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# Parasocial relationships with transgender characters and attitudes toward transgender individuals

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Abstract

The transgender population lives in a condition of serious discrimination, poverty and violence (NCTE, 2014). Few studies, however, have been conducted to understand people's attitudes toward this population and factors that affect the responses. Applying the Parasocial Contact Hypothesis (Schiappa, Gregg & Hewes, 2005), this thesis investigated the relationship between audiences' positive and negative parasocial relationships with transgender characters in TV and their attitudes toward transgender people in real life. A survey method was employed to address research questions and test hypothesis. Results show a significant association between parasocial relationship (positive or negative) and attitudes toward trans people in real life. Parasocial relationship was also found to have mediating and interactive effects on the relationship between perceived realism of characters and attitudes toward transgender population. Finally, it was also suggested that positive parasocial relationship with comedy characters is a stronger predictor of attitudes than with non-comedy characters. Contribution, limitation and implications were also discussed.


*Keywords*:  Parasocial Relationship, Attitudes towards Transgender, Parasocial Contact Hypothesis

PARASOCIAL RELATIONSHIP WITH TRANSGENDER CHARACTERS AND
ATTITUDES TOWARD TRANSGENDER INDIVIDUALS


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**Chapter 1: Introduction**

This is a special moment for transgender people. With celebrities and advocates like Larverne Cox, Caitlyn Jenner, and recently Lilly Wachowski speaking out and increasing representation in scripted TV shows, the visibility of the transgender community in media has risen in the last several years (GLAAD, 2014, Nov.; 2016, Jan; Luk, 2016, March). Such entertainment content includes films and TV shows that adapt tragic true stories of real transgender people (such as Boys Don't Cry, 1999, Soldier's Girl, 2003, and A Girl Like Me, 2006). There are also reality shows that present the life of transgender people like Transamerican Love Story (2008), a transgender dating reality show and TRANSform Me, (2010), a make-over reality show produced and starred by transgender women Laverne Cox. There are also fictional and comedy shows that include or even center transgender characters, like Amazon's comedy series Transparent (2014). There is no doubt that more and more transgender images are visible in the U.S. media, yet it is unclear if this "progress" is making any changes to transgender people's lives. Their living conditions remain a major concern.

According to Injustice at Every Turn: A Report of the National Transgender Discrimination Survey (Grant, Mottet, Tanis, Harrison, Herman & Keisling, 2011), transgender adults are more likely to be living in poverty (15% of respondents reported an annual household income lower than $10,000, while the average rate is 4%). The report also shows that 30% of them reported a physical or mental disability that interferes with major life activities; at the same time, 6% of them are unemployed. Sixteen percent of the respondents reported having been involved in sex work, drug sales, or other underground activities for income.

According to a 2015 GLAAD report, though having gained visibility and representation in the past decades, transgender people are facing severe discrimination in the workplace,

housing, education and health service. Approximately 26% respondents of the survey reported having been violently assaulted (GLAAD, 2015). Seven transgender people were brutally murdered in the U.S. only in the first two months in 2015 (Speller, 2015). More than 40% of transgender adults reported suicide attempts, which is shockingly higher than that of 4.6% of the overall American population and 10%-20% of the LGB population (Herman, Haas, & Rodgers, 2014). Discriminations and maltreatment in their lives draw people's attention to understand the attitudes towards transgender people from the general public.

**The present study**

The purpose of this thesis is to examine the relation between the U. S. audiences' parasocial relationships with transgender characters in scripted TV dramas and their attitudes towards transgender people. This research is of great importance and urgency for the following reasons:

Transgender individuals in the U. S. live their lives facing poverty, violent assaults, high suicide rates and severe discrimination in almost all aspects of life (GLAAD, 2015; MAP, NCTE, TLC, 2015). To explore a way to change this situation, researchers needs to put more efforts on studying public attitudes towards transgender individuals in various areas of the academy.

The role of media is crucial to understand people's attitudes towards transgender individuals, since, though doubled in the past seven years, only 16% of Americans reported knowing transgender individuals in person according to the latest GLAAD and Harris Poll (Stokes, 2015, Sept.). Lack of real life interaction with transgender people means that for most Americans, media is the primary source of their knowledge about the transgender population (Luk, 2016, March). Thus, the relationship between media usage and attitudes towards

transgender people is of great importance.

Moreover, this thesis contributes to the general knowledge of parasocial relationships. To date, there has been no research done to understand parasocial relationship with transgender TV personalities. This study tested the parasocial contact hypothesis (PCH) proposed by Schiappa, Gregg and Hewes (2005) in a transgender context.

A parasocial relationship (commonly interchangeable in early literature with parasocial interaction), as first defined by Horton and Wohl (1956), is the "seeming face-to-face relationship between spectator and performer" (p215). This concept went through development in the past decades with various definitions for different scholars and research purposes. In this study, parasocial relationship is defined as a long-term, positive or negative, one-sided intimacy that viewers develop with media characters, based on repeated encounters.

PCH proposes that, analogous to Allport's (1954) Contact Hypothesis, "parasocial contact facilitates positive parasocial responses and changes in beliefs about the attributes of minority group categories" (Schiappa, Gregg & Hewes, 2005, p92). This hypothesis was examined in empirical research in understanding parasocial relationships and attitudes towards gay men and male transvestites (Schiappa, Gregg & Hewes, 2005). These studies all show a positive parasocial relationship with minority TV persona leads to less prejudice and more positive attitudes towards these minority groups. Junger and Witte (2008) also found in an experimental study that parasocial contact with out-group members in media improves the level of solidarity in both behavior and cognition of participants.

The following chapters further explored parasocial relationships and the parasocial contact hypothesis in a transgender context. Chapter 2 reviewed the body of literature regarding parasocial relationships, parasocial contact hypothesis and transgender in media. Chapter 3

presented the methodological decisions and the rationale behind them. Chapter 4 reported statistical results addressing all the hypotheses and research questions. Finally, Chapter 5 discussed the contribution and limitation of this study and proposed suggestions for future studies.

**Chapter 2: Literature review**

Literature regarding transgender images in media, parasocial relationships, and the Parasocial Contact Hypothesis are discussed in this section to provide theoretical background and support for hypotheses and research questions in this thesis. Only a few research studies have examined transgender images in media. Meanwhile, the body of literature on PSR is considerable. Only most studies that are most relevant to the present thesis are discussed.

**Transgender portrayals in media**

Limited research has been done to investigate media coverage or representation of the transgender community (Barker-Plummer 2013; Dame, 2013; Mocarski, Butler, Emmons, & Smallwood, 2013 Ryan, 2009; Sloop, 2004; Willox, 2003). It seems like news coverage of transgender people shows some improvement in the past decade (Barker-Plummer, 2013). This seemingly positive change, however, is not documented by an adequate amount of research. Instead, by utilizing new media, transgender people have gained some control over media content concerning their lives (Dame, 2013). In entertainment media, transgender characters are traditionally portrayed in a negative way (Ryan, 2009).

Regarding news media, studies of media coverage of transgender teenager Brandon Teena found that female pronouns are strategically used by British media to emphasize the view that he is "pretending to be something s/he is not," despite the fact that he is a transgender male (Willox, 2003). Sloop (2004) explained how gender is disciplined through covering Brandon's story by portraying him as a pathological person. Barker-Plummer (2013) found that media coverage of the murder of Gwen Araujo in 2002, a transgender teen in California, showed progress on some level, after scrutinizing more than 200 news report of this event. She found that this brutal murder was described as a hate crime and a reflection of the social problem of gender

violence.

It seems that in a new media context, transgender people are gaining more authority in trans-related issues. According to a study conducted by Dame (2013), YouTube video bloggers can easily get their voice and views heard (or seen) by the public by producing their "vlogs (video blogs)." They can be "experts" in the transgender community and issues themselves. Meanwhile, by using various social cues including "hero" or "leader," they also show perception and conscious awareness of being socially responsible for the community.

In entertainment media, though there are some positive or sympathetic portrayals of transgender characters, traditionally, the portrayals of transgender people are relatively negative, according to Ryan (2009). Ryan (2009), in his dissertation, identified four transgender stereotypes found in media, and especially film and TV shows: transgender deceiver – depict transgender people as selfish and duplicitous because they are "pretending" to get what they want from the society; transgender mammy – characters in this category are always in a position of serving the dominant class; transgender monster – those transgender characters are often murderers in hate crime; and transgender revolutionary – which focus on trans political agency.

A case study of Chaz Bono's appearance on Dancing with the Stars shows how his transgender identity is constructed and presented in a prime-time reality TV show, through custom and song choice, interaction with dance partner and judges, as well as other production decisions (Mocarski, Butler, Emmons, & Smallwood, 2013). Though this presentation was considered progress, the authors worried that by portraying Bono as a "transnormativity of a White, upper-class postoperative heterosexual male," it still shows acceptance and reinforcement of hegemony of gender, sexuality, race and class.

**Parasocial relationships**

Since it was first proposed in the 50s, the concept of parasocial relationship has gone through some significant development in the past decades. It was distinguished from similar concepts, like parasocial interaction (e.g. Dibble, Hartmann & Rosaen, 2016; Klimmt, Hartmann & Schramm, 2006; Tukachinsky, 2010). Many empirical studies have been done to understand its causes and possible outcomes (e.g. Derrick, Gabriel & Tippin, 2008; McQuail, Blumler and Brown; 1972; Schmid, & Klimmt, 2011; Turner, 1993). Among the studies, some also explored the effects of PSR on audiences' attitudes toward people (Hoffner & Cohen, 2012; Schiappa, Gregg, & Hewes, 2005)

The concept of "parasocial relationship" developed over years since it was first proposed in the 50s (Horton & Wohl, 1956). Horton and Wohl defined "parasocial interaction/relationship (these two now different concepts are used interchangeably in this article)" as an "illusion" of "seeming face-to-face relationship between spectator and performer." (Horton & Wohl, 1956, p 215) Though it is "illusion," it is still seen as a continuity of the social relations. This relationship is "one-sided, nondialectical, controlled by the performer, and not susceptible of mutual development." (Horton & Wohl, 1956, p 215) This relationship seems like an "illusion" manipulated by performers and producers of media programs. By controlling the tones, gestures, blurring boundaries and interacting with the audience, performers or media persona create a sense of intimacy with the audience. While on the other hand, the audiences feel that they "share" experience and history with the persona and they believe that they "know" this person and understand them better than other people do. The sense of loyalty, intimacy and connection are built in this parasocial relationship. After its initial proposal, the concept of PSR/PSI received relatively little attention until the application of the use and gratification theory approach in the

70s (Giles, 2002). McQuail, Blumler, and Brown (1972) identified a type of gratification function as "personal relationships" with media personalities: "companionship," which stands for the "process whereby the audience member enters a vicarious relationship with media personalities (fictional figures, entertainer or presenters) as if he is in friendly terms with them and as if they could stand in for real persons" (p 448). Rosengren and Windahl (1972) also argues that parasocial interaction with TV personalities is an "alternative companionship" for "deficiencies" in social life. Authors (Rosengren, Windahl, Hakansson, & Johnsson-Smaragdi, 1976) also see parasocial interaction as one of the four relationships viewers have with TV personalities that "exist mainly during the very act of TV viewing," (Rosengren et al., 1976, p 349) compared to "detachment" (no identification or interaction); "solitary identification" (no interaction) and "capture" (identification and interaction). Nordlund (1978), who integrated identification and parasocial interaction under the concept of "media interaction," was one of the first scholars who deliberately distinguished parasocial relationship and parasocial interaction. Though not specifically pointing it out, he operationalized parasocial interaction as "showing interest," "talk with others about persons in the content," "relaxing and withdrawing from reality," "participating' what happens in the content" while during media viewing. This difference will be further discussed later.

One of the most significant developments in parasocial relationships occurring in the use and gratification tradition is the work of Rubin, Perse and Powell (1985). They defined parasocial interaction (or parasocial relationship, since they used these two terms interchangeably) as "interpersonal involvement of the media user with what he or she consumes." (p156) PSI/PSR here is conceptualized as "seeking guidance from a media persona, seeing media personalities as friends, imagining being part of a favorite program's social world,

and desiring to meet media performers." (p157) Rubin and McHugh (1987) also consider parasocial relationship as an analogy of interpersonal relationship with real people in life. They applied interpersonal communication theories like uncertainty reduction theory to explain the parasocial "counterpart." By developing one of the most used measurement for parasocial interaction (the 20-item Parasocial Interaction Scale (Rubin, Perse & Powell, 1985)), Rubin et al's definition of parasocial interaction remains influential for decades (Giles, 2002; Dibble et al., 2016; Schiappa, Allen, & Gregg, 2007).

As mentioned before, the concepts of parasocial relationship and parasocial interaction are often used interchangeably in the earlier literature (Dibble et al., 2016, Schramm, & Hartmann, 2008). Since the 2000s, some scholars called for distinguishing these two concepts: a parasocial relationship indicates long-term enduring relationships between audience and media personalities, whereas parasocial interaction is a communicative interaction between viewers and media personalities during viewing activities (e.g. Dibble et al., 2016; Klimmt, Hartmann & Schramm, 2006; Tukachinsky, 2010). The ambiguity of using PSR and PSI can be traced back to Horton and Wohl (1956) when they first coined the term of "parasocial interaction." They not only used it to indicate the "seeming face-to-face relationship" as mentioned previously, but they also define it as "simulacrum of conversational give and take" (p 215) which emphasizes a during viewing activity instead of a long-term bond. Tukachinsky (2010) further distinguished that parasocial relationship is a multi-dimensional concept that includes parasocial friendship, as "liking the character, feeling solidarity with and trust in the media figure, and desiring self-disclosure and communication with him or her;" and parasocial romantic relationship, which often involves sexual attractions and romantic bonds.

In the present study, the phenomenon of parasocial relationship (PSR) is defined as a

long-term, positive or negative, one-sided intimacy that viewers develop with a media character, based on repeated encounters. This definition is mostly from Dibble, et al.'s (2016) work to elaborate the difference between PSI and PSR. You've got to fix the formatting here. It wouldn't change for me.

**Empirical Studies on PSR as Dependent Variable.** McQuail, Blumler and Brown (1972) studied British TV audience members for their viewing experience and usage of media. Their findings are among the first empirical studies that identified the parasocial phenomena introduced by Horton and Wohl (1956). Turner (1993) proposed an association between parasocial relationship with newscasters, soap opera characters and TV performers with independent variables like homophily and self-esteem. The results show that "attitude" homophily is the strongest predictor of parasocial relationship among all the independent variables.

**Perceived content attributes tested as predictors to PSR.** Within the uses and gratifications framework, Rubin and McHugh (1987) proposed and tested a model using survey method to understand the relationship between PSI (means PSR here), perceived attraction to TV personality, TV program exposure and perceived importance of the relationships (with the TV characters). The results show that PSI was related strongly to social and task attraction towards the media personality, and to perceived importance of the relationship with the personality. The perceived social attraction of the media character is also revealed to be the most substantial predictor for PSR with Harry Potter for fans from collectivistic and (individualistic culture (Schmid, & Klimmt, 2011). Findings show that a parasocial relationship with news persona is predicted by perceived realism of the news along with happy emotion while watching and recognition of news issue (Perse, 1990). Worth mentioning is that the measurement employed in

these studies is the most popular PSI-Scale which was criticized as a mixture of long-term parasocial relationship and during-viewing parasocial interactions items (Dibble et al., 2016).

