There was a main effect of treatment (i.e., self- and other-focused motivation)  $F(3, 60) = 2.34, \Lambda = .78, p < .05, \eta^2 = .21$ . At the level of .05, power was .76. The following sections will discuss the result for each hypothesis based on each univariate test.

Table 7. *Correlations among Variables*

	1	2	3	4	5	6	7	8	9	10	11
1. Other-centered sadness <sup>-</sup>		.06	.26 *	.25 *	.59 **	-.08	-.21	.04	-.07	.04	.04
2. Sadness (base)			-.14	-.11	.17	-.12	.39 **	.26 *	.41 **	-.02	-.29 *
3. Self-centered sadness				.00	.19	-.09	.12	.17	.13	.02	.07
4. Enjoyment					.48 **	.71 **	.10	-.01	-.15	-.08	.00
5. Meaning						.16	-.03	-.06	.01	.17	.13
6. Fun							.08	-.07	-.08	.14	.04
7. Trait Loneliness								.08	.14	-.16	-.32 **
8. Self-control									.29	-.07	-.29 *
9. Need to Belong										.26 *	-.21
10. Trait Compassion											.33 **
11. Trait Pride											

*Note:* \*  $p < .05$  \*\*  $p < .01$ , two-tailed. Sadness (base) was measured at the beginning of the survey. Self-focused sadness was measured after watching the stimulus.

Table 8. *Sadness and Enjoyment of Self- or Other-Focused Participants*

	Conditions	<i>N</i>	<i>M</i>	<i>SD</i>
Other-focused Sadness *	Self-focus	32.00	4.05	.57
	Other-focus	32.00	4.36	.56
	Total	64.00	4.20	.58
Enjoyment *	Self-focus	32.00	2.79	.85
	Other-focus	32.00	3.36	.92
	Total	64.00	3.08	.93
Enjoyment (Meaning dimension)	Self-focus	32.00	4.06	.66
	Other-focus	32.00	4.34	.69
	Total	64.00	4.20	.69
Self-centered sadness	Self-focus	32.00	3.84	1.08
	Other-focus	32.00	4.00	1.16
	Total	64.00	3.92	1.12
Loneliness *	Self-focus	32.00	2.75	.98
	Other-focus	32.00	2.16	1.02
	Total	64.00	2.45	1.04

*Note:* Five point scale ranging from 1 = “Not at all” to 5 = “Very much”

\*  $p < .05$ .

*N*: the number of participants, *M*: means, *SD*: standard deviations

#### *H2a: Other-centered Sadness*

Hypothesis 2a predicted that other-centered individuals would be more likely than self-centered individuals to experience a higher level of other-centered sadness when watching tragic content. Univariate test revealed a significant main effect for the treatment  $F(3, 60) = 4.73, p < .05, \eta^2 = .08$ . The participants in the other-focused condition felt more other-centered sadness ( $M = 4.36, SD = .56$ ) than did the participants in the self-centered condition ( $M = 4.05, SD = .57$ ). Levene’s Test of equality of error variances indicated that the error variances was equal across treatment conditions  $F(3, 60) = .38, p = .77$ . At the level of .05, power was .57. There was no significant difference on self-centered sadness  $F(3, 60) = .34, p = .41$ . Therefore, hypothesis 2a was supported. There was no significant difference of gender  $F(3, 60) = 2.3, p = .13$ .

### *H2b: Enjoyment*

Hypothesis 2b predicted that other-focused individuals would be more likely than self-focused individuals to experience a higher level of enjoyment when watching tragic content. A univariate test revealed a significant main effect of the treatment  $F(3, 60) = 5.45, p < .05, \eta^2 = .09$ . Participants in the other-focused condition reported more general enjoyment ( $M = 3.36, SD = .92$ ) than did participants in the self-focused condition ( $M = 2.79, SD = .85$ ). Levene's Test of equality of error variances indicated that the error variance was equal across groups  $F(3, 60) = .28, p = .84$ . At the level of .05, power was .63. Therefore, hypothesis 2b was supported. There was no significant difference of gender  $F(3, 60) = .07, p = .79$ .

