

INTERPERSONAL ATTRACTION AS A FUNCTION
OF ATTITUDE SIMILARITY AND AGGRESSION

by

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LIST OF ABBREVIATIONS

Abbreviation	Description
BPAQ	Buss Perry Aggression Questionnaire
IJS	Interpersonal Judgement Scale
IPV	Intimate Partner Violence

ABSTRACT

The attitude similarity effect is one of the most replicated paradigms of interpersonal attraction. Strangers with similar attitudes are found to be attractive compared to those with dissimilar attitudes. Previous research has found that this phenomenon does not occur with personality traits. Aggression may influence interpersonal attraction in a negative manner. The current study aims to understand if we find similar strangers attractive if they also have aggressive tendencies. 258 undergraduate students took a 14 item attitude survey and Buss Perry Aggression Questionnaire. Attitude similarity was manipulated as similar or dissimilar and aggression was manipulated to be aggressive or non-aggressive. Results suggest that participants prefer a similar and aggressive stranger over a dissimilar and non-aggressive stranger. Future studies may look into mediators of similarity to understand potential reasoning for this occurrence.

I. INTRODUCTION

Interpersonal attraction can be influenced by many factors. One of the most established influential factors is attitude similarity. When people have similar attitudes, it is possible to believe that disputes never occur; however, the reality is friends fight. Friends can openly disagree with each other, argue and even resort to hitting another over a dispute. When friends act aggressively, there is a possibility of continuing the friendship. It is under this notion that aggression is likely to be another factor that influences interpersonal attraction. Why is it that we choose friends with aggressive tendencies or in other words do we sometimes find them to be attractive despite being aggressive?

Attitude Similarity and Interpersonal Attraction

Byrne's interpersonal attraction research and theory has a potential explanation for this dilemma (Byrne, 1961). Byrne suggests that the relationship between two individuals can be predicted in basis of attitude similarity. The more similar we are to a person, the more we will find them attractive. Byrne's first experiment sought to understand the strength of the similarity effect as well as differences based on the importance of the items on the attitude survey.

In Byrne's research, attitude surveys were administered to participants to fill out. Participants were told to come back two weeks later to evaluate another survey completed by a student in another class. In fact, these surveys were not completed by students, but by Byrne and his assistants. Participant surveys were used to manipulate a fake stranger's survey that portrayed one of four conditions; similar attitudes, dissimilar attitudes, similar on important attitudes and similar on unimportant attitudes. Important

and unimportant items were determined by a pilot study run prior to the experiment. Items deemed important consisted of religion and premarital sex. Unimportant items consisted of attitudes towards music and television programs.

Participants were handed back their manipulated survey and instructed to report their evaluations of the stranger in 6 categories using a 7-point scale. When participants were presented strangers with similar attitudes, participants would report higher attraction. Participants that received dissimilar surveys reported to be less attracted to the stranger. This demonstrated that we prefer people that share similar attitudes to our own (Byrne, 1961).

The similarity effect is a simple phenomenon at first glance, however, there is some controversy over why we become more attracted to individuals that share similar attitudes. Byrne's explanation suggests a mediating effect of positive affect. That is, we associate the stranger with positive feelings or emotions (Byrne & Clore, 1970). Aronson and Worchel (1966) explained that the similarity effect was mediated by inferred attraction. When we are rating attraction for similar strangers, we assume that they will like us back. The opposite can be true; we dislike dissimilar people because we believe they would not like us as well. More recently, Montoya and Horton (2004) have proposed that we cognitively evaluate the stranger. When the stranger's survey was manipulated to be similar, participants believe them to be better leaders and more successful overall. This cognitive evaluation has been referred to as feelings of respect towards the stranger in some research (Singh, Chen & Wegener, 2014).

Previous work has sought to understand which mediating variables are associated with the similarity effect. The answer might not be as simple as there being only one

variable. Research by Singh, Yeo, Lin, & Tan (2007) measured all three of these mediating variables at the same time. Attitude similarity had a positive effect on positive affect, inferred similarity, and respect. Each of these mediating variables also had a positive effect on attraction. The strength of the mediating variable depended on what order each of these three variables was presented.