Characteristics of media content are also found to be important predictors for PSR (Auter, 1992; Nordlund,1978). In the 1970s, a significant study conducted in Sweden (Nordlund, 1978) hypothesized that different types of media content have different levels of "media interaction potential," which means the possibility of the media content to generate media interaction from the audience. The author argued that media contents that more "approximate" reality; characterizing "dominant" or "leading" characters and characters with regular appearance are more likely to generate media interaction. He specifically mentioned entertainment shows and series to be of high media interaction potential.

An experiment with manipulated media content shows a stronger PSR for audiences who watch a sitcom that contains content of a performer stepping out of the role and addressing the audience than those who watch content without such line-blurring activities (Auter, 1992). This finding echoes with Horton and Wohl's (1956) idea that performers create PSR deliberately to create an illusion of intimacy by blurring the line between performer and audience. Fiction or Non-fiction characteristic of media figure also affect audience PSR with them (Cohen, 2003; Giles, 2002). Cohen (2003) found that even though audiences construct a stronger PSR with non-fictional characters, they are afraid to "breakup" with fictional characters more than non-fictional ones. The association between commitment and PSR is also different for fictional and non-fictional characters (Branch, Wilson & Agnew, 2013).

Viewers' personality traits like loneliness, aggressiveness, attachment style and neuroticism are also examined as predictors to PSR (Eyal & Rubin, 2003; Leets, 1999; Rubin et al., 1985). After surveying approximately 700 people, the results show that neuroticism is a

significant predictor of media interaction with entertainment media content and series figures (Nordlund, 1978). A recent study also confirmed this finding after testing all five basic personality traits (Tsay & Bodine, 2012). Results show that though hypothesized, the relationship between loneliness and PSI with local newscasters was not significant (Rubin et al., 1985). A more particular examination of the relationship between PSR and different types of loneliness reveal social loneliness as a predictor for PSR but in an unexpected negative direction (Wang, Fink & Cai, 2008). Seen as an analog to social interaction, PSR was shown to be predicted by viewers' attachment styles: Anxious-ambivalents are most likely to form PSR with TV personalities and Avoidant least likely. This result was supported by the other study of parasocial breakup, that shows Anxious-ambivalent react most negatively when they lose their favorite TV character compare to other attachment styles (Cohen, 2004). In a more recent research testing a model with five basic personality traits and PSR in sports fans, the author found that emotion instability has direct and indirect effects on PSR while agreeableness has indirect effects (Sun, 2010).

**Empirical Studies on PSR as Independent Variable.** As we can see here, a considerable body of research has been conducted to understand parasocial relationship as a dependent variable (e.g. Rubin & McHugn, 1987; Turner, 1993; Schmid, & Klimmt, 2011; Perse, 1990; Sun, 2010; Tsay & Bodine, 2012). There are also studies that aim to reveal possible outcomes or effects of parasocial relationships (e.g. Nordlund, 1978; Rubin et al., 1985; Hartmann & Goldhoorn, 2011).

Nordlund (1978) explored possible consequences of parasocial interaction in his survey study. Since causal relation cannot be suggested from a non-experimental research design, the author's finding about media interaction can be interpreted as the following correlations:

Interaction with TV series and entertainment media shows are significantly positively associated with dependency on TV; media interaction with TV series and entertainment media shows is also positively correlated with using media when feeling lonely as an alternative to real life interaction. The study conducted by Rubin et al. (1985) shows that PSI (PSR) with local newscaster is significantly correlated with news affinity and perceived realism of news.

In a series of experimental studies conducted by Derrick, Gabriel and Tippin (2008), they tested the hypotheses that PSR will benefit low self-esteem people in a way that interpersonal relationships can't. The results show that by bonding with their favorite celebrities, they feel closer and more similar to their ideal selves, which demonstrates a self-enhancing benefit of PSR.

Hartmann and Goldhoorn (2011) had interesting findings in their experiment. The results show that the more intensive the parasocial experience is with TV characters, the more likely the audience will commit to social norms (which specifically indicate norms of social interaction, like manners). Not surprisingly, the intensity of parasocial experience also predicts the level of pleasure while media viewing.

Stress coping strategies were also found as an outcome of PSR for sports fans (Sun, 2010). The more intensive PSR a sports fan with his/her favorite athletes, the more likely he/she will actively cope with or withdraw from the stress events like games.

More relevant to the present study is that research also shows that whether there is a parasocial relationship will affect the media contents′ effects on the audience, including their perception and attitudes towards certain social groups (Hoffner & Cohen, 2012; Schiappa, Gregg, & Hewes, 2005). For example, after controlling personal contact, parasocial relationship is found to be negatively correlated with negative stereotypes of OCD (Obsessive-Compulsive

Disorder) people and desired social distance with them (Hoffner & Cohen, 2012). This result confirmed the "Parasocial Contact Hypothesis" proposed by Schiappa, Gregg and Hewes (2005).

PSR with media personalities is found to have direct, mediating and moderating effects on people's attitudes to different issues (Bond & Drogos, 2014; Chung & Cho, 2014; Young, Gabriel & Sechrist, 2012). Chung and Cho surveyed 401 Korean celebrity fans in Singapore and revealed that PSR with the celebrities predicts a positive attitude towards brands and products endorsed by those celebrities. Media effects on sexual attitudes and activities are found to be mediated by PSR with media figures. In a study exploring outcomes of watching Jersey Shore, a show with intensive sexual content, audience who has stronger PSR with the characters shows more permissive sexual attitudes, which further indicate more frequent sexual activities (Bond & Drogos, 2014). PSR is also found to moderate thin-ideal media effects on women's perception of themselves (Young, Gabriel & Sechrist, 2012). A series of two studies reveal that women are more satisfied with their body after exposure to thin ideal images of their favorite media celebrities than images of controlled celebrities, which indicate a beneficial moderation of PSR.

**Parasocial Contact Hypothesis**

Parasocial Contact Hypothesis (PCH) was proposed by Schiappa et al. (2005) as an analog to Intergroup Contact Theory (or Contact Hypothesis, Allport, 1954). Contact Hypothesis states that intergroup contact can be an effective way to improve attitudes towards out-group under appreciated conditions (Allport, 1954). These conditions include equal status, a common goal, non-superficial contact and not being opposed by authority figures. When these conditions are satisfied, a positive or pleasant contact can generate attitude change in a positive direction (Allport, 1954).

This theory has inspired research across a variety of groups, situations, and societies (Pettigrew & Tropp, 2006). Contacts with racial and ethnic groups (e.g. Chavous, 2005; Emerson, Kimbro & Yancey, 2002; Ghuman, 2015); groups with disabilities (e.g Armstrong, Morris, Abraham, Ukoumunne & Tarrant, 2015; Couture & Penn, 2003; Stathi, Tsantila & Crisp, 2012); and sexual minority groups (e.g. Vonofakou, Hewstone & Voci, 2007; Smith Axelton & Saucier, 2009) have been investigated. A meta-analysis of more than 500 empirical studies supported Intergroup Contact Theory with an average correlation between contact and prejudice as -.21 (n > 250,000, p < .0001) (Pettigrew & Tropp, 2006).

Following the assumption that a parasocial relationship is the counterpart of a social relationship in a media character-audience setting, Schiappa et al. (2005) argues that the social benefits of interpersonal social contact should be similar for parasocial contact. Particularly for people who don't have social contact with certain minority groups, media contents provide an opportunity for interaction and building meaningful bonds (Schiappa, 2006). Schiappa et al. (2005) described PCH as that "parasocial contact facilitates positive parasocial responses and changes in beliefs about the attributes of minority group categories" (p 92). In other words, more positive parasocial interaction with media persona from an outgroup leads to a more positive attitude change towards this group in general.

The proposed attitude-changing effects of parasocial relationships can be traced back to the notion of "coaching attitude" (Horton & Wohl, 1956): by using various devices, performers influence audiences' perceptions and attitudes of the character, the values associated with them and the reaction towards them. PCH elaborated this "coaching" process in real social circumstances where the attitudes in parasocial relationships extent to real life context. This kind of influence can be explained by the notion that people perceive mediated "relationship" similar

to interpersonal relationships in real life (Schiappa, Gregg, & Hewes, 2005). From an evolutionary perspective, "media equation" can also be used explain this effect (Reese & Nass, 1996). It suggests that the way the human brain responds to media content is the similar way as it responds to real interaction in life**.**

**Empirical studies of PCH.** Four studies were conducted by Schiappa et al. (2005, 2006) to test the PCH. The first study hypothesized that parasocial responses to gay men are negatively related to the level of prejudice to gay men. Also, the more gay men a participant knows in real life, the weaker the association is. After an experiment, the results show that the first hypothesis, anticipating a negative correlation, is supported for particular characters but not for others. The second hypothesis was rejected: there was no significant difference between high contact group and low contact group. In their second study, a Solomon four-group design was employed. By using reality show Queer Eye for the Straight Guy as stimuli, they also proposed an association (addition to the hypothesis in Study 1) between parasocial relationship with gay men in the show with prejudice to gay men, mediated by category-attribute beliefs about gay men. All the hypotheses are supported by statistical analysis. Following this, a third study was conducted to test the same hypothesis in Study 2, only changing gay men to male transvestites. The mediated association between parasocial relationship with male transvestites and prejudice towards them is supported. In the fourth study, Schiappa et al. (2006) applied PCH to sitcom Will & Grace (with leading characters of gay men). After surveying 245 students, audiences' prejudice towards gay men in general is found to be negatively correlated with the level of PSR with gay characters in Will & Grace. Numbers of gay acquaintances played a role of moderator in this correlation.

According to contact hypothesis and parasocial contact hypothesis, when a person learned about a minority group from mediated messages and representations, if the experience is

positive, the person will seek out additional contact (parasocial or social) rather than avoid it (Allport, 1954; Schiappa, 2005). A positive parasocial relationship can reduce prejudice and improve intergroup attitude, especially if a majority group member has limited real life contact with minority group members (Schiappa, 2005, 2006). Lacking real life contact is the exact situation for transgender community. Thus, the following hypothesis is proposed:

**H1:** The stronger the positive parasocial relationship between a viewer and transgender characters in scripted TV shows, the more positive attitude he or she holds toward transgender individuals in general.

PSR and PSI can be positive as well as negative (Hartmann, Stuke & Daschmann, 2008; Jennings & Alper, 2016; Schramm & Hartmann, 2008). Negative parasocial relationships are worth studying since abundant evidence shows that negative information typically has a stronger impact on people than positive (see Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001, for a review). However, only a few studies took negative parasocial relationships into consideration (Hartmann et al., 2008; Jennings & Alper, 2016). Jennings and Alper (2016) explored children's positive and negative PSR with TV characters. Hartmann et al. (2008) found that negative and positive parasocial relationship with race car driver functions differently on influencing audiences' feelings about bad outcomes and suspense.

Although no clear theoretical linkage or empirical evidence is found in a parasocial context, studies have been done regarding how negative contact affects attitudes towards outgroup members (Barlow, Paolini, Pedersen, Hornsey, Radke, Harwood, Rubin & Sibley, 2012; Paolini, Harwood & Rubin, 2010; Techakesari, Barlow, Hornsey, Sung, Thai & Chak, 2015). Paolini and colleagues (2010) found in two experiments that when people experienced negative intergroup contact (vs. positive or neutral contact), they are more aware of their own

and others' group membership (higher category salience). They coined a term valence–salience effect to describe this phenomenon. They suggest that since category salience leads to contact generalization, negative intergroup contact might worsen intergroup relationships. In a survey of approximately 2000 Australians, Barlow et al. (2012) found that perceived contact valence (negative or positive) is a strong predictor for interracial prejudice. Moreover, contact valence moderates the association between contact quantity and prejudice. The "worsening" effects of negative contact were found cross-culturally: Australia, American, Hong Kong and Thailand (Barlow, 2012; Techakesari, 2015). In these studies, negative contact appeared to be a more consistent predictor of intergroup attitudes than positive ones. Thus the following hypothesis is proposed:

**H2:** The stronger the negative parasocial relationship between a viewer and transgender characters in scripted TV shows, the more negative attitude he or she holds toward transgender individuals in general.

**Perceived realism of character**

Many studies have addresses that perceived realism has crucial importance in media effects (e.g. Busselle, 2001; Chock, 2011; Pouliot & Cowen, 2007; Ward & Carlson, 2013). Potter (1988) argues that perceived realism of TV content modifies the impacts of the contents on audience's attitudes and behaviors. In this thesis, perceived realism refers to how realistic the audience thinks the character in media is, or in other words, "the congruency between a television character and what is observed in real life" (Rosaen & Dibble, 2008).

Regarding perceived realism of representation of social groups, for example, Punyanunt-Carter (2008) found in a survey study that audience members perceived portrayal of occupational roles and personality characteristics of African American on TV to be realistic while the low-

achieving roles and positive stereotypes to be unrealistic. Zhang (2015) conducted a study to investigate how perceived realism of Chinese in media affect audiences' stereotypes about them. After surveying 320 American undergraduate students, the results show that perceived realism in media, when interacting with exposure to media content about China and Chinese, is an important predictor of positive stereotypes (like Chinese people are smart, hardworking, inventive and have good morals) an audience holds.

As suggested by Nordlund (1978), media content that is more approximate to reality has more potential to generate media interaction including PSR. Rosaen and Dibble (2008) found that social realism was positively associated with parasocial interaction for children.

Referring the existing literature, it is reasonable for the researcher to believe that perceived realism of media characters has an influence on the parasocial relationship with characters and attitudes towards social groups. The direction or nature of this influence, however, is not completely clear at this point. Thus, the following research questions are proposed:

**RQ1**: What role does perceived realism of transgender characters play in the relationship between positive/negative PSR with transgender characters and attitudes towards transgender people in general?

**Perceived variety of characters**

Intergroup contact is found to be especially effective regarding improving attitudes toward minority groups when the interaction repeatedly occurs with a diverse (typical and atypical) representation of the social group (Pettigrew, 1998; Simon, 1998). Allport (1954) believed that by repeatedly contacting with more diverse individuals from a social group, the "hasty generalization" about this category is weakened, which further reduces prejudice people hold towards this group. Linville (1982) proposed in her "Extremity-complexity hypothesis" that

more interaction with members of a social group generates more dimensions, "along which individual members may be characterized (Linville & Jones, 1980)," which lead to less extreme evaluation of this group. Schiappa (2006) also argues that "Since the goal is to change people's understanding of a category, the more representatives of that category that are encountered, the better." (p5)

**H3**: The more transgender characters a viewer has PSR with, the stronger the relationships proposed in H1and H2 would be (if they exist).

Perceived variety is defined in this study as for whether the characters an audience have PSR with is a mixture of atypical and typical transgender (to his/her perception) or not. Since there was no empirical study that investigated the role of perceived variety in PCH, the following research questions are proposed:

**RQ2**: What role does perceived variety of transgender characters play in the relationship between positive/negative PSR with transgender characters and attitudes towards transgender people in general?

**Real life contacts and PCH**

Scholars suggest that when it comes to "groups and phenomena about which there is little first-hand opportunity for learning," media content can have the most influence on people's attitude (Gross, 1991, p. 22). For PCH, the amount of previous direct personal contact with minority group members is considered as moderating media effect (Schiappa, 2005, 2005). Among groups that have different levels of contact with gay men, those with fewest contact experience the strongest Parasocial Contact effect after viewing Will & Grace (Schiappa, 2006). The similar hypothesis is proposed as follow:

**H4**: The fewer personal contacts with transgender people a viewer has in real life, the stronger the relationships proposed in H1and H2 would be (if they exist).