The treatment of self- and other-focused motivation had significant difference neither on the meaning dimension of enjoyment,  $F(3, 60) = 2.17, p = .15$ , nor on the fun dimension of enjoyment  $F(3, 60) = .89, p = .35$ . Gender did not have significant differences in the meaning dimension of enjoyment,  $F(3, 60) = 1.61, p = .21$ , nor in the fun dimension of enjoyment,  $F(3, 60) = .16, p = .69$ .

### *H2c: Mediation*

Hypothesis 2c predicted that feeling other-centered sadness would mediate the effect of other-focused motivation (versus self-focused motivation) on the experiencing the enjoyment of tragic content. Following the procedure by Baron and Kenny (1986), a mediation analysis was conducted via four regressions. First, the predictor (other- versus self-focused motivation) had significant effects on the dependent variable (enjoyment)  $\beta = .31, t(62) = 2.59, p < .05$ . Second, the predictor (other- versus self-focused motivation) had significant effects on the mediating variable (other-centered sadness)  $\beta = .27, t(62) = 2.21, p < .05$ . Third, the mediating variable had significant effects on the dependent variable (enjoyment)  $\beta = .11, t(62) = 2.03, p < .05$ . However,

the effect of the predictor (other-focused motivation) on the dependent variable (enjoyment) did not disappear when controlling for the mediating variable (other-focused sadness)  $\beta = .26$ ,  $t(62) = 2.12$ ,  $p < .05$ . Thus, hypothesis 2c was not supported. Before conducting regression analyses, the dependent and mediating variables were standardized.

### *H3: Self-regulation Resources*

Hypothesis 3 predicted that other-focused individuals would likely perform self-regulation tasks better than would self-focused individuals. The self-regulation were measured by five lexical generation tasks, and 12 price assignment tasks with four kinds of product images such as watches, grills, boats, and cars. Following Ackerman et al. (2009), the composite scores of the lexical generation tasks and the price assignment tasks were created. To create the composite score of the lexical generation tasks, the numbers of correct words that participants generated was averaged. To create the composite pricing index of pricing assignment tasks, the prices of the product was averaged ( $\alpha = .69$ ). The prices for each product types and the number of words were summarized in Table 9. Because of the gap among the product types (e.g., watches and boats), each price was standardized before they were averaged. Univariate tests revealed that there was no main effect on the word score  $F(3, 60) = 1.26$ ,  $p = .27$ . The participants in the other-focused condition generated more words ( $M = 2.31$ ,  $SD = .98$ ) than did the participants in the self-focused condition ( $M = 2.02$ ,  $SD = .93$ ), but they did not reached at a significant level. On the other hand, there was a significant effect on the price index  $F(3, 60) = 5.27$ ,  $p < .05$ ,  $\eta^2 = .09$ . Participants in the other-focused condition assigned fewer prices on the products ( $M = -.58$ ,  $SD = 2.29$ ) than did participants in the self-focused condition ( $M = .58$ ,  $SD = 2.29$ ). Levene's test of equality of error variances indicated that the error variance was not equal across groups  $F(3, 60) = 3.31$ ,  $p < .01$ . At the level of .05, power was .62. Therefore, hypothesis

3 was partially supported, but care should be taken about this result, because of significantly different error variances across treatment groups. Gender did not have effects on both self-regulation indicated by lexical generation tasks  $F(3, 60) = 1.09, p = .30$ , and price assignment tasks  $F(3, 60) = .06, p = .80$ .