**Humor and media effect**

The impact of humor on media effects has been examined by many studies in areas like political communication (e.g. Becker, 2011; Polk Young & Holbert, 2009), advertising (e.g. Chung & Zhao, 2011; Yoon, 2015; Yoon & Tinkham, 2013) and education (e.g. Moyer-Gusé, Mahood & Brookes, 2011). Yoon and Tinkham (2013) suggested that humor affects how threatening messages are communicated.  Chung and Zhao (2011) found that humorous ads predict more positive attitudes toward the ads and the brand. This humor effect is stronger in unfamiliar brands than familiar ones. Humor was also found to moderate the persuasive effect of pregnancy-related content in drama and comedy on viewer's intention to engage in unprotected sex. The moderating effect of humor was also suggested in an agenda-setting function of comedy and hard news media (Kowalewski, 2012). In an LGBT context, the humor of media content is positively correlated with attitudes towards the show *Will & Grace* and attitudes toward real-life homosexuals (Cribbs, 2009). Though it is clear that the presence and absence of humor in media content does impact its effects on the audience, there is no theoretical linkage regarding how humor would affect parasocial contact effects. Humor, however, is seen as a moderating factor that impacts media effects (Kowalewski, 2012; Sternthal & Craig, 1973; Yoon & Tinkham, 2013). Sternthal and Craig (1973) argued that humor strengthens the power of persuasion in advertisements by humanizing messages.  This moderating effect of humor may lead to a more positive outcome (Chung & Zhao, 2011), although when it comes to threatening messages, humor can be a negative factor (Yoon & Tinkham, 2013). Thus it is safe to assume a moderating effect of humor, although the direction remains unclear. Since both comedy drama and regular

drama are chosen for participants to rate their PSR with transgender characters in this thesis (in more detail in Appendix A), the following hypothesis is proposed:

**H5**: The presence/absence of humor will act  as a moderator in the relationship between positive/negative PSR with transgender characters and attitudes towards transgender people in general.

## Chapter 3: Methodology

To address the research questions and test the hypotheses, the researcher conducted a cross-sectional online survey. A cross-sectional study is "an observational study in which the exposure and the outcome are determined at the same time point for each study participant" (Pandis, 2014). Since this thesis aims to examine the Parasocial Contact Hypothesis in a transgender context at this point in time, instead of tracking changes over time, a cross-sectional study is appropriate. Survey research is employed to "provide a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population" (Creswell, 2014). By using a survey method, the researcher also intends to generalize the findings of the sample to a broader population. This thesis casts light on American's attitudes towards transgender individuals by investigating a sample of 495 people. Also, the present study is examining the proposed correlations between PSR and attitudes. Thus, a non-experimental, correlational-designed survey method is appropriate to address the research questions and test the hypothesis.

**Sampling**

In total, 495 participants, who are non-transgender citizens of the U.S., were recruited from Amazon Mechanical Turk, using a convenience sampling strategy. All of the respondents have watched at least one of the shows selected in this study and know the transgender character in that show (the list of shows and characters are in Appendix A). Amazon Mechanical Turk (M-Turk), started in 2005, is an "online labor market" which is frequently used as a source to recruit research participants (Paolacci, Chandler & Ipeirotis, 2010). Researchers have pointed out some concerns regarding using M- Turk for research, such as habitual responding (Paolacci, Chandler & Ipeirotis, 2010), and participants are "notably younger and more ideologically liberal than the

public" (Berinsky, Huber & Lenz, 2012, p366). However, this online recruiting platform is still recommended by many researchers because of such advantages as being more convenient, and inexpensive than other convenient sampling pool (Berinsky, Huber & Lenz, 2012, Mason & Suri, 2012, Paolacci, Chandler & Ipeirotis, 2010).

**Procedures**

A consent form with a brief introduction of the research was presented to all 495 participants before they decided to participate. All the participants were informed of what this study is about and what they would be asked to do in the study. After they had agreed to participate, they were invited to complete an online survey. This survey included basic demographic questions, questions about PSR with selected transgender characters, attitudes toward transgender people in real life and some control measurements (like if they know the term "transgender"). After the survey was completed and accepted by the researcher, a 75 cents incentive was given to each respondent through Amazon as a reward for their efforts.

**Measurements**

**Independent Variables.** Positive parasocial relationship (PPSR) and negative parasocial relationship (NPSR) are the two independent variables under examination in this thesis.

*PPSR.* As a popular concept in psychology as well as communication research, PSR has been assessed by many researchers using different measures (e.g. Rubin et al., 1985; Schramm & Hartmann, 2008; Tukachinsky, 2010; Hartmann et al., 2008, see a review in Dibble et al., 2016). Rubin et al.'s 20-item PSI-Scale and a short 10-item version are the most popular measures applied to date (Dibble et al., 2016). Though named PSI, the scale is actually a mixture of PSR (e.g. "I see my favorite newscaster as a natural, down-to-earth person;" "I think my favorite newscaster is like an old friend.") and PSI (e.g. "I feel sorry for my favorite newscaster when he

or she makes a mistake;" "When I'm watching the newscast, I feel as if I am part of their group.") measures.

More recently, Tukachinsky's (2010) 24-item Multiple-PSR Scale was created to measure PSR as a multi-dimensional concept. He defines PSR as an analog of a social relationship with a range from "a mere acquaintance to friendship or love" (p76). This definition echoes with how the author defines PSR in this thesis. This scale was used to measure PPSR with transgender characters in the present study (see the details in Appendix B). Four dimensions are tapped in this scale: para-friendship-communication (e.g. "If X was a real person, I could have disclosed a great deal of things about myself to him/her."); paras-friendship-support (e.g. "If X were a real person, he/she would be able to count on me in times of need."); para-love-emotional (e.g. "Sometimes, I think that X and I are just meant for each other.") and para-love-physical (e.g. "X is very sexy looking"). In an empirical test, Cronbach's alpha value for each one of the four dimensions is adequate (higher than .75). In the present study, PPSR is a continuous variable measured by 7-point Likert scale.

*NPSR.* Unlike PPSR, there are not many choices of measure on this concept. Only one established scale was found. Hartmann et al. (2008) constructed an 11-item NPSR Scale tapping two dimensions: antipathy (e.g. "I am happy whenever I learn that something bad happened to this driver.") and disinterest (e.g. "I am not interested in articles or coverage in the media about this racing driver."). The higher the score, the stronger negative parasocial relationship one has with the characters. With a Cronbach's alpha value of .81, the reliability of this scale is considered adequate. The NPSR Scale was used to measure NPSR with transgender characters in this study (as a continuous variable, see the details in Appendix B).

**Dependent Variables.** Two dependent variables were measured: attitudes toward

transgender individuals and desired social distance from transgender people.

*Attitudes toward transgender.* In this study, attitudes toward transgender people are conceptualized as a tendency to evaluate transgender people with some degree of favor or disfavor. A modified version of Genderism and Transphobia Scale (GTS) developed by Hill and Willoughby (2005) was employed. The original scale has 32 items; in the present study, some items were excluded from the questionnaire to keep it efficient (listed in Appendix B).

Other than GTS, social distance (Bogardus, 1925, see Fishbein, 1967, for a review) will also be considered as a way to measure attitude towards transgender people. It is commonly used to assess attitudes and behavior towards illness labeled individual (Kroska, Harkness, Thomas, & Brown, 2014), minority race and ethnicities (Qian, 2002) and sexual minorities (Gentry, 1987). The social distance with transgender individuals scale was developed according to the social distance scale with homosexuals designed by Gentry (1987) (see details in Appendix B).

**Moderating Variables.** Three variables are proposed to moderate the effects of PSR on attitudes toward transgender people: perceived realism of characters; perceived variety of characters and level of real life personal contact with transgender individuals.

*The perceived realism of characters.* The perceived realism of media narratives and contents are often discussed and measured (e.g. Cho, Shen & Wilson, 2012; Green & Brock, 2002; Zhang, 2015). However, no scale that measures perceived realism of fictional characters was found. A four-item measurement for perceived realism of events and characters created by Shapiro and Chock (2003) is the most applied measurement for realism perception. Two of the four items directly address perceived realism of media persona: 7-point semantic items (from "the people were just like real life" to "the people is not at all like real life;" and from "the people were like people I know" to "the people were not at all like people I know"). The Temple

Presence Inventory (TPI) also includes measurements for the social realism of events in media (Lombard, Ditton & Weinstein, 2009): "The events I saw/heard would occur in the real world" and "The events I saw/heard could occur in the real world." A four-item measurement was constructed with adapted items from those two scales to assess perceived realism of particular transgender characters in this thesis (see details in Appendix B).

*The perceived variety of characters.* The perceived variety of characters here is defined as whether or not the characters with whom audience members have PSR are a mixture of atypical and typical transgender (to his/her perception). It was measured as a binary variable with only two values (yes or no). It was calculated based on participant's answer to perceived typicality of the characters they have PSR with as suggested by Pettigrew (1998) and Simon (1998). When the following conditions are satisfied, the value for perceived varitey of characters will be "yes:" first, a participant need to identify as least two transgender characters with whom he/she has PSR; also, among the characters he/she identified, at least one is perceived as typical (which means the viewer rates the character higher than mid-point 4 in typicality scale) and at least one atypical (lower than mid-point 4 in typicality scale). If either one of the two conditions is not met, the value of perceived variety of characters was coded as "no." As suggested by Shapiro and Chock (2003), the perceived typicality of characters was measured by asking "How typical do you think is the character is, as a transgender woman/man? (1 to 7 from very atypical to very typical)"

*The level of real life personal contact with transgender individuals.* This ordinal variable was measured by one question adopted from Shiappa et al. (2006). Four levels of contact can be generated: no social contact; only distant or superficial contact; a moderate amount of non-superficial contact; and a relatively high amount of non-superficial contact (see

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details in Appendix B).

*Humor*. The humor presence variable is regarding transgender characters chosen. Characters in the lists were selected from eight shows, four of them comedies and four non-comedies. Characters from comedies were labeled as humor-present characters and characters from non-comedies were humor-absent.

**Demographic and other variables.** The demographic variables of age, gender, education, race and ethnicity and sexual orientation were also asked. These variables are important to measure because they may be relevant to attitudes toward LGBT people in general (Andersen & Fetner, 2008). Other variables like familiarity with selected shows and characters were measured for better understanding the phenomena.

## IRB

Since this research collected data from human subjects, it had to be approved by the Institutional Review Board (IRB) of Syracuse University. An exempted application, together with all the required materials, was submitted to and approved by IRB before the data collection process.

## Data analysis

Data was imported to SPSS for statistical analysis. First, all the data was cleaned before any analysis. Then, descriptive data was generated for every variable to gain a holistic picture of the data. After that, the reliability tests were done for all the scales with multiple items (see Table 2 for Cronbach's α values for each scale). Once the reliability statistics were deemed acceptable, means of the items were calculated for further analysis. After preparation, statistical analysis and modeling were conducted to address research questions and test hypothesis. To test H1 and H2, correlation and linear regression has been processed. To address moderation effects proposed,

the author also conducted multiple regression statistics. Other statistical analysis were also performed according to the data and initial hypothesis testing results.

**Threats to validity**

Internal validity reflects the extent to which a conclusion presents what is really going on in research situation (Campbell, Stanley, & Gage, 1963). For this survey design, threats to validity are mainly caused by the questions asked. Two variables (perceived variety and realism) in this study are measured with a single item instead of established scales.

External validity refers to generalizability to a larger population (Campbell, Stanley, & Gage, 1963). In this case, the convenience sampling strategy through the online platform M-Turk might put the validity into risk, because of the possible habitual responding (Paolacci et al, 2010), and younger age (Berinsky et al., 2012) as motioned before.

**Chapter 4: Results**

After cleaning data under strict standards and series of assumption testing, all five hypothesis and two research questions were examined. Two main hypothesis stating the predictive effects of parasocial relationships on attitudes towards transgender people were found significant. The hypothesized effect of the number of characters one has parasocial relationship with and presence or absence of humor is partially supported. The proposed effect of level of in-person contact in real life on the "parasocial-attitudes" relationship is not significant. After exploring the research question about the role of perceived realism, potential mediating and moderating effects were found.

**Data cleaning**

A total number of 700 respondents participated this study by taking a survey online. After excluding data from the uncompleted survey and reckless or habitual answers (for example, on the scale from 1 to 7, a few respondents reported straight 3 for all the items including reversely coded items), a sample of 501 valid respondents was obtained. Since this thesis aimed to examine the attitudes and parasocial relationships of the non-transgender audience, six people who identified as transgender (5 males and 1 female) were excluded from the final sample. The final sample size is 495.

**Participants**

There is adequate variance regarding the demographic profile in this sample. The ages of participants range from 18 to 74. The majority of the participants falls into the 25-54 age group (86.5% of the total sample, n=428). Gender distribution is relatively balanced: with 50.1% females (n=248) and 49.1% males (n=243). The majority of respondents self-identify as heterosexual (85.5%, n=423); with 12.7% (n= 68) of some respondents self- identified as a

sexual minority (Gay, lesbian, bisexual, polysexual/pansexual, or asexual). Regarding ethnicity, the sample is majorly white (72.3%, n=358); followed by Asian American (8.7%, n=43), African American (5.9%, n=29), and Latino (5.8%, n=26). (For more detail on the demographic information of the sample, please see Table 1)

Additional to basic demographic information, this study also collected information about "familiarity with the term 'transgender'," "knowing transgender people in person or not," number of shows in the list watched and number of characters in the list familiar with. Nearly 95% of participants (n=469) reported "knows what the term (transgender) means;" a few (3%, n=15) saying they "heard if it, but not sure what it means;" only 0.6% respondents (n=8) answered, "never heard of it." Slightly more than half of the participants reported that they "don't know and female-to-male transgender people in person (54.7%, n=271)," while the number of not-knowing male-to-female transgender people are similar (59.8%, n=296). A considerable number of participants have female-to-male transgender acquaintances (27.3%, n=135); the number for male-to-female is 23.6% (n=117). Some participants reported having friends, family members or close co-workers who are female-to-male transgender (15.3%, n=76). About 14.1% participants (n=64) have male-to-female transgender friends, family members or close co-workers. The average number of shows watched within the list of eight is 2.18 (SD=1.24, n=495). Most of the participants identified one to three shows (86.5%, n=428). Only about an eighth of the respondents chose four to six shows (12.9%, n=64). More than half of participants (60.4%, n=299) reported that they are familiar with one of the eight characters in the list and 34.3% (n=170) chose two.

**Normality, Reliability Testing and Correlation**

Since many statistical procedures (including regression) are based on the assumption of a

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normal distribution, it is necessary to check normality before any further data analysis (Shapiro & Wilk, 1965). The Shapiro-Wilk test was conducted for all the variables of interest. Though many of the test results show significant violation (p<.05), the absolute number of skewness and Kurtosis are relatively small (<.5). To minimize the influence of a non-normal distribution, scales with a skewness larger than .5 were processed with "log-transformation," which is one of the most commonly used transformation for this purpose (Azzalini, & Valle, 1996). The choice of adopting .5 as a threshold for transformation is based on observation of data (most distributions in this study had a skewness lower than .5), and Shapiro-Wilk tests conducted (distributions with skewness higher than .5 in this study are all found significant in Shapiro-Wilk test). Those scales include Positive Parasocial Relationship Scale (PPSR), Negative Parasocial Relationship Scale (NPSR), Transphobia Scale (TS), Desired Social Distance Scale and Perceived Realism Scale (PRS).

Reliability tests for PPSR, NPSR and PRS were conducted for each characters. For the PPSR Scale, reliability scores for all eight character are pretty high (with Cronbach's $\alpha$ higher than .88 and an average of .913). Rating for NPSR Scale is also very consistent with Cronbach's $\alpha$ higher than .86 and the average of .879. The result also showed a great reliability for the 4-item Perceived Realism Scale (with Cronbach's $\alpha$ higher than .72; average of .782). For dependent variables, the 19-item Transphobia Scale and Desired Social Distance Scale both have high reliability (Transphobia Scale: Cronbach's $\alpha$=.965; Social Distance Scale: Cronbach's $\alpha$==.938).

Before any hypotheses testing, partial correlation analysis was conducted to examine the possible association between major variables. Demographic information (age, gender, sexuality and ethnicity) is controlled in this correlation analysis. Most major variables are significantly

correlated with each other (see detailed results in Table 3).

**Description of IVs and DVs**

After reliability tests, two independent variables: PPSR, NPSR and two dependent measurements: transphobia and desired social distance with transgender characters were calculated. Demographic information was used as factors to better understanding these measurements.

Two independent variables: Positive Parasocial Relationship (PPSR) with transgender characters and Negative Parasocial Relationship (NPSR) with transgender characters were generated based participants' response for each characters of their choice. Eight characters in total were listed, including five male-to-female (MTF) transgender and three female-to-male (FTM) transgender. PPSR with transgender characters was calculated as the mean of all the characters one respondent chose to rate. Three sets of means were calculated: positive parasocial relationship with transgender characters in general (M=3.76, SD=.97, n=495); positive parasocial relationship with MTF transgender characters (M=3.78, SD=.9, n=460); and positive parasocial relationship with FTM transgender characters (M=3.72, SD=.89, n=100).

Significant gender differences were found for two out of three sets of means: male participants have significantly lower PPSR with all transgender characters (M=3.60, SD=.96, n=243) comparing to females (M=3.89, SD=.96, n=248; t(489)=-3.283, p<.001); for PPSR with MTF transgender characters, males also score lower (M=3.61, SD=.97, n=243) than females (M=3.92, SD=.96, n=248; t(454)=-3.39, p=.001). Non-heterosexual participants have a stronger PPSR with transgender characters (M=4.07, SD=1.00, n=72) than heterosexuals (M=3.70, SD=.96, n=423; t(493)=2.98, p<.005). Similarly for PPSR with MTF transgender characters, non-heterosexual participants scored higher (M=4.13, SD=.99, n=65) than heterosexuals

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(M=3.72, SD=.97, n=395; t(458)=3.1, p<.005).

Similar to the positive parasocial relationship, the negative parasocial relationship (NPSR) with transgender characters were also measured by an established scale (Hartmann et al., 2008). The mean of the 11-item scale was calculated for later analysis in three sets: NPSR with transgender characters in general (M=3.25, SD=1.06, n=495); NPSR with MTF transgender characters (M=3.20, SD=1.07, n=460); and NPSR with FTM transgender characters (M=3.47, SD=1.05, n=100).

Gender was also found to be a significant factor: male participants rated significantly higher in NPSR for all transgender characters (M=3.48, SD=.97, n=243) than female participants (M=3.04, SD=1.10, n=248; t(482.98)=4.63, p<.001); males also have stronger NPSR with MTF transgender characters (M=3.44, SD=.97, n=243) than female (M=2.99, SD=1.11, n=248; t(450.36)=4.66, p<.001 ); the gender difference is also significant but smaller for NPSR with FTM transgender characters (male: M=3.71, SD=.82, n=243; female: M=3.30, SD=1.16, n=248; t(95)=2.054, p<.05). Heterosexual participants have a stronger NPSR with MTF transgender characters (M=3.24, SD=1.05, n=395) than non-heterosexuals (M=2.94, SD=1.12, n=65; t(458)=-2.13, p<.05).

Regarding dependent variable, attitudes towards transgender people, was measured by two scales: Transphobia Scale and Desired Social Distance Scale. Score for Transphobia Scale was calculated as the mean of the 19-item scale (M=2.86, SD=1.39, n=495), from 1 to 7 with 1 indicating the lowest level of transphobia (or the most positive attitude) and 7 indicating the highest level.

Male participants generally have a higher score in transphobia (M=3.13, SD=1.31, n=243) with female respondents  significantly lower (M=2.61, SD=1.41, n=248; t(489)=4.18,

p<.001). Heterosexual participants are found to be significantly more transphobic (M=3.02, SD=1.37, n=423) than non-heterosexual participants (M=1.91, SD=1.15, n=72; t(108.1)=-7.37, p<.001). Also, ethnic minority respondents have a higher level of transphobia (M=3.34, SD=1.40, n=137) compared to Whites (M=2.68, SD=1.35, n=358; t(493)=4.86, p<.001). To be more specific, Asian Americans have a significantly higher transphobia score (M=3.59, SD=1.23, n=43) than Whites with t(399)=-4.275, p<.001.

Meanwhile, the calculation of desired social distance was more complicated. Many of the studies that employed Bogardus's social distance scale (1933) did not weight each item differently (Corrigan, Edwards, Green, Diwan, & Penn, 2001; Fernández, Solar, Bórquez & Navarrete, 2015; Penn, Guynan, Daily, Spaulding, Garbin & Sullivan, 1994), including Gentry (1987), from which I adapted the Social Distance Scale for measuring attitudes towards transgender people. Bogardus (1959, p31), however, assigned different values to each item to reflect different "degree of sympathetic understanding" (1959, p7, for example: "Would marry into group" is assigned 1 and "Would debar from my nation" was given a value of 7). For this thesis, though it is acceptable to treat each item with equal weight as the previous studies did (Corrigan et al., 2001; Feret, Conway & Austin, 2011; Penn et al., 1994), assigning a different value to each item reflects different levels of psychological distance and gives more variance ("uncomfortable in the same party" shouldn't be rated as the same as "living in the same house"). Therefore, a respondent's final desired social distance was calculated by multiplying every rated score (from 1- strongly disagree to 7-strongly agree) of a certain item with the assigned weight (4- uncomfortable at a party where a transgender person was present; 3- uncomfortable drive along in a car with a transgender person; 2- uncomfortable if I was left alone in a room with a transgender person; 1- bother me to live in the same house with a

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transgender person) for this item and computing the mean of all eight-item scores. The score has a possible minimum of 2.5 and maximum of 17.5. Three scores were calculated: social distance with transgender people in general (M=8.32, SD=2.00; n=495); social distance with MTF transgender people (M=8.90, SD=1.84, n=495); and social distance with FTM transgender people (Mean=7.73, SD=2.61, n=495). There's a significant difference between desired social diatance with MTF and FTM transgender people: in general, participants desired greater social distance with MTF transgender people (t(494)=107.91, p<.001).

Similar to transphobia, gender also has a crucial role when it comes to desired social distance with transgender people: females have smaller desired social distance with transgender people in general (M=8.14, SD=2.02, n=248) than males do (M=8.51, SD=1.97, n=243; t(489)=2.02, p<.05); for FTM transgender people specifically, females desire a closer social distance (M=7.43, SD=2.64, n=248) than male (M=8.05, SD=2.56, n=243; t(489)=2.65, p<.01). No gender difference was found for social distance with MTF transgender individuals in real life.

Heterosexual participants desire significantly greater social distance with transgender people in general (M=8.45, SD=2.03, n=423) than non-heterosexual participants (M=7.53, SD=1.64, n=72; t(111.5)=-4.3, p<.001); especially regarding FTM transgender people, heterosexual people want to keep a longer social distance (M=7.92, SD=2.64, n=423) than non-heterosexuals (M=6.63, SD=2.17, n=72; t(110.1)=-4.52, p<.001); the difference is smaller regarding MTF transgender people (heterosexuals: M=8.99, SD=1.87, n=423; non-heterosexuals: M=8.43, SD=1.56, n=72; t(109.01)=-2.70, p<.01).

Ethnic difference was found: minority groups in general desire a greater social distance from transgender people (M=8.85, SD=2.26, n=137) than white (M=8.11, SD=1.85, n=358; t(209.57)=3.4, p=.001). The difference is also significant regarding social distance with FTM

transgender people (minority: M=8.53, SD=2.78, n=137; white: M=7.42, SD=2.48, n=358; t(223.47)=4.07, p<.001).

**Hypotheses Testing**

H1 stated that the stronger the positive parasocial relationship between a viewer and transgender characters in scripted TV shows, the more positive attitude he or she holds toward transgender individuals in general.

Four sets of Linear Regression Model were performed to examine H1 (with demographic variable controlled, see details in Table 4.1, 5.1, 6.1 and 7.1): (1) regression modeling with PPSR with transgender characters in general as independent variable and the transphobia score as the dependent variable was found statistically significant (β=-.317, p<.001). This indicates a significant negative relationship between positive parasocial relationship with transgender characters in TV and level of transphobia, in other words, a more positive attitude towards transgender people; (2) PPSR in general as an independent variable and desired social distance score as dependent variable was also found significant (β=-.176, p<.001). The increase of participants Positive Parasocial Relationship with transgender characters in TV shows indicates decrease in participants' desired social distance with transgender people; more specifically, (3) PPSR with male-to-female (MTF) transgender people was not a significant predictor of desired social distance with MTF transgender people (β=-.088, p=ns); finally, (4) PPSR with female-to-male (FTM) transgender people was also not a significant predictor for desired social distance with FTM transgender people in real life (β=.041, p=ns.). After conducting regression analysis for these pairs, H1 received considerable support. It is fair to say that a stronger positive parasocial relationship mostly predicts more positive audience attitudes towards transgender people in his/her real life.

In the four models mentioned above, the variables gender, sexuality (dummy coded as queer or heterosexual) and ethnicity (dummy coded as white or minority) are controlled. This is because of the significant group differences regarding the dependent variables discussed above.

H2 predicted that the stronger the negative parasocial relationship between a viewer and transgender characters in scripted TV shows, the more negative attitude he or she holds toward transgender individuals in general.

To test the hypothesis, the regression analysis was conducted for four pairs of data (with demographic variable controlled, see details in Table 4.2, 5.2, 6.2 and 7.2): (1) between NPSR in general and transphobia, NPSR with transgender people was found to be a significant predictor for the degree of transphobia one has ($\beta$=.492, p<.001). The increase of participants negative parasocial relationship with transgender characters indicates an increase in participants' tendency of transphobia; (2) NPSR was also found to be a positive predictor for desired social distance ($\beta$=.361, p<.001). The stronger a participant's negative parasocial relationship with transgender characters in TV shows the greater participant's desired social distance with transgender people in his/her personal life. (3) More specifically, a stronger NPSR with MTF transgender characters in TV indicates a greater desired social distant with MTF transgender people in real life ($\beta$=.255, p<.001). (4) For FTM transgender characters and people, this prediction was also found significant ($\beta$=.280, p<.001). The increase of participants' NPSR with FTM transgender characters in TV shows predicts an increase in desired social distance with FTM transgender people. Since four sets of regression were all found statistically significant, H2 was supported, which means that a stronger negative parasocial relationship with transgender TV characters does predict a more negative attitude towards transgender people in real life.

H3 stated that the more transgender characters a viewer has a parasocial relationship

with, the stronger the relationships proposed in H1 and H2 would be. In other words, H3 proposed a moderation function of "number of character audience has parasocial relationship with" in the relationship between PPSR and attitudes towards transgender people and between NPSR and attitudes towards transgender people. Correlation analysis showed that the number of characters known was only correlated with PPSR (r=.109, p<.05). To test this moderation or interaction effect, a multiple regression was conducted as suggested by Jaccard, Turrisi and Wan (1990). The interaction effect of "number of parasocial relationships" was examined for (1) "PPSR- Transphobia" relationship; (2) "PPSR-Desired Social Distance" relationship; (3) "NPSR- Transphobia" relationship; (2) "NPSR-Desired Social Distance" relationship (with demographic variable controlled, see details in Table 4.3, 4.4, 5.3 and 5.4). The multiple regression only showed a significant moderation effect of the number of parasocial relationships in the "NPSR-Transphobia" relationship (β=.077, p<.05). A scatter plot (Figure 1.) shows a clear pattern. For people who has NPSR with four characters, $R^2$ is larger than those who have fewer than four (0.755 compare to 0.441, 0.348 and 0.244, see details in Table 4.4). That is to say, for people who have a negative parasocial relationship with four transgender characters, their levels of transphobia are more strongly predicted by NPSR comparing to people who have fewer than four NPSR relationship with transgender characters. All the other three proposed effects were not found. Thus, H3 was only partially supported.

H4 proposed a moderation effect of level of personal contact with trans people in real life on the relationship between parasocial relationship and attitude towards transgender people in real life. After similar testing as for H3, no significant effect was found (with demographic variable controlled, see details in Table 4.5, 4.6, 5.5 and 5.6). H4 was rejected.

H5 hypothesized that the presence/absence of humor would act as a moderator in the

relationship between positive/negative PSR with transgender characters and attitudes towards transgender people in general. The method used for examining an interaction effect, however, cannot be used here since audience members may have parasocial relationships with characters from both comedy and non-comedy at the same time. Since the moderation means that one variable has influence on the nature of the relationship between an independent and a dependent variable (Jaccard et al., 1990), the researcher conducted regression tests between transphobia/desired social distance and PPSR with comedy and non-comedy transgender characters and tested if there was significant difference in these two regression coefficients. The technique used to test is z-test for a null-hypothesis that there was no significant difference, as suggested by (Paternoster, Brame, Mazerolle, & Piquero, 1998).

The test was conducted for the following pairs (with demographic variable controlled, see details in Table 4.7-4.10 and 5.7-5.10): (1) regression coefficient of PPSR with comedy characters (M=3.75, SD=.98, n=439) when predicting transphobia ($\beta$=-.322; p<.001.) with coefficient of PPSR with non-comedy characters (M=3.93, SD=.94, n=148) when predicting transphobia ($\beta$=-.231; p<.001.);  (2) regression coefficient of NPSR with comedy characters (M=3.21, SD=1.08, n=439) when predicting transphobia ($\beta$=.494; p<.001) with coefficient of NPSR with non-comedy characters (M=3.35, SD=1.04, n=148) when predicting transphobia ($\beta$=.462; p<.001); (3) regression coefficient of PPSR with comedy characters when predicting desired social distance ($\beta$=-.214; p<.001.) .with coefficient of PPSR with non-comedy characters when predicting desired social distance ($\beta$=-.009; p<.001.);  (4) regression coefficient of NPSR with comedy characters when predicting desired social distance ($\beta$=.373; p<.001) with coefficient of NPSR with non-comedy characters when predicting desired social distance ($\beta$=.322; p<.001).

A significant influence of humor presence or not was only found in the (1) and (3) situation: when PPSR was used to predict transphobia and desired social distance (with a z-score of -1.81 and -13.44, respectively). In another word, if the characters with whom the audience members have positive parasocial relationships are from a comedy show, the predictive power of PPSR score for attitude towards transgender people is significantly stronger than if the characters are from non-comedy shows. Thus, H5 was partially supported.