Table 9. *Composite Index of Lexical Generation and Price Assignment Tasks*

	Conditions	<i>N</i>	<i>M</i>	<i>SD</i>	Minimum	Maximum
Price on Watch	Self-focused	32	20.85 a	255.78	21.67	860.00
	Other-focused	32	97.26 a	125.06	4.00	731.67
	Total	64	149.05	206.43	4.00	860.00
Price on Grill	Self-focused	32	300.25	299.61	21.67	1,266.67
	Other-focused	32	282.10	351.45	25.67	1,400.00
	Total	64	291.18	324.09	21.67	1,400.00
Price on Boat	Self-focused	32	130,230.10 b	307,530.88	1,500.00	1,366,666.67
	Other-focused	32	57,786.00 b	126,791.77	55.00	666,666.67
	Total	64	94,008.05	236,178.69	55.00	1,366,666.67
Price on Car	Self-focused	32	76,210.17 c	72,260.42	9,000.00	382,000.00
	Other-focused	32	53,856.22 c	36,007.51	7,000.00	141,666.67
	Total	64	65,033.19	57,742.80	7,000.00	382,000.00
Lexical Generation	Self-focused	32	2.02	.93	.00	4.05
	Other-focused	32	2.31	.98	.00	4.90
	Total	64	2.17	.96	.00	4.90

*Note:* Prices of products are US dollars.

Means with same lower case subscripts differ significantly by *F* test at  $p < .05$ .

*M* = Mean, *SD* = Standard Deviation

### *Affective States*

Additional MANOVA was conducted to examine affective states such as loneliness, gloomy, distress, hopeless, nervous, angry, tired, good, proud, excited, and amused between self- and other-focused conditions. There was a marginal effect  $F(12, 51) = 1.92, \Lambda = .69, p = .05$ . Univariate tests revealed that the significant difference was only on loneliness  $F(3, 60) = 5.62, p < .05, \eta^2 = .08$ . Participants in the other-focused condition felt less lonely ( $M = 2.16, SD = 1.02$ ) than did participants in the self-focused condition ( $M = 2.75, SD = .98$ ). There were no

significant differences on the other affective states between two self- and other-focused conditions.

### Discussion of Study 2

These results supported that other-centered sadness (i.e., compassion or sympathy) enabled the enjoyment of tragic drama. Participants who were instructed to focus on the feelings of others experienced more other-centered sadness and more enjoyment than did the participants who were instructed to focus on their own feelings. There were no significant differences in self-focused sadness, the meaning dimension of enjoyment, and the fun dimension of enjoyment between the other- and self-focused conditions.

The mediation analysis indicated that other-focused sadness did not mediate the effects between the other-focused motivation and the enjoyment of tragic drama. This result implies that the enjoyment is not an indirect, but a direct effect of other-focused motivation. That is, both other-focused sadness and enjoyment might directly be caused by other-focused motivation. It is also possible that enjoyment mediated the effects of other-focused motivation to the feeling other-focused sadness. That is, people felt compassion from watching tragic drama because they could experience enjoyment. To test this possibility, a mediation analysis was conducted. First, other-focused motivation predicted other-focused sadness (the outcome variable)  $\beta = .27, t(62) = 2.21, p < .05, R^2 = .06$ . Second, other-focused motivation predicted enjoyment (the mediator)  $\beta = .31, t(62) = 2.59, p < .05, R^2 = .08$ . Third, enjoyment (the mediator) predicted other-focused sadness (the outcome variable)  $\beta = .11, t(62) = 2.03, p < .05, R^2 = .05$ . Fourth, the effect of other-focused motivation (the predictor) on other-focused sadness (the outcome variable) disappeared when controlling for the effect of the enjoyment of tragic drama (the mediator)  $\beta = .49, t(62) = 1.67, p = .10$ . However, a Sobel test revealed that the indirect effect of the other-

focused motivation on other-focused sadness via the enjoyment was not significantly different from zero (Sobel test: 1.59,  $p = .11$ ). Therefore, the data suggest that both other-focused sadness and enjoyment might directly be caused by other-focused motivation. The result is consistent with the distinction between compassion (i.e., other-focused sadness), which is one of affective states, and empathy, which refers to the mental processes of understanding others' feelings (Decety & Jackson, 2006; Zillmann, 2006b). That is, when people are instructed to focus on others' feelings, they likely empathize others' feelings, which can make them feel more other-focused sadness and enjoyment.