**Research question exploration**

Research Question 1 asked what role perceived realism of transgender characters might play in the relationship between positive/negative PSR with trans characters and attitudes towards trans people in general. To explore the influence of perceived realism of characters on the relationship between parasocial relationship with transgender characters and attitudes towards transgender people, first, a correlation test was conducted. Perceived realism of characters was significantly correlated with all four variables of interest: PPSR, NPSR, Transphobia and Desired Social Distance (see details in Table 3). When posing perceived realism as an independent variable and transphobia and desired social distance as dependent variables in regression modelling, both suggested that perceived realism is a significant predictor (predicting transphobia: $\beta$=-.198; p<.001; predicting social distance: $\beta$=-.099; p<.05). After adding PPSR/NPSR in the "Realism-Transphobia" regression, the significant predictive power of perceived realism disappeared (see details in Table 4). The same situation happened after adding PPSR/NPSR to the "Realism-Desired Social Distance" regression (this might indicate possible mediating effect of PSR on the "Realism-Transphobia/Desired Social Distance" relationships, more information in discussion). To explore further possibilities, a product of perceived realism and PPSR/NPSR was calculated. The result showed that when predicting transphobia, the

products of perceived realism and NPSR had significant effects ( $\beta$=.127. p<.001). These statistical results indicated a possible moderation effect of perceived realism on the regression model proposed in H2. To further observe the situation, a scattered plot was created after grouping all respondents into "Low in Perceived Realism," "Moderate in Perceived Realism," and "High in Perceived Realism." Figure 3 shows that for people who are high in perceived realism of characters, the predictive power of NPSR for transphobia is higher (See details of regression tests in Table 4.12).

For Research Question 2, the proposed influence of perceived variety of characters on the parasocial relationship and attitude towards transgender people was first tested by correlation. There was no significance found in any of the pairs. Further regression analysis did not show any significance for an interactive effect of perceived variety on the "PSR-Transphobia/Desired Social Distance" regression (with demographic variables controlled, see details in Table 4.13, 4.13, 5.13 and 5.14).

## Chapter 5: Discussion

In this chapter, three aspects of the thesis were discussed: its contribution, limitations and suggestions for future research. This study contributes to not only the understanding of attitudes toward the trans population but also the Parasocial Contact Hypothesis proposed by Schiappa et al. (2005). Through a detailed interpretation of results presented in the last chapter, the contribution and meaning of the study was revealed. Despite all the contributions, there are still limitations regarding sampling, method chosen and some statistical results. Finally, some suggestions were proposed in reference to future research.

## Contributions

Although transgender people face severe discrimination in almost all aspects of life (GLAAD, 2015), only a few studies have been done to understand the attitudes toward this social group (e.g. Norton & Herek, 2013; Walch, Nagamake, Francisco, Stitt & Shingler, 2012, see a review in Kanamori, Cornelius-White, Pegors, Daniel & Hulgus, 2016). With only 16% of Americans knowing transgender individuals in real life (Stokes, 2015, Sept.), the effect of media on people's attitude is crucial. The present study contributes to the understanding of attitudes towards transgender people, especially because the results indicate that parasocial relationships with trans TV characters can be used to predict one's attitudes to transgender people.

Equally importantly, the thesis contributes to the theory of Parasocial Contact Hypothesis (Schiappa et al., 2005). The results confirmed the proposed association of parasocial relationship and attitude towards certain social groups. It also extended the theory to negative parasocial relationships, which was not addressed by previous studies. Additionally, several factors were found to be moderating or mediating the effect, including number of characters one has parasocial relationships with; presence/absence of humor and perceived realism of trans

characters.

To further explore the possible social benefit of parasocial relationship as suggested by Schiappa (2006), specifically in a transgender and TV drama show context, the present study proposed and examined five hypotheses and two research questions. As presented in the last chapter, data analysis results showed relatively strong support for the Parasocial Contact Hypothesis (Schiappa, 2006). Further understanding of this theory was also achieved to some extent by finding moderating and mediating effects of variables.

Consistent with previous literature (Schiappa et al, 2005, 2006), hypotheses on the parasocial relationship with transgender TV characters as significant predictor for attitudes towards transgender people in real life were both supported according to the results of statistical tests for H1 and H2: a stronger positive parasocial relationship with transgender characters indicates a more positive attitude towards transgender people and a stronger negative parasocial relationship, on the contrary, suggests a more negative attitude. Despite the straightforwardness of the results, several issues are worth discussion.

To operationalize the "attitudes toward transgender people," two variables were measured: transphobia and desired social distance towards transgender people. According to Bourne (2011), "phobia" is "strong fear or avoidance of one particular type of object or situation." In a more specific LGBT context, the "fear" part of phobia is mostly replaced by "hostility and aversion," which also ties to "saving the state of masculinity from all feminization," and ideological system and power relationship regarding sexuality (see a review in Fraïssé & Barrientos, 2016, p5). In Hill and Willoughby (2005), from which the researcher adapted the Transphobia Scale for the present research, transphobia was defined as a "anti-trans" prejudice and discrimination. Desired social distance, also commonly used when measuring

prejudice attitude, emphasizes the comfort with "varying level of intimacy and interaction" with a certain social group (Suarez & Redmond, 2014, p468). Compared to transphobia, desired social distance is more relevant to discomfort than fear and hostility (Gentry, 1987). In other word, despite the inherent discrimination and prejudice of high level "desired social distance," this scale measures more moderate or subtler emotions and attitudes towards trans people than transphobia.

The results from both H1 and H2 showed that the association between parasocial relationship (positive or negative) and transphobia is significantly stronger than the association between PSR and desired social distance. Though the mechanism behind this phenomenon is unclear, it is easier for a parasocial relationship to predict a hostile attitude than a vague feeling of discomfort in this specific context. The explanation for this phenomenon can be speculated. It's possible that fear and hostility are more "obvious" or "conscious" negative attitudes compared to feeling discomfort, which can be "subconscious" and "more socially desirable."

The results also showed that the association between a PSR with MTF transgender characters and attitudes towards MTF trans people is stronger than the association between PSR with FTM transgender and attitudes toward FTM trans person in real life. Although most studies of attitudes towards transgender population did not distinguish MTF and FTM trans people (Hill & Willoughby, 2005; Nagoshi, Adams, Terrell, Hill, Brzuzy & Nagoshi, 2008; see a review in Worthen, 2013), research had shown that in various aspects of life, FTM and MTF trans person has very distinct experiences (Rubin, 2003; Bockting, Benner & Coleman, 2009). When it comes to attitudes, Grossman, D'Augelli, Salter and Hubbard (2006) found in their study that MTF and FTM transgender youth experience a different interaction with parents and verbal/physical victimization from others. The results of the present thesis also added evidence to the literature

that not only do other people hold distinct attitudes towards MTF and FTM trans people, but also the mechanisms and predictors of the attitudes can be different.

H1 and H2 predicted both positive and negative PSR for attitudes towards trans person in real life. The results showed that negative PSR to be a stronger predictor compared to positive PSR. This is an interesting finding since there were few studies that have addressed negative PSR (Hartmann et al, 2008; Jennings & Alper, 2016). In these studies, NPSR is only treated as the counterpart of PPSR (e.g. friendly vs. unfriendly, Jennings & Aller, 2016) without distinguishing further. The results of testing H1 and H2 told a different story: since the NPSR is a stronger predictor for both transphobia and desired social distance, it might be not only just the "opposite" situation of PPSR, but may have its own unique feature and influence.

H3 proposed a moderation effect of number of parasocial relationships on the "PSR-Attitude" association. The results, however, showed only partial support in the "NPSR-Transphobia" situation. That is to say that, for most situations, the number of characters one has PSR with does not influence the relationships proposed in the Parasocial Contact Hypothesis. This finding indicates that the nature and the strength of PSR instead of the number of PSRs is what really matters when predicting attitudes toward transgender people. The similar results were also found after testing H4, which proposed a moderation effect of level of personal contact with trans person in real life. This result was consistent with Schiappa et al.'s study (2005) of the Parasocial Contact Hypothesis in the gay men context: levels of personal contact with gay men did not influence the effect of PSR on attitude towards gay men. At the same time, however, this result conflicted with another study done by Schiappa et al. (2006) testing the Parasocial Contact Hypothesis on viewers of *Will & Grace*. As a more "sensitive and direct" experiment (Schiappa, et al, 2005, p105), the 2006 study is considered to be more accurate than the previous one.

Theoretically speaking, parasocial relationship is an alternative for social contact. Therefore, it is reasonable to consider PSR as a "complementary" factor in the attitudes formation process. However, with conflicting results, the effect of personal contact on "PSR-Attitudes" association needs further study.

The presence or absence of humor acts as a moderating factor in the "PSR-Attitude" regression model. The effect, however, only occurs when the PSR is positive: PPSR with comedy trans character is a stronger predictor of attitude towards trans people comparing to PPSR with non-comedy trans character. This effect is within expectation. It is consistent with Chung and Zhao's (2011) argument that the moderating effect of humor leads to more positive outcome of media effects on attitudes change. Cribbs's (2009) study of the LGBT context also argues that humor plays a positive role when it comes to attitudes towards real life gay and lesbians. With the expected effect on NPSR not appearing, it seems that when a NPSR is formed, humor can't have any "softening" function. Yoon and Tinkham (2013) addressed how humor functions when the threatening messages are communicated and argued that it depends on people's involvement with the issue. It is possible in the present study that involvement with transgender issues is a factor influencing how humor functions; such a possibility warrants future study.

One of the most interesting findings of this thesis is the function of perceived realism. From the regression modeling, we can see that perceived realism is a significant predictor for attitude towards trans people (both transphobia and desired social distance). This prediction seems to be mediated by the level of parasocial relationship one has with trans characters (following are the evidences): (1) Perceived realism is a significant predictor for PSR; (2) PPSR and NPSR are significant predictors for transphobia and desired social distance with trans

people; (3) the significance of perceived realism predicting attitudes reduced or disappeared after adding NPSR and PPSR in the model. Drawing statistical evidence above, when an audience perceive a trans character to be more realistic, he/she would be more likely to have a parasocial relationship with that character, which further leads to more positive or negative attitudes (depends on the valence of parasocial relationship) towards transgender people in real life. In addition to this mediation effect, the statistical results also indicated an interaction effect of PSR and perceived realism on attitudes toward trans people (on transphobia, to be more specific). From Figure 2 and 3, it is easy to see that in group rated high in perceived realism, the predictive power of PSR (with a larger $R^2$, both negative and positive) is stronger and the correlation of PSR and transphobia is stronger (with a stiffer slope). Though the interactive effect is evident, whether perceived realism or PSR is the moderator is not clear.

This mediating and moderating effect of perceived realism on PSR and attitudes was not reported by prior studies. It is, however, logical when referring previous literature on parasocial relationships and media effects on attitudes (Rubin et al., 1985; Rubin & McHugh, 1987; Schiappa, Allen & Gregg, 2007; Schiappa et al, 2005, 2006). Perceived realism was found to be a significant factor when predicting parasocial relationships with TV characters (Rubin et al., 1985; Rubin & McHugh, 1987; Schiappa, Allen & Gregg, 2007). Schiappa et al. (2007, p305) argue that perceiving a character as more real is important since it "indicates a more realistic element to the relationship." It is reasonable to speculate that when an audience member perceives a trans TV character as realistic, he/she would be more likely to start forming a relationship with the character since the feelings all seem "real." When the PSRs are being constructed, referring previous research (Schiappa et al, 2005, 2006) and the results of the present study, attitudes towards the social group of the character can be predicted.

Unlike many previous studies focusing on the mediation and moderation effect of perceived realism on various media effects (e.g. Chock, 2011; Peter & Valkenburg, 2010; Taylor, 2005), this thesis addressed a perspective of seeing parasocial relationship as a mediating and moderating factor between perceived realism and attitudes. In other words, to see parasocial contact effects as part of inner mechanism of perceived realism affecting attitudes formation and change.

One other thing worth discussion is the $R^2$. $R^2$ is defined as a measurement of "proportion of total variance" of dependent variable explained by the regression model (Draper & Smith, 2014, p28). It is among the most critical criteria for deciding fitness of a regression model (Whaley, Kaminsky, Dwyer & Getchell, 1995). As we can see in the results session, several of the regression models under examination have a relatively low $R^2$ (<.1, meaning less than 10% of the variance of the dependent variable is explained). Though the low $R^2$s can cast doubts on the significance of the regression model in general, it is understandable for this specific case: attitude towards transgender people was found to be very complex with considerable number of factors that influence it, including religiosity (Nagoshi, Adams, Terrell, Hill, Brzuzy & Nagoshi, 2008; Norton & Herek, 2013; Tee & Hegarty, 2006); heterosexism (Tee & Hegarty, 2006); authoritarianism (Nagoshi et. al., 2008; Norton & Herek, 2013; Tee & Hegarty, 2006); contact with sexual minorities (Nisley, 2010; Norton & Herek, 2013; Tee & Hegarty, 2006); homophobia (Nagoshi et. al., 2008); and political conservatism (Norton & Herek, 2013). Regarding an issue as complicated as attitude towards trans people, it is reasonable to have a relatively small $R^2$ for the variables studied here. In fact, as suggested by Todeschini, Consonni, Mauri and Pavan (2004), we need to be cautious of overfitting which might due to predictor multicollinearity and change factors.

**Limitations**

As a cross-sectional survey examining the Parasocial Contact Hypothesis, this thesis has some internal contradictions. On one hand, unlike originally conceptualized and operationalized in Shiappa et al.'s work (2005, 2006), definition of parasocial relationship in this study emphasizes long-term relationships instead of short-term, during viewing interactive experience (comparing to parasocial interaction). Thus, a cross-sectional survey is appropriate since it is aiming to understand long-term, relatively stable characteristics and attitudes of a population (Creswell, 2014). On the other hand, the inherent causal relationship of Parasocial Contact Hypothesis cannot be truly determined by any method other than experiment.

As mentioned in Chapter 3, this thesis employed a convenient sampling strategy on an online platform (Mechanical-Turk). Non-probability sampling inherently poses concerns on generalizability of results to the larger population (Blair & Zinkhan, 2006). In addition to the non-probability sampling and concerns of habitual responding (Paolacci et al., 2010), this strategy generated a sample that is relatively young (with about 64% of the respondents younger than 35) and more liberal than the public (Berinsky et al., 2012), which poses threats to the generalizability of the results to the larger population. It can be a concern for this study especially because the response to attitudes toward trans people and issues is more positive for politically liberal people than the general public (Norton & Herek, 2013).

**Future research**

Based on the limitations mentioned in the previous section, the researcher proposed some suggestions for future research: (1) experimental studies to test causal relationships between parasocial relationship with trans TV characters and attitudes towards trans people in general; (2) revise sampling strategy to generate samples more approximate to the general public for better

generalizability of results.

Additionally, based on the results interpretation, here are some proposed ideas for possible future research: (1) more focused study on whether and how personal contact with transgender people in real life affect "PSR-Attitude" regression model (since conflicted results are gained by the present and previous research); (2) explore the possibility of trans issue involvement moderating the effect of humor on "PSR-Attitude" association; (3) test the proposed mediating and moderating effect of PSR on "Perceived realism-Attitude" regression model using experimental method.

One other thing worth discussion is possible difference of audience for shows listed. Shows like *The L Word* and *Transparent* are centered around LGBT related topics and plots. It wouldn't be entirely unexpected to see or interact with transgender characters for audiences who choose to start and continue watching these kind of shows. In comparison, LGBT topics are not the essential storyline for shows like *Glee* and *Ugly Betty*. The encounter with transgender characters, for audiences of these type of shows, can be a "surprise." Examining how this type of audience difference can affect parasocial relationships with transgender characters and attitudes towards transgender people could generate more understanding of this research topic.

Finally, regarding operationalization of attitudes towards transgender people, the researcher used two separate measurements: Transphobia Scale and Desired Social Distance Scale. When this study was conducted, no measurement, to the knowledge of the researcher, was found to capture both the "fear and aversion" aspect and "level of interaction comfort" aspect of attitudes towards trans population. This approach, though has its theoretical advantages, created some ambiguity and inconsistency when discussing the results. It also poses burden on the researcher to explain the relationship and nuance between these two measurements and to justify

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the decision of employing this measurement. However, a new measurement: Transgender Attitudes and Beliefs Scale, with three dimensions (interpersonal comfort, sex and gender belief, and human value), was developed recently (Kanamori, Cornelius-White, Pegors, Daniel & Hulgus, 2016). It also specifies MTF and FTM trans persons for each of the dimensions. The researcher suggests that future research adapting this newly developed scale for a more consistent and systematical study of transgender attitudes.

**Conclusion**

There are several key findings in this thesis. First, both positive and negative parasocial relationships with trans TV characters were found to be significant predictors of attitudes towards trans people in real life. Second, whether the TV characters, with whom the audience has positive parasocial relationships, are from comedy or non-comedy shows affects the "PPSR-Attitude" relationship: PPSR with comedy trans characters is a stronger predictor of attitudes towards trans people than PPSR with non-comedy characters. Meanwhile, PSR with trans characters was found to mediating the predicting power of perceived realism of character for attitudes toward transgender people. Additionally, an interactive effect was found between PSR and perceived realism when predicting attitudes towards trans people.

These findings lead to some important practical implications in influencing attitudes towards transgender people and reduce discrimination. As was mentioned in the Introduction chapter, though transgender people have become more visible in media than they ever were, they are still facing severe discrimination and prejudice in their everyday lives. Media is the major source to know about trans people since only 16% Americans reported have in-person contact with trans people in real life (Stokes, 2015, Sept). Drawing findings from the present study, more "likable" and "realistic" trans characters in TV might generate a positive attitude change among

the audience, especially in comedy TV shows.

**Appendix A: Shows and characters selected**

Eight transgender characters from eight different shows are selected for this study. These

shows are all scripted TV shows (instead of reality shows) with leading or recurring transgender characters. Four of them are drama while the other four categorized as comedy drama. All eight shows that met the selecting criteria is chosen. Here is a brief of the characters and the shows:

**Drama**

 **Cole from *The Fosters*.** The Fosters is an American family drama TV series on ABC. It tells the story of lesbian couple family raising a family with multi-ethnic, biological, adopted and foster children. The first season premiered on June 2013. For the portrayals of LGBT characters, The Fosters won the GLAAD Media Award for Outstanding Drama Series in its first season. Cole is a 15-year-old recurring female-to-male transgender teenager in this show. After his first appearance in the season one, he has been in ten episodes in three seasons. The character struggles with this transgender identity.

 **Adam Torres from *Degrassi*.** *Degrassi* is a long-running Canadian teen drama. The show portrays students in college facing all kinds of problems and challenges in their lives. It is now in its 14th season. Adam Torres was first introduced in 2010 as a female-to-male transgender teenager. He experienced some realistic problems like being bullied in school and being forced to come out in the show. After 78 episodes of his appearance, the character Adam died in a car accident in season 13.

 **Max from *The L Word*.** The L Word is a drama show following lives of a group of lesbian, bisexual, transgender women in LA. Max Sweeny (born Moira) is a transgender man who went through his transition since first appearing in season three. He has become one of the main characters since then. For this character, struggles not only occur in his gender identity, but also his distinguish class and values comparing to other characters in the show.

 **Nomi Marks from *Sense8*.** Sense8 is a science fiction drama show. It is created by

transgender directors Lilly and Lana Wachowski and J. Michael Straczynski. The first season was streamed last year on Netflix. Sense8 won winning the GLAAD Media Award for Outstanding Drama Series for its presentation of LGBT characters and stories. Nomi Marks is one of the main characters played by transgender actress Jamie Clayton. Nomi is also a lesbian woman who works as a political blogger and hacker in San Francisco.

**Comedy Drama**

      **Alexis Meade from *Ugly Betty*.** In the U.S., Ugly Betty (2006-2010) is one of the earliest top-rated TV comedy series that involve main or recurring transgender characters. Alexis Meade was born as Alexander Spencer Meade, who was the brother of the main character Daniel Meade. From Alexander to Alexis, this character transformed from a man who was invisible to the audience but crucial to the plot, to an intelligent beautiful and, importantly, powerful woman who co-works with her brother in the fashion magazine editing office. She was present from the very first episode as a regular character in the first two seasons of the show and recurred in the third season, performing in 33 out of 85 episodes in total.

      **Unique Adam from *Glee*.** From 2009 to 2015, Fox musical comedy series Glee has always been one of the shows that represents sexual and gender diversity with many LGBT teen characters in major parts. In season three, Unique Adams, played by actor Alex Newell, was introduced to viewers as a transgender female singer who eventually joined the "Glee Club" and became a regular character. This character is portrayed talented and courageous. The storyline of Unique involves transgender related issues like public restroom usage and sex-reassign surgery.

      **Sophia Burset from *Orange Is the New Black*.** Orange Is the New Black, the most-watched series on Netflix centers on stories in a women's prison. Sophia Burset is a male-to-

female transgender inmate played by actress Laverne Cox. Sophia works as prison hairdresser. Meanwhile, she's under hormone treatment. The show portrays the courageous and struggling lives of Sophia and her family. The actress, Ms. Cox, became the first openly transgender person to be nominated for Emmy Awards in acting categories. She is also well-known as a LGBT advocate and hosting her own reality show.

**Maura Pfefferman from *Transparent*.** Golden-Globe and GLAAD award winning, Amazon original comedy series "Transparent," is one of the first scripted shows that centers on a transgender character. It was complimented by the audience as well as critics with an 8/10 score on IMDb and 97% on Rotten Tomatoes, and comments like "profound, provocative and groundbreaking" (Robert Bianco, 2015). Maura Pfefferman is a transgender woman who came out to her wife and children late in her life. The show focuses on the transition of Maura and the life of the family during the transition. Jeffrey Tambor, the actor who plays the character Maura, won Gorden Globe and Emmy Award for his performance in this show.

## Appendix B: Survey Instruments

**Choosing shows/characters**

| Please choose all the TV shows you have watched from the list below: |
| --- |

| The Fosters |
| Degrassi |
| The L Word |
| Sense8 |
| Ugly Betty |
| Glee |
| Orange is the New Black |
| Transparent |

| Please choose all the characters you know and familiar with from the list below: |
| Cole from *The Fosters* (played by Tom Phelan) |
| Adam Torres from *Degrassi* (played by Jordan Todosey) |
| Max from *The L Word* (played by Daniela Sea) |
| Nomi Marks from *Sense8* (played by Jamie Clayton) |
| Alexis Meade from *Ugly Betty* (played by Rebecca Romijn) |
| Unique Adams from *Glee* (played by Alex Newell) |
| Sophia Burset from *Orange is the New Black* (played by Laverne Cox) |
| Maura Pfefferman from the *Transparent* (played by Jeffrey Tambor) |

## Viewing Frequency and character familiarity
(adapted from Auter and Palmgreen, 2000)

| Please rate how familiar are you with the following shows: | |
| --- | --- |
| Ugly Betty | I have never watched this show before |
| Glee | I have watched the show only a few time |
| Orange is the New Black | I have watched the show more than a few times |
| Transparent | I watched the show quite often |
| The Fosters | I almost always watch the show |
| Degrassi | |
| The L Word | |
| Sense8 | |

How familiar are you with the characters listed below (from 1 to 7, which 1 means not familiar at all and 7 means very familiar):

| | 1 Not Familiar at all 7 Very Familiar | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Alexis Meade from *Ugly Betty* | 1 | 2 | 3 | 4 | 5 | 6 7 |
| Unique Adams from *Glee* | 1 | 2 | 3 | 4 | 5 | 6 7 |
| Sophia Burset from *Orange is the New Black* | 1 | 2 | 3 | 4 | 5 | 6 7 |
| Maura Pfefferman from the *Transparent* | 1 | 2 | 3 | 4 | 5 | 6 7 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Cole from *The Fosters* | 1 | 2 | 3 | 4 | 5 | 6 7 |
| Adam Torres from *Degrassi* | 1 | 2 | 3 | 4 | 5 | 6 7 |
| Max from *The L Word* | 1 | 2 | 3 | 4 | 5 | 6 7 |
| Nomi Marks from *Sense8* | 1 | 2 | 3 | 4 | 5 | 6 7 |

## Independent Variables

**Positive Parasocial Relationship.** Multiple-Parasocial Relationships Scale (adapted from Tukachinsky, 2010). Here is an example, the characters' name and shows' name will be replaced every time to test PPSR with a different character.

About Alexis Meade from *Ugly Betty* (this will only be shown to participants who choose *Ugly Betty* in Question 1 and Alexis Meade from *Ugly Betty* in question 2)

| Please rate the following statements about Alexis Meade from *Ugly Betty* ( from 1 to 7, which 1 means totally disagree and 7 means totally agree) | | | | | | |
|---|---|---|---|---|---|---|
| | 1 Totally Disagree          7 Totally Agree | | | | | |
| If Alexis was a real person, I could have disclosed negative things about myself honestly and fully  (deeply) to her. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I could have disclosed a great deal of things about myself to her. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| Sometimes, I wish I knew what Alexis would do in my situation. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I could have disclosed positive things about myself honestly and fully (deeply) to her. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| Sometimes, I wish I could ask Alexis for advice. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| I think Alexis could be a friend of mine. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| I find Alexis very attractive physically. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| I think Alexis is quite pretty. | 1 7 | 2 | 3 | 4 | 5 | 6 |
| Alexis is very sexy looking. | 1 7 | 2 | 3 | 4 | 5 | 6 |

| | | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| Alexis fits my ideal standards of physical beauty. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I want Alexis physically, emotionally and mentally. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| For me, Alexis could be the perfect romantic partner. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| Sometimes, I think that Alexis and I are just meant for each other. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I wish Alexis could know my thoughts, my fears and my hopes. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| Alexis influences my mood. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I adore Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I idealize Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I would be able to count on Alexis in times of need. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I would give her emotional support. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, she would be able to count on me in times of need. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I would will to share my possessions with her. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I could trust her completely. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| If Alexis was a real person, I could have a warm relationship with her. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I want to promote the well-being of Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |

**Negative Parasocial Relationship.** (adapted from Hartmann et al., 2008). Here is an

example, the characters' name and shows' name will be replaced every time to test PPSR with a

different character.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Please rate the following statements about Alexis Meade from *Ugly Betty (* from 1 to 7, which 1 means totally disagree and 7 means totally agree) | | | | | | | |
| I am happy whenever I learn that something bad happened to Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I never agree with the actions of this Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I never liked Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |

| | | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| It is annoying to see Alexis on TV. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I do not want to be reminded about Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I find Alexis to be dislikable. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| Alexis does not perform admirable actions. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I am not interested in articles or coverage in the media about Alexis. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I would not mind if I never saw Alexis again. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I do not want to get to know Alexis any further. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| I am not concerned if I do not see Alexis on TV for a long time. | 7 | 1 | 2 | 3 | 4 | 5 | 6 |

## Dependent Variables

**Attitudes towards transgender individuals.** Multiple-Parasocial Relationships Scale (adapted from Tukachinsky, 2010). Here is an example, the characters' name and shows' name will be replaced every time to test PPSR with a different character.

*Genderism and Transphobia Scale.* (adapted from Hill & Willoughby, 2005).

| To what extent do you agree with the following statements? From 1 to 7, with 1 means strongly disagree and 7 means strongly agree. | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 (Strongly disagree) | | | | | 7(Strongly agree) | |
| If I found out that my best friend was changing their sex, I would freak out. | 1 | 2 | 3 7 | 4 | 5 | 6 | |
| God made two sexes and two sexes only | 1 | 2 | 3 7 | 4 | 5 | 6 | |
| If a friend wanted to have his penis removed in order to become a woman, I would openly support him. | 1 | 2 | 3 7 | 4 | 5 | 6 | |
| Men who cross-dress for sexual pleasure disgust me. | 1 | 2 | 3 7 | 4 | 5 | 6 | |
| Children should be encouraged to | 1 | 2 | 3 7 | 4 | 5 | 6 | |

| | | | | | |
|---|---|---|---|---|---|
| explore their masculinity and femininity. | | | | | |
| Men who act like women should be ashamed of themselves. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Men who shave their legs are weird | 1 | 2 | 3 7 | 4 | 5 | 6 |
| I cannot understand why a woman would act masculine | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Children should play with toys appropriate to their own sex. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Women who see themselves as men are abnormal. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| A man who dresses as a woman is a pervert. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Feminine boys should be cured of their problem | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Individuals should be allowed to express their gender freely | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Sex change operations are morally wrong | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Feminine men make me feel uncomfortable | 1 | 2 | 3 7 | 4 | 5 | 6 |
| People are either men or women | 1 | 2 | 3 7 | 4 | 5 | 6 |
| My friends and I have often joked about men who dress like women | 1 | 2 | 3 7 | 4 | 5 | 6 |
| Masculine women make me feel uncomfortable | 1 | 2 | 3 7 | 4 | 5 | 6 |
| It is morally wrong for a woman to present herself as a man in public | 1 | 2 | 3 7 | 4 | 5 | 6 |

***Social Distance Scale.*** (adapted from Gentry, Cynthia, 1987).

| To what extent do you agree with the following statements? From 1 to 7, with 1 means strongly disagree and 7 means strongly agree. | | | | | | |
|---|---|---|---|---|---|
| | 1 (Strongly disagree) | | | | 7(Strongly agree) | |
| I would be uncomfortable at a party where a male-to-female transgender person was present. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| I would be uncomfortable at a party | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| where a female-to-male transgender person was present. | | | 7 | | | |
| It would bother me to drive along in a car with a male-to-female transgender person. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| It would bother me to drive along in a car with a female-to-male transgender person. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| I would be uncomfortable if I was left alone in a room with a male-to-female transgender person. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| I would be uncomfortable if I was left alone in a room with a female-to-male transgender person. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| It would bother me to live in a same house with a male-to-female transgender person. | 1 | 2 | 3 7 | 4 | 5 | 6 |
| It would bother me to live in a same house with a female-to-male transgender person. | 1 | 2 | 3 7 | 4 | 5 | 6 |

*Perceived realism of the character.* adapted from Lombard, Ditton & Weinstein, 2009;

Shapiro & Chock, 2003*).*

| Please rate the character Alexis Meade from *Ugly Betty in the following traits:* |
|---|
| She is not at all like real life 1    2    3    4    5    6    7 She is just like real life |
| She is not at all like people I know 1    2    3    4    5    6    7 She is just like people I know |


| Please rate the following statements about the character Alexis Meade from *Ugly Betty:* | | | | | | |
|---|---|---|---|---|---|---|
| From 1 to 7, with 1 means strongly disagree and 7 means strongly agree. | | | | | | |
| She <u>would</u> exist in real world | 7 | 1 | 2 | 3 | 4 | 5 | 6 |
| She <u>could</u> exist in real world | 7 | 1 | 2 | 3 | 4 | 5 | 6 |