The data also partially supported that the function of other-centered sadness resembled the function of positive emotions that helped individuals to restore self-regulation resources. Participants in the other-focused condition assigned fewer prices on products than did participants in the self-focused condition. However, the data did not fully support this argument. Despite the better self-regulation performance in price assignment tasks, participants in the other-focused condition did not generate more words than did participants in the self-focused condition.

## CHAPTER 5

### GENERAL DISCUSSIONS

The two studies attempted to answer the questions that arise from the enjoyment of tragic drama, which poses a challenge to the hedonic principle and mood management theory. The two questions were: (1) why do people, particularly lonely individuals, select tragic content, and (2) how is the intensity of the negative affect (e.g., sadness) positively associated with the degree of enjoyment of such negatively valenced content? The two studies approached the questions in terms of the social aspects of hedonic motivation, defining enjoyment as a subjective mental state of pleasurable responses to media stimuli that can meet the need of being either “alone” or “along.”

#### *Appeal of Tragic Content*

Sociality is fundamental to human nature. Individuals can achieve the hedonic objective by meeting the need for sociality: avoiding social exclusion and seeking social inclusion. Sociality has two aspects: distinctiveness from others and relatedness to others. Media content appeals because it provides experiences for individuals to meet their needs such as the need for distinctiveness or relatedness. As such, media enjoyment can be classified into two types: enjoyment from meeting the need for distinctiveness and from meeting the need for relatedness.

Originally, this study focused on one aspect of tragic drama: social connection. It has been suggested that tragic drama can appeal to lonely individuals, because tragic drama can meet the unmet need of lonely individuals (i.e., social connection). Suspenseful films or hostile

comedies that portray hostile relations were proposed to be the one that can meet the need of being alone or distinctive. As such, it was hypothesized that lonely individuals would be likely to select tragic drama that portrayed human relations positively, whereas non-lonely individuals would be likely to select suspenseful films that featured hostile relations. As predicted, high-lonely individuals who had the unmet need of social relations watched more tragic drama than did moderate-lonely individuals whose unmet need was not as severe as high-lonely individuals.

However, the low-lonely individuals showed unexpected patterns in watching tragic dramas. Individuals who had low trait loneliness spent similar amount of time in watching tragic drama ( $M = 652.66$ ) and suspense ( $M = 620.01$ ). This pattern was distinguishable from individuals with moderate or high trait loneliness who spent their time either more on tragedy or more on suspenseful films (see Table 1). The dual aspects of low-lonely individuals' social needs can explain low-lonely individuals' unexpected pattern of watching tragic drama.

#### *Dual Aspects of Low Loneliness*

Individuals with low trait loneliness typically feel that they have many close friends and can find companionship well. On its surface, individuals with low trait loneliness should be satiated with their social connection. It can be analogous to a content person who has just finished a good meal. As such, it has been hypothesized that low-lonely individuals who have already been satisfied with their social connection would not likely select tragic drama, which was not supported by the data in this study. There was no significant difference between high- and low-lonely individuals.

Feeling lonely is a subjective state. There can be two types of low-lonely individuals: one who did not feel lonely with great appetite for social connection and with many friends, and others who did not feel lonely with small appetite for social connection with a few friends. The

former type of low-lonely individuals (i.e., those who have strong motives for social connection) may have greater preference to watch media content that portrays positive human relations than have the latter type of low-lonely individuals (i.e., those who have weak motives for social connection). If this is the case, within the group of low-lonely individuals, the exposure time to tragic drama should be similar to the exposure time to suspenseful films, which is consistent with the data in this study.