*Perceived typicality of characters.* An example:

| How typical do you think is Alexis Meade is as a transgender woman? (1 to 7 from |
|---|

| very atypical to very typical) | | | | | | |
|---|---|---|---|---|---|---|
| Very atypical 1 | 2 | 3 | 4 | 5 | 6 | 7 Very typical |

*Level of real life contact with transgender people.* (adapted from Shiappa et al., 2006)

Please identify which of the following statements describes your situation:

- o  I do not know any male-to-female transgender people personally
- o  I am acquainted with a few male-to-female transgender people, but not as friends
- o  I have a few [3 or less] male-to-female transgender friends, family members or close co-workers
- o  I have more than 3 male-to-female transgender friends or close co-workers

Please identify which of the following statements describes your situation:

- o  I do not know any female-to-male transgender people personally
- o  I am acquainted with a few female-to-male transgender people, but not as friends
- o  I have a few [3 or less] female-to-male transgender friends, family members or close co-workers
- o  I have more than 3 female-to-male transgender friends or close co-workers

**Demographic Information**

Please Identify the range which your age belongs to:
- o  Under 18
- o  18 to 24
- o  24 to 34
- o  35 to 44
- o  45 to 54
- o  55 to 64
- o  Above 65
- o  Prefer not to answer

Which of the following terms describes you best:
- o  Male (Not transgender)
- o  Male (Transgender)
- o  Female (Not transgender)
- o  Female (Transgender)
- o  Other (Please specify_____)
- o  Prefer not to answer

Which of the following terms describes you best:
- o  Heterosexual
- o  Gay

- o Lesbian
- o Bisexual
- o Queer
- o Asexual
- o Other (Please specify_____)
- o Prefer not to answer

Which of the following ethnicity groups do you identify with:
- o White, non-Hispanic
- o Hispanic American
- o African American
- o Native American
- o Asian American
- o Pacific Islander
- o Multiracial
- o Other (Please Specify _____)
- o Prefer not to answer

**Tables**

Table 1

*Demographics*

| N=496 | | | |
|---|---|---|---|
| Gender | | | |
| Male | 49.1% | Female | 50.1% |
| Age | | | |

| | | | |
|---|---|---|---|
| 18-24 | 8.5% | 25-34 | 55.6% |
| 35-44 | 21.6% | 45-54 | 9.7% |
| 55-64 | 4.8% | 65-74 | 0.2% |

Ethnicity

| | | | |
|---|---|---|---|
| White, non-Hispanic | 72.3% | Hispanic American | 5.3% |
| African American | 5.9% | Native American | 0.8% |
| Asian American | 8.7% | Pacific Islander | 1% |
| Multiracial | 2% | Others | 2% |
| Prefer not to answer | 2% | | |

Sexual Identity

| | | | |
|---|---|---|---|
| Heterosexual | 85.5% | Gay | 1.8% |
| Lesbian | 2.6% | Queer | 0.4% |
| Bisexual | 7.1% | Asexual | 0.4% |
| Pansexual | 1.4% | Prefer not to answer | 0.8% |

Knowing "transgender"

| | | | |
|---|---|---|---|
| Knows what's the term "transgender" means | 94.7% | Never heard of it or not sure what it means | 3.6% |

Personal Contact

| | | | |
|---|---|---|---|
| Don't know MTF | 59.8% | Don't know FTM | 54.7% |
| MTF acquaintances | 23.6% | FTM acquaintances | 27.3% |
| MTF Close friend/family (<3) | 12.7% | FTM Close friend/family (<3) | 12.5% |
| MTF Close friend/family (>3) | 2.4% | FTM Close friend/family (>3) | 2.6% |

Table 2

*Scale Reliability Tests*

| Scale | Cronbach's $\alpha$ |
|---|---|
| Positive Parasocial Relationship Scale (PPSR) | .913 |
| Negative Parasocial Relationship Scale (NPSR) | .879 |
| Transphobia Scale | .965 |
| Social Distance with MTF transgender | .859 |
| Social Distance with FTM transgender | .902 |
| Social Distance with transgender in general | .938 |

*Note: $0.9 > \alpha \geq 0.8$ indicates good internal consistency; $\alpha \geq 0.9$ indicates excellent consistency*

Table 3

*Correlation of major variables*

| | PPSR | NPSR | Transphobia | SD | Personal_ Contact | Realism |
|---|---|---|---|---|---|---|
| PPSR | — | 0.695*** | -0.355*** | - 0.199*** | 0.253*** | 0.418*** |
| NPSR | | — | 0.537*** | 0.376*** | -0.165*** | -0.444*** |
| Transphobia | | | — | 0.594*** | -0.189*** | -0.245*** |
| SD | | | | — | -0.06 | -0.112* |
| Personal_ Contact | | | | | — | 0.228*** |
| Realism | | | | | | — |

*Note: * p < .05, ** p < .01, *** p < .001*

Table 4

*Summary of Regression Analysis for variables predicting Transphobia (N=495)*

| Model | B | SE B | β | t |
|---|---|---|---|---|
| 1 | | | | |
| Constant | .643 | .037 | - | 17.238 |
| Gender | .056 | .018 | .124** | 3.154 |
| Ethnicity | .112 | .02 | .223*** | .223 |
| Sexuality | -.171 | .025 | -.263*** | -6.725 |
| PPSR | -.073 | .009 | -.317*** | -8.075 |
| R Square: .276 | | | | |

| | | | | |
|---|---|---|---|---|
| Adjusted R Square: | .270 | | | |
| 2 | | | | |
| Constant | .045 | .026 | - | 1.698 |
| Gender | .031 | .016 | .069 | 1.925 |
| Ethnicity | .103 | .018 | .203*** | 5.826 |
| Sexuality | -.182 | .023 | -.280*** | -7.96 |
| NPSR | .104 | .008 | .492*** | 13.807 |
| R Square: | .410 | | | |
| Adjusted R Square: | 405 | | | |
| 3 | | | | |
| Constant | .368 | .024 | - | 15.139 |
| Gender | .056 | .018 | .124** | 3.14 |
| Ethnicity | .112 | .020 | .223*** | 5.708 |
| Sexuality | -.171 | .026 | -.263*** | -6.608 |
| # of Character | .001 | .014 | .001 | -.010 |
| PPSR | -.073 | .009 | -.317*** | -7.933 |
| PPSR*Number of character | -.001 | .016 | -.001 | -.031 |
| R Square: | .276 | | | |
| Adjusted R Square: | .267 | | | |
| 4 | | | | |
| Constant | .406 | .022 | - | 18.55 |
| Gender | .027 | .016 | .60 | 1.676 |

| | | | | |
|---|---|---|---|---|
| Ethnicity | .104 | .018 | .206*** | 5.892 |
| Sexuality | -.175 | .023 | -.269*** | -7.602 |
| # of Character | -.015 | .012 | -.042 | -1.198 |
| NPSR | .107 | .008 | .504*** | 14.045 |
| NPSR*Number of | .029 | .013 | .077* | 2.174 |
| character | | | | |
| R Square: | .417 | | | |
| Adjusted R Square: | .410 | | | |
| 5 | | | | |
| Constant | .368 | .015 | - | 24.02 |
| Gender | .041 | .020 | .091* | 2.057 |
| Ethnicity | .110 | .022 | .216*** | 4.998 |
| Sexuality | -.150 | .029 | -.229*** | -5.072 |
| Personal Contact | -.027 | .012 | -.113* | -2.259 |
| PPSR | -.067 | .010 | -.300*** | -6.662 |
| PPSR*Personal Contact | .010 | .011 | .041 | .896 |
| R Square: | .275 | | | |
| Adjusted R Square: | .264 | | | |
| 6 | | | | |
| Constant | .390 | .014 | - | 27.919 |
| Gender | .021 | .018 | .047 | 1.182 |
| Ethnicity | .108 | .020 | .212*** | 5.418 |
| Sexuality | -.170 | .027 | -.261*** | -6.342 |

| | | | | |
|---|---|---|---|---|
| Personal Contact | -.018 | .010 | -.075 | -1.739 |
| NPSR | .099 | .008 | .475*** | 11.787 |
| NPSR*Personal Contact | .015 | .009 | .066 | 1.634 |
| R Square: | .402 | | | |
| Adjusted R Square: | .393 | | | |

7

| | | | | |
|---|---|---|---|---|
| Constant | .657 | .040 | - | 16.532 |
| Gender | .045 | .019 | .100* | 2.376 |
| Ethnicity | .107 | .021 | .207*** | 5.008 |
| Sexuality | -.176 | .028 | -.265*** | -6.347 |
| PPSR with comedy characters | -.076 | .010 | -.322*** | -7.885 |
| R Square: | .271 | | | |
| Adjusted R Square: | .264 | | | |

8

| | | | | |
|---|---|---|---|---|
| Constant | .566 | .067 | - | 8.434 |
| Gender | .131 | .032 | .281*** | 4.154 |
| Ethnicity | .132 | .032 | .274*** | 4.136 |
| Sexuality | -.185 | .039 | -.325*** | -4.796 |
| PPSR with non-comedy characters | -.057 | .016 | -.231*** | -3.545 |
| R Square: | .408 | | | |
| Adjusted R Square: | .391 | | | |

| | | | | |
|---|---|---|---|---|
| 9 | | | | |
| Constant | .054 | .028 | - | 1.974 |
| Gender | .024 | .017 | .053 | 1.368 |
| Ethnicity | .097 | .019 | .189*** | 5.041 |
| Sexuality | -.186 | .025 | -.281*** | -7.428 |
| NPSR with comedy characters | .103 | .008 | .494*** | 12.899 |

R Square: .398

Adjusted R Square: .393

| | | | | |
|---|---|---|---|---|
| 10 | | | | |
| Constant | .017 | .047 | - | .363 |
| Gender | .084 | .028 | .179** | 2.996 |
| Ethnicity | .130 | .028 | .270*** | 4.719 |
| Sexuality | -.183 | .033 | -.322*** | -5.495 |
| NPSR with non-comedy characters | .104 | .013 | .462*** | 8.016 |

R Square: .557

Adjusted R Square: .544

| | | | | |
|---|---|---|---|---|
| 11 | | | | |
| Constant | .376 | .014 | - | 26.137 |
| Gender | .052 | .018 | .115** | 2.915 |
| Ethnicity | .107 | .020 | .212*** | 5.441 |
| Sexuality | -.167 | .025 | -.257*** | -6.554 |

| | | | | |
|---|---|---|---|---|
| Perceived Realism | -.158 | .087 | -.078 | -1.818 |
| PPSR | -.068 | .010 | -.293*** | -6.907 |
| PPSR*Perceived Realism | -.116 | .073 | -.062 | -1.594 |

R Square: .283

Adjusted R Square: .274

12

| | | | | |
|---|---|---|---|---|
| Constant | .396 | .013 | - | 30.451 |
| Gender | .027 | .016 | .060 | 1.672 |
| Ethnicity | .100 | .018 | .197*** | 5.679 |
| Sexuality | -.176 | .023 | -.271*** | -7.771 |
| Perceived Realism | .011 | .078 | .006 | .146 |
| NPSR | .109 | .008 | .512*** | 13.277 |
| NPSR*Perceived Realism | .205 | .057 | .127*** | 3.606 |

R Square: .426

Adjusted R Square: 419

13

| | | | | |
|---|---|---|---|---|
| Constant | .368 | .014 | - | 26.068 |
| Gender | .056 | .018 | .124** | 3.144 |
| Ethnicity | .113 | .020 | .223*** | 5.734 |
| Sexuality | -.171 | .026 | -.263*** | -6.709 |
| Perceived Variety | -.007 | .032 | -.009 | -.221 |

| | | | | |
|---|---|---|---|---|
| PPSR | -.074 | .009 | -.320*** | -7.783 |
| PPSR* Perceived Variety | .006 | .033 | .008 | .193 |
| R Square: | .276 | | | |
| Adjusted R Square: | .267 | | | |
| 14 | | | | |
| Constant | .385 | .013 | - | 29.988 |
| Gender | .031 | .016 | .070 | 1.943 |
| Ethnicity | .103 | .018 | .204*** | 5.812 |
| Sexuality | -.182 | .023 | -.281*** | -7.954 |
| Perceived Variety | -.010 | .029 | -.012 | -.347 |
| NPSR | .105 | .008 | .495*** | 13.295 |
| NPSR* Perceived Variety | -.008 | .026 | -.011 | -.312 |
| R Square: | .41 | | | |
| Adjusted R Square: | .403 | | | |

*Note: * p < .05, ** p < .01, *** p < .001*

Table 5

*Summary of Regression Analysis for variables predicting Desired Social Distance with*

*transgender people (SD) (N=495)*

| Model | B | SE B | β | t |
|---|---|---|---|---|
| 1 | | | | |
| Constant | .901 | .007 | - | 132.021 |
| Gender | .008 | .009 | .042 | .942 |
| Ethnicity | .036 | .010 | .162*** | 3.721 |
| Sexuality | -.041 | .012 | -.143*** | -3.263 |
| PPSR | -.018 | .004 | -.176*** | -4.001 |
| R Square: .089 | | | | |

| | | | | |
|---|---|---|---|---|
| Adjusted R Square: | 0.81 | | | |
| 2 | | | | |
| Constant | .906 | .006 | - | 139.447 |
| Gender | -.001 | .008 | -.006 | -.152 |
| Ethnicity | .033 | .009 | .150*** | 3.660 |
| Sexuality | -.043 | .012 | -.150*** | -3.624 |
| NPSR | .033 | .004 | .361*** | 13.807 |
| R Square: | .183 | | | |
| Adjusted R Square: | .177 | | | |
| 3 | | | | |
| Constant | .892 | .012 | - | 74.987 |
| Gender | .009 | .009 | .044 | .986 |
| Ethnicity | .035 | .010 | .158*** | 3.619 |
| Sexuality | -.042 | .013 | -.147*** | -3.331 |
| # of Character | .006 | .007 | .038 | .846 |
| PPSR | -.018 | .005 | -.178*** | -3.961 |
| PPSR*Number of character | .002 | .008 | .012 | .274 |
| R Square: | .090 | | | |
| Adjusted R Square: | .079 | | | |
| 4 | | | | |
| Constant | .903 | .011 | - | 79.881 |
| Gender | -.002 | .008 | -.008 | -.199 |

| | | | | |
|---|---|---|---|---|
| Ethnicity | .033 | .009 | .148*** | 3.584 |
| Sexuality | -.042 | .012 | -.148*** | -3.528 |
| # of Character | .002 | .006 | .014 | .336 |
| NPSR | .034 | .004 | .367*** | 8.654 |
| NPSR*Number of character | .007 | .007 | .043 | 1.033 |

R Square: .186

Adjusted R Square: .175

5

| | | | | |
|---|---|---|---|---|
| Constant | .904 | .011 | - | 82.254 |
| Gender | .001 | .009 | -.001 | -.025 |
| Ethnicity | .031 | .010 | .147** | 3.035 |
| Sexuality | -.035 | .014 | -.127* | -2.517 |
| Personal Contact | -.003 | .006 | -.025 | -.447 |
| PPSR | -.019 | .005 | -.203*** | -4.011 |
| PPSR*Personal Contact | .007 | .005 | .069 | 1.339 |

R Square: .089

Adjusted R Square: .075

6

| | | | | |
|---|---|---|---|---|
| Constant | .905 | .010 | - | 88.998 |
| Gender | -.007 | .009 | -.037 | -.796 |
| Ethnicity | .031 | .010 | .146** | 3.174 |
| Sexuality | -.041 | .013 | -.149** | -3.084 |

| | | | | |
|---|---|---|---|---|
| Personal Contact | .002 | .005 | .017 | .335 |
| NPSR | .033 | .004 | .377*** | 7.993 |
| NPSR*Personal Contact | .002 | .005 | .016 | .338 |
| R Square: | .179 | | | |
| Adjusted R Square: | .167 | | | |

7

| | | | | |
|---|---|---|---|---|
| Constant | .981 | .019 | - | 51.469 |
| Gender | .006 | .009 | .030 | .640 |
| Ethnicity | .031 | .010 | .142** | 3.083 |
| Sexuality | -.037 | .013 | -.130** | -2.788 |
| PPSR with comedy characters | -.021 | .005 | -.214*** | -4.568 |
| R Square: | .092 | | | |
| Adjusted R Square: | .084 | | | |

8

| | | | | |
|---|---|---|---|---|
| Constant | .902 | .037 | - | 24.399 |
| Gender | .020 | .017 | .095 | 1.142 |
| Ethnicity | .044 | .018 | .204* | 2.498 |
| Sexuality | -.041 | .021 | -.159 | -1.905 |
| PPSR with non-comedy characters | -.001 | .009 | -.009*** | -.108 |
| R Square: | .100 | | | |
| Adjusted R Square: | .074 | | | |

| | | | | |
|---|---|---|---|---|
| Constant | .799 | .014 | - | 57.919 |
| Gender | -.002 | .009 | -.011 | -.254 |
| Ethnicity | .029 | .010 | .130** | 2.975 |
| Sexuality | -.039 | .013 | -.138** | -3.123 |
| NPSR with comedy characters | .033 | .004 | .373*** | 8.361 |

R Square:  .181

Adjusted R Square:  .174

10

| | | | | |
|---|---|---|---|---|
| Constant | .795 | .028 | - | 28.026 |
| Gender | .005 | .017 | .025 | .305 |
| Ethnicity | .046 | .017 | .214** | 2.787 |
| Sexuality | -.038 | .020 | -.148 | -1.881 |
| NPSR with non-comedy characters | .032 | .008 | .322*** | 4.156 |

R Square:  .198

Adjusted R Square:  .175

11

| | | | | |
|---|---|---|---|---|
| Constant | .900 | .007 | - | 127.304 |
| Gender | .008 | .009 | .039 | .882 |
| Ethnicity | .035 | .010 | .161*** | 3.663 |
| Sexuality | -.041 | .013 | -.144*** | -3.266 |
| Perceived Realism | -.022 | .043 | -.024 | -.502 |

| | | | | |
|---|---|---|---|---|
| PPSR | -.017 | .005 | -.166*** | -3.471 |
| PPSR*Perceived Realism | .013 | .036 | -.016 | .371 |
| R Square: | .090 | | | |
| Adjusted R Square: | .078 | | | |

12

| | | | | |
|---|---|---|---|---|
| Constant | .907 | .007 | - | 134.161 |
| Gender | -.001 | .008 | -.004 | -.102 |
| Ethnicity | .034 | .009 | .153*** | 3.699 |
| Sexuality | -.043 | .012 | -.150*** | -3.618 |
| Perceived Realism | .054 | .041 | .061 | 1.326 |
| NPSR | .036 | .004 | .390*** | 8.500 |
| NPSR*Perceived Realism | .024 | .030 | .034 | .802 |
| R Square: | .187 | | | |
| Adjusted R Square: | .178 | | | |

13

| | | | | |
|---|---|---|---|---|
| Constant | .902 | .007 | - | 130.942 |
| Gender | .008 | .009 | .040 | .909 |
| Ethnicity | .036 | .010 | .162*** | 3.740 |
| Sexuality | -.040 | .012 | -.143*** | -3.251 |
| Perceived Variety | -.014 | .015 | -.040 | -.929 |
| PPSR | -.020 | .005 | -.202*** | -4.409 |

| | | | | |
|---|---|---|---|---|
| PPSR* Perceived Variety | .031 | .016 | .086 | 1.906 |
| R Square: | .098 | | | |
| Adjusted R Square: | .087 | | | |
| 14 | | | | |
| Constant | .907 | .007 | - | 137.984 |
| Gender | -.001 | .008 | -.003 | -.073 |
| Ethnicity | .033 | .009 | .151*** | 3.675 |
| Sexuality | -.043 | .012 | -.152*** | -3.663 |
| Perceived Variety | -.017 | .015 | -.048 | -1.153 |
| NPSR | .035 | .004 | .376*** | 8.592 |
| NPSR* Perceived Variety | -.015 | .013 | -.047 | -.1.095 |
| R Square: | .188 | | | |
| Adjusted R Square: | .178 | | | |

*Note: * p < .05, ** p < .01, *** p < .001*

Table 6

*Summary of Regression Analysis for predicting Desired Social Distance with MTF transgender people (SD_MTF) (N=460)*

| Model | B | SE B | β | t |
|---|---|---|---|---|
| 1 | | | | |
| Constant | 9.499 | .368 | - | 25.835 |
| Gender | .019 | .175 | .005 | .107 |
| Ethnicity | .278 | .194 | .067 | 1.434 |
| Sexuality | -.472 | .225 | -.088 | -1.853 |
| PPSR_MTF | -.165 | .089 | -.088 | -1.855 |
| R Square: | .022 | | | |
| Adjusted R Square: | .013 | | | |

| 2 | | | | |
|---|---|---|---|---|
| Constant | 7.544 | .274 | - | 27.512 |
| Gender | -.125 | .172 | -.034 | -.726 |
| Ethnicity | .252 | .188 | .061 | 1.337 |
| Sexuality | -.443 | .247 | -.082 | -1.796 |
| NPSR_MTF | .438 | .080 | .255*** | 5.491 |

R Square: .076

Adjusted R Square: .068

*Note: * p < .05, ** p < .01, *** p < .001*

Table 7

*Summary of Regression Analysis for predicting Desired Social Distance with FTM transgender people (SD_FTM) (N=100)*

| Model | B | SE B | β | t |
|---|---|---|---|---|
| 1 | | | | |
| Constant | 6.563 | 1.232 | - | 12.984 |
| Gender | 1.211 | .564 | .209* | 2.146 |
| Ethnicity | 1.663 | .593 | .273** | 2.803 |
| Sexuality | -.527 | .678 | -.076 | -.777 |
| PPSR_FTM | .133 | .311 | .041 | .427 |
| R Square: .153 | | | | |
| Adjusted R Square: .116 | | | | |
| 2 | | | | |
| Constant | 4.577 | .942 | - | 4.861 |
| Gender | .852 | .553 | .147 | 1.542 |
| Ethnicity | 1.644 | .566 | .270** | 2.903 |
| Sexuality | -.786 | .654 | -.114 | -1.203 |
| NPSR_FTM | .775 | .261 | .280** | 2.976 |
| R Square: .225 | | | | |
| Adjusted R Square: .192 | | | | |

*Note: * p < .05, ** p < .01, *** p < .001*

**Figures**

Figure 1.

*Interactive Effect of Number of Characters Known on "NPSR-Transphobia" Regression*

Figure 2.
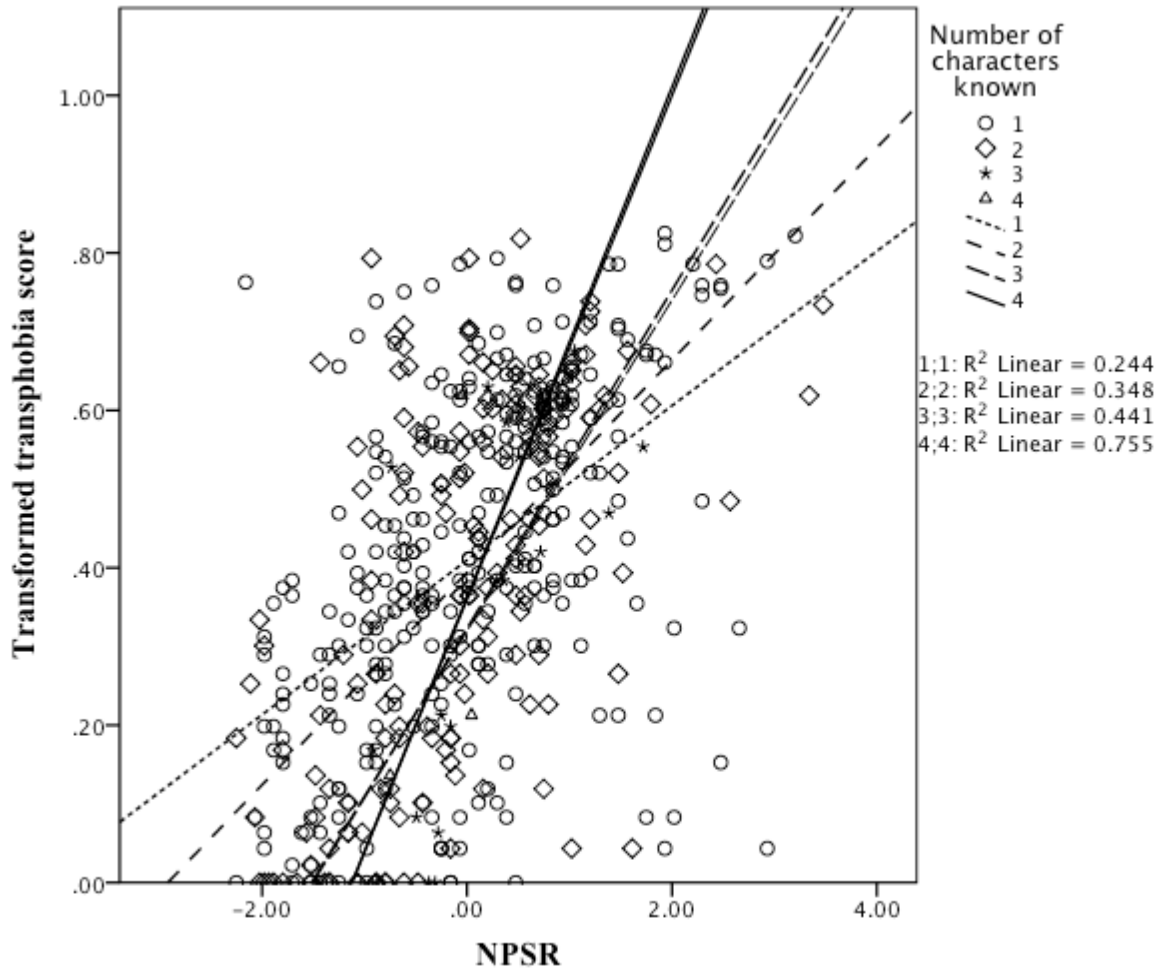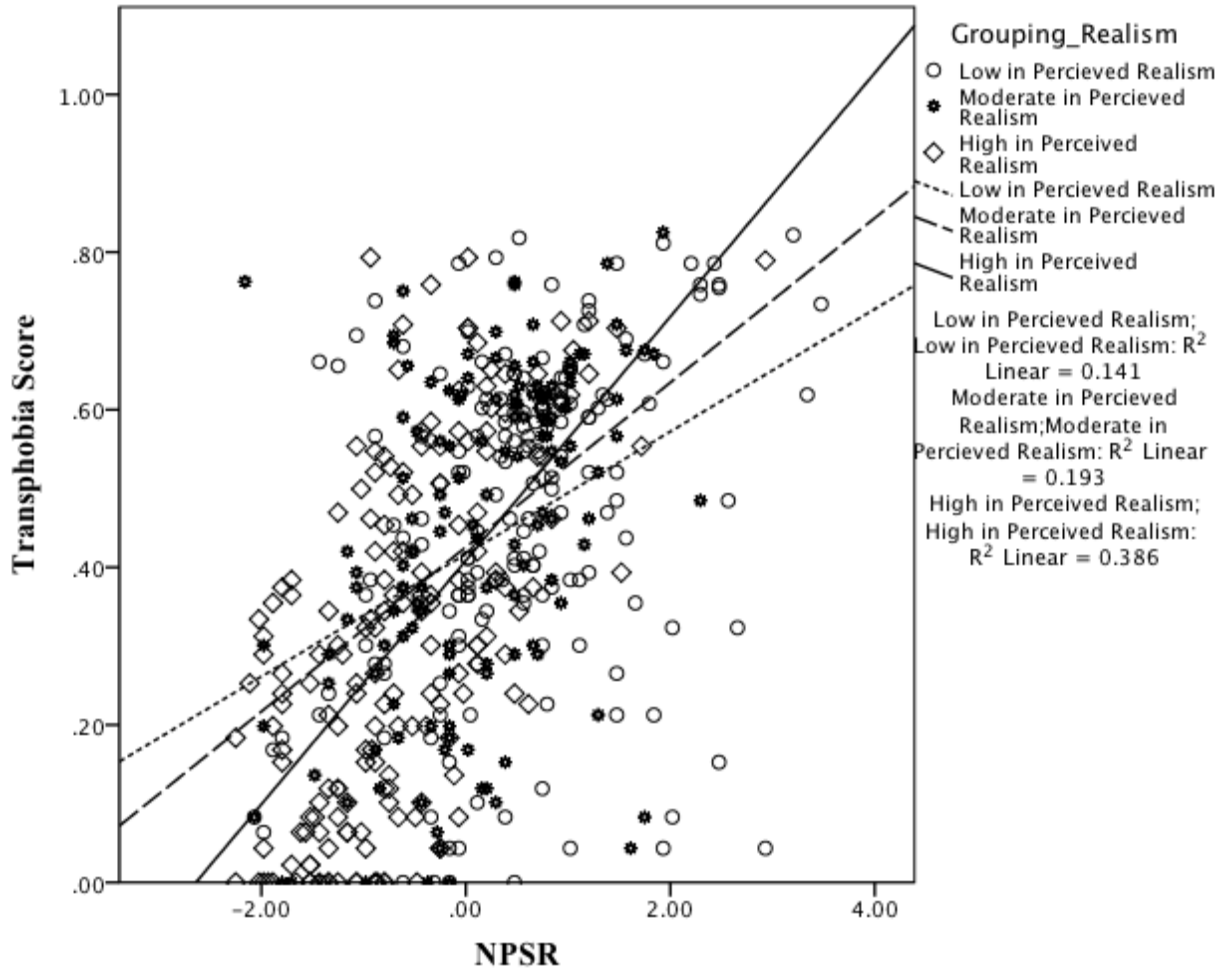
*Interactive Effect of Perceived Realism on "NPSR-Transphobia" Regression*

Figure shows a scatter plot with NPSR on the x-axis (ranging from -2.00 to 4.00) and Transphobia Score on the y-axis (ranging from .00 to 1.00).

**Grouping_Realism**
- ○ Low in Percieved Realism
- ✳ Moderate in Percieved Realism
- ◇ High in Perceived Realism
- ⋯ Low in Percieved Realism
- – Moderate in Percieved Realism
- — High in Perceived Realism

Low in Percieved Realism; Low in Percieved Realism: $R^2$ Linear = 0.141
Moderate in Percieved Realism;Moderate in Percieved Realism: $R^2$ Linear = 0.193
High in Perceived Realism; High in Perceived Realism: $R^2$ Linear = 0.386

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