#### *The Need to Belong*

The need to belong predicted neither the selection of tragic drama (Study 1) nor the enjoyment of tragic drama (Study 2). If tragic drama provide an opportunity for lonely individuals to meet their social needs, it is plausible to expect relationships between the need to belong and the selection of tragic drama. These results can be explained in the same way as discussed above: tragic drama may have dual aspects, and loneliness may also represent both great and small social appetite. In this sense, the data was consistent: loneliness did not correlate with the need to belong  $r(167) = .06, p = .49$ , which is also consistent with the previous study (Leary et al., 2007).

#### *Intensity of Sadness and Enjoyment*

The second question was about the positive association between sadness and enjoyment. Given that sadness is obviously a negative emotion, the positive association with positive feelings has been considered to be a paradox (e.g., Oliver, 1983). To resolve the problem, this study categorized sadness into two types: feeling sad for the sake of themselves (i.e., self-centered sadness) and feeling sad for others (i.e., other-centered sadness). It has been suggested that sadness positively associated with enjoyment is not self-centered sadness but other-centered sadness. To test whether sadness can be categorized into two types, this study induced

experimental conditions of either self- and other-focused motivation, and made participants rate their emotions right after watching the sad film without having moments to soothe their feeling sad. Having time to soothe feelings or not can result in big differences in assessing the nature of sadness. Unlike self-focused sadness, it takes time for individuals to fully appreciate other focused sadness. When individuals cried at sad movies, their excitement levels were appeased after two or three minutes of crying incidences (Rottenberg, Bylsma, & Vingerhoets, 2008; Rottenberg, Bylsma, Wolvin et al., 2008). Once the painful aspects become appeased, sadness from watching films typically changes to be like sympathy. That is, as time passes after watching sad events, the two aspects of sadness, self- and other-centered sadness, likely blend into each other. As such, ratings of “sad” in previous studies are likely to represent both aspects of sadness, self- and other-centered sadness. That is why previous studies reported positive association between sadness and enjoyment. For example, de Wied and Zillmann (1994) reported the correlation between sadness and enjoyment  $r(94) = .46, p < .001$ .

Inconsistent finding between the previous studies (e.g., de Wied and Zillmann, 1994) and this study can be explained by the different stimulus and the timing of measuring sadness. For example, de Wied and Zillmann (1994) used a movie, *Steel Magnolias*, whose ending scene dramatized the continuation of life, featuring hope. After the death of a protagonist, all main characters gathered at a community picnic, and one of the characters was taken to the hospital to give birth. On the other hand, this study used a movie, *The Hour*, whose edited portion ended with the death of a male protagonist who threw himself out of a window and with the screaming of a female protagonist. That is, the participants of de Wied and Zillmann (1994) had time to soothe their feeling sad, whereas the participants in this study did not. Typical sad films provide

viewers with moments to appease their sadness, even though they did not end with positive resolutions.

This study captured mostly self-centered sadness by asking participants to rate their feelings right after watching the sad event. As such, sadness in this study correlated with other-centered sadness, but not with enjoyment, whereas other-centered sadness correlated with both sadness and enjoyment. Therefore, it is reasonable to conclude that the paradoxical association between sadness and enjoyment was actually the association between other-centered sadness and enjoyment.

#### *On the Downward-Social-Comparison Account*

The result in this study makes it possible to rule out the downward-social-comparison account of the enjoyment of tragic drama for three reasons. According to the downward-social-comparison account, the source of enjoyment is comfort from the comparison with others who are in a worse situation (Mares & Cantor, 1992). A character in a tragic drama can be a source of self-enhancement by comparing themselves to a tragic character. In this sense, motives of comparing the self to others are to focusing on the self, not others. If the downward-social-comparison account is correct, self-focused motivation should have resulted in more enjoyment than had done other-focused motivation. The data suggest the opposite. Viewers, who were instructed to focus on their own feeling, experienced less enjoyment than those who were instructed to focus on others' emotion.

Second, if the downward-social-comparison account is correct, the compassion (i.e., other-centered sadness) and enjoyment should have been negatively associated: feeling less compassion and more enjoyment. Compassion typically arises from concerning others' misfortune, not from comforting from comparing misfortunate others. Contrary to the

downward-social-comparison account, the viewers of tragic drama who reported more enjoyment have more compassion than did the viewers who reported less enjoyment.

Third, if the tragic drama makes viewers experience self-enhancement by comparing them with a misfortunate character of a tragic drama, the viewers should have the sense of enhanced self after viewing tragic drama. Also, the effect of self-enhancement should be stronger among the self-focused viewers. The data in this study suggest that the self-focused viewers did not have the sense of enhanced self. On the contrary, they likely experienced self-devaluation. The viewers of the self-focused condition assigned bigger price on products than those who were in the other-focused condition. This means that the viewers of the self-focused condition had the sense of diminished self, compared to the viewers of the other-focused condition. When individuals have diminished sense of self, the self-devaluation triggers an implicit desire to enhance the self. Consequently, individuals with diminished self typically desire to enhance the self by increased valuation of possessions that the individuals might acquire (Cryder, Lerner, Gross, & Dahl, 2008). This argument is consistent with the price assignment patterns. The participants in the self-focused condition assigned bigger prices on the products than did the participants in the other-focused condition.

However, the results in this study do not suggest that Mares and Cantor (1992) were wrong. Mares and Cantor (1992) used a documentary that portrayed an unhappy character. Their stimulus was not a tragic drama that portrayed human relations positively, but a documentary that featured negative aspects of human lives. The documentary portrayed the characters' painful memory without describing warm relations among characters. That is, the study by Mares and Cantor (1992) was specifically designed to test social comparisons using a documentary, not the enjoyment of tragic drama. Indeed, the concept of enjoyment was not included in the study by

Mares and Cantor (1992). Therefore, it is unlikely the enjoyment of tragic drama is accounted by the downward social comparison.

### *The Hedonic Account of the Enjoyment of Tragic Drama*

The eudaimonic account provided an alternative account of the enjoyment of tragic drama. The eudaimonic account focuses on non-hedonic motivations. Oliver (2008) suggested that selecting sad films or dramas that portrayed love or devotion might be driven by eudaimonic motivations like seeking greater insight, self-reflection, or meaningfulness. From the perspective of eudaimonic happiness, eudaimonic happiness is not understood as a subjective mental state such as attaining desire or fulfilling needs, but as objective states such as individuals' fulfilling, human potential, or self-actualization (Ryff & Singer, 1998; Waterman, 1993). In this sense, the eudaimonic view on pleasure is called objectivism, as compared to subjectivism (or mentalism) which views pleasure as subjective mental states (Kahneman et al., 1999).

Distinguishing the meaning of life from pleasure was criticized as unnecessary costs (Kashdan et al., 2008). The result in this study suggests that the enjoyment of tragic drama can be accounted without distinguishing hedonic and eudaimonic happiness, which is more parsimonious than the eudaimonic account. Rather than distinguishing pleasure into hedonic happiness and eudaimonic happiness, this study distinguished sadness into self- and other-centered sadness. Such distinguishing can be a test of the hedonic and eudaimonic account of the enjoyment of tragic drama. If the eudaimonic account is correct, self-centered sadness should be associated with enjoyment. On the other hand, if the hedonic account is correct, self-centered sadness should not be associated with enjoyment. The data in this study support the latter approach. The enjoyment of tragic drama was associated with other-centered sadness, but not with self-centered sadness.

This study supports the hedonic principle, as a basic motivation, that has fundamentally accounted for human behaviors, including the enjoyment of tragic drama. Mood management theory is premised on the hedonic principle. Therefore, in terms of the consumption of tragic drama, mood management theory was substantiated by distinguishing sadness into self- and other-centered sadness.

#### *The Discrepancies between Study 1 and Study 2*

There was a discrepancy between Study 1 and Study 2. In Study 1, individual differences in trait loneliness were a main predictor of the consumption of tragic drama. On the other hand, in Study 2, trait loneliness did not predict the enjoyment of tragic drama. If lonely individuals have an unmet need of social connection and tragic drama provides lonely individuals with a chance to meet their needs, it is plausible to expect the association of loneliness, both with the selection of tragic drama and the enjoyment of tragic drama. However, loneliness was not associated with enjoyment in Study 2.

The discrepancy implies that the selection of media content is fundamentally governed by the hedonic principle, but individuals may not always perceive their feelings as enjoyment. When individuals avoid bad feelings, as compared to seeking good feelings, they did not consider such avoidance as enjoyment. People's media selection is governed by either spontaneous hedonism or telic hedonism (Zillmann, 2000). For example, angry individuals tended to select media content that made them maintain their anger when they expect to retaliate (Knobloch-Westerwick & Alter, 2006). That is, angry individuals chose to maintain negative emotions (i.e., anger) to avoid worse emotions (e.g., shame can be more painful to endure than anger) not to miss telic hedonism (i.e., distal pleasure via possible revenge). Because they chose to maintain negative emotions, it is not likely they perceive the emotional experiences as

enjoyment, even though they could avoid worse negative emotions. Likewise, some lonely individuals might select sad films to ruminate their loneliness by focusing on the separation of the sad films, which might help them to overcome social isolation. Future research is required to examine whether lonely individuals actually ruminate loneliness when watching tragic drama.

There was another discrepancy between Study 1 and Study 2. In Study 1, females ( $M = 741.86$ ,  $SD = .389.94$ ) spent more time in watching tragic dramas than males ( $M = 415.66$ ,  $SD = 352.69$ ). On the other hand, in Study 2, female and male did not show different patterns in enjoying the sad film. Given that females showed greater preferences toward sad films in Study 1, it is plausible to expect that females felt more enjoyment from sad films than did males in Study 2. Although males typically do not prefer sad films to suspenseful films, males are also able to experience enjoyment from sad films, especially when a sad film featured a tragedy of a male protagonist (Oliver et al., 2000). When a sad film featured female characters (Study 1), females reported more enjoyment than did males in response to the sad film. On the other hand, when a sad film featured male characters (Study 2), female and male did not show differences of enjoyment in response to the sad film. Study 2 of this research is consistent with Study 2 of the previous study (Oliver et al., 2000). The sad film clip of this study featured a tragic life of a male protagonist. As Oliver et al. (2000) pointed out, gender difference reflects females' particular enjoyment of stereotypical features in sad films of female characters, rather than males' particular dislikes of sad films.

### *Limitations*

This study has limitations. First, Study 1 has unexpected result from individuals with low trait loneliness; low-lonely individuals' consumption of tragic drama was in the moderate of high- and moderate-lonely individuals' consumption. The processes of unexpected behaviors' by

low-lonely individuals were only speculated. Future research is required to examine the motives of low-lonely individuals for consuming tragic drama by disentangling the two aspects of tragic drama. For example, editing the portrayals of relations, in terms of the degree of social relations and separation, can disentangle the two aspects of tragic drama.

Second, the treatment of Study 1, social exclusion and inclusion, produce effect only among individuals with moderate trait loneliness. In selecting sad or suspenseful films, it is not clear whether the treatment of this study was not strong enough to induce the intended effects, whether the sample size was not big enough to produce a main effect, or whether only moderate-lonely individuals are sensitive to situational factors (i.e., feedback about “future alone” or “future belong”). Future research is required to clarify which factor was the cause of null finding of the treatment among low- and high-lonely individuals.

Third, the number of participants in Study 1 was 169, and may not be big enough to assess the interaction of three groups of trait loneliness and the three groups of situational isolation. In nine cells, the number of participants were 19 in average, which may not be enough number of participants to produce reliable effects. However, the limited number of participants unlikely compromises this study, because participants were assigned randomly. Indeed, Levene’s test of equality of error variance indicated that the error variances of dependant variable were equal across groups  $F(8, 160) = .89, p = .53$ . Therefore, it is unlikely that significant difference of exposure time to tragic drama among nine groups was due to Type I error.

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Appendix A

*UCLA Loneliness Scale (Version 3)*

Instruction: The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by writing a number in the space provided.

NEVER RARELY SOMETIMES ALWAYS

1                      2                      3                      4

- \_\_\_\_ 1. How often do you feel that you are "in tune" with the people around you?
- \_\_\_\_ 2. How often do you feel that you lack companionship?
- \_\_\_\_ 3. How often do you feel that there is no one you can turn to?
- \_\_\_\_ 4. How often do you feel alone?
- \_\_\_\_ 5. How often do you feel part of a group of friends?
- \_\_\_\_ 6. How often do you feel that you have a lot in common with the people around you?
- \_\_\_\_ 7. How often do you feel that you are no longer close to anyone?
- \_\_\_\_ 8. How often do you feel that your interests and ideas are not shared by those around you?
- \_\_\_\_ 9. How often do you feel outgoing and friendly?
- \_\_\_\_ 10. How often do you feel close to people?
- \_\_\_\_ 11. How often do you feel left out?
- \_\_\_\_ 12. How often do you feel that your relationships with others are not meaningful?
- \_\_\_\_ 13. How often do you feel that no one really knows you well?
- \_\_\_\_ 14. How often do you feel isolated from others?
- \_\_\_\_ 15. How often do you feel you can find companionship when you want it?
- \_\_\_\_ 16. How often do you feel that there are people who really understand you?
- \_\_\_\_ 17. How often do you feel shy?
- \_\_\_\_ 18. How often do you feel that people are around you but not with you?
- \_\_\_\_ 19. How often do you feel that there are people you can talk to?
- \_\_\_\_ 20. How often do you feel that there are people you can turn to?

Items 1, 5, 6, 9, 10, 15, 16, 19, and 20 should be reversed.  
Higher scores indicate greater degrees of loneliness.  
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## Appendix B

### *Trait Compassion and Trait Pride*

Using the scale provided, please indicate how much each of the following statements reflects how you typically are.

Not at all 1——2——3——4——5 Very much

#### Compassion

1. It is important to take care of people who are vulnerable.
2. When I see someone hurt or in need, I feel a powerful urge to take care of them.
3. Taking care of others gives me a warm feeling inside.
4. I often notice people who need help.
5. I am a very compassionate person.

#### Pride

1. I feel good about myself.
2. I am proud of myself and my accomplishments.
3. Many people respect me.
4. I always stand up for what I believe.
5. People usually recognize my authority.

## Appendix C

### The Descriptions of Stimuli

#### *Runaway Jury*

"I'd like this boy to have a lesson in civic responsibility."

In the jury pool is Nicholas Easter, a video game store clerk who tries to get himself excused from jury duty, which angers the Judge.

#### *Radio*

"Always be with you right in your heart."

Football coach Jones befriends Radio, a mentally-challenged man. Jones' life is enriched by Radio, from whom he learns to value friendship.

#### *Click*

"I love you, too, Dad. I miss you."

Michael feels deep regret that he had insulted his father shortly prior to his father's death, and that he had prioritized work over family.

#### *Reservoir Dogs*

"You're lookin' at me like it's my fault?"

After a botched jewel heist, Mr. White and Mr. Pink violently argue about whether or not to take the unconscious Mr. Orange to a hospital.

#### *Crimson Tide*

"Any crew member can leave the ship right now."

During the mission of a nuclear submarine, the conflict escalates between the commander and his executive officer.

#### *Titanic*

"I'll never let go. I promise."

Jack and Rose strike up a friendship and their bonds deepens on the ship. After the collision of the ship with an iceberg, Jack sacrifices his life to save Rose.