The most recent research by Singh, Chen and Wegener (2014) examined the three mediating variables in all six possible combinations to understand which mediating model best fit the similarity effect. Two experiments were conducted. The first tested each of these mediating variables separately. Inferred attraction was found to be a stronger mediator than positive affect and respect. The second experiment tested the mediating variables in different orders. One of their findings suggests that each mediating variable consists of a separate process from interpersonal attraction. They also found that multiple models were able to fit the data. Thus, we can assume that all mediating variables are involved with attitude similarity.

Although the mediation explanation has not been fully explored, the similarity effect has been consistently replicated during multiple studies. Certain research included the addition of different variables to examine their effect on attraction (Byrne, 1971). Variables such as self-esteem (Gonzales, Davis, Loney, LuKens & Junghans, 1983), proximity of distance, (Davis, 1984), racial prejudice (Byrne & Wong, 1962), and real and assumed similarity of spouses (Byrne & Blaylock, 1963) have been looked at in the context of attitude similarity. In addition, some research has looked at the function of negative characteristics on interpersonal attraction (Novak & Lerner, 1968; Ajzen, 1974).

Novak and Lerner (1968) investigated how participants would view emotionally

disturbed individuals that displays similar or dissimilar attitudes. Participants took an attitude survey, then received an attitude survey which was manipulated to be either similar or dissimilar. In addition, the participants were randomly assigned to be in one of two conditions to evaluate: an emotionally disturbed stranger (recently having to be hospitalized for a nervous breakdown) or typical stranger (presented with the attitude survey with no additional baggage). Their results demonstrated that participants were not attracted to emotionally disturbed strangers, even when they reflected similar attitudes. Even further, participants were more willing to interact with a dissimilar normal stranger.

Different research in interpersonal attraction consisted of using personality traits instead of opinion statements. Ajzen (1974) had participants complete a personality inventory instead of the typical attitude survey. Using the fake stranger paradigm, personality traits (dissimilar vs. similar) and affective value (positive vs. negative) were manipulated. Similarity had no significant effect in terms of personality traits. Participants rated strangers that were portrayed as positive more attractive, ignoring shared similarities in personality traits. These findings suggest that attitude similarity is only related to attraction due to an association with affective value.

Although there is an understanding that positive affect plays a mediating role in similarity effect, there are other variables that were not accounted for in this experiment. Current research that incorporates all the mediating variables show that when each mediating variable is included, attitude similarity still has an effect on attraction (Singh, Chen & Wegener, 2014). In addition, there have been times where positive affect had a negative regression coefficient when used as a predictor for attraction along with attitude similarity, respect, and inferred attraction (Singh, Yeo, Lin, & Tan, 2007).

From this, we can suggest that there are some mixed findings on how negative traits or personalities affect attraction. According to Byrne's interpersonal attraction theory we should rate those who are similar to us more attractive (Byrne, 1961). Other research has shown that in regard to personality traits or being emotionally stable, attitude similarity is shown to have no effect (Ajzen, 1974; Novak & Lerner, 1968). Although some research has focused on negative traits, there has not been enough research to distinguish what negative traits are considered unattractive.

Aggression and Interpersonal Attraction

One variable that has not been thoroughly examined in relation to interpersonal attraction is aggression. Aggression can be defined as a hostile behavior that causes physical and/or psychological harm to another person (Card, Stucky, Sawalani, & Little, 2008). Aggression is relevant in many different areas of psychology including abnormal, cognitive, personality, social and biological psychology. Aggression is a broad category, so much, that using the term "aggression" by itself is not sufficient to describe the vast quantity of behaviors aggression entails.

Types of aggression can be broadly categorized as either direct or indirect. Direct aggression is defined as any act face to face action intended to cause harm to a person (Card et al., 2008). This can be either physical, verbal, or relational. Physical aggression involves any act that hurts another person through means of hitting, kicking, shoving, or use of weapons (Card et al., 2008). This form of aggression is the most commonly used in research. Results typically show gender differences in that males are more likely to enact physical aggression than females (Vandello, Ransom, Hettinger, & Askew, 2009). Verbal aggression is the act of attacking another person through words or gestures.

Yelling at another person would be an act of verbal aggression. Relational (also known as social) aggression is any behavior that damages feelings of love and acceptance in a peer. Relational aggression is relevant in both peer and romantic relationships. An example of this is refusing to love a person if they continue to associate themselves with somebody regarded as undesirable. Both verbal and relational aggression are reported to not have gender differences (Card et al., 2008).

Indirect aggression is the act of using non-physical means to harm another person. These acts can be either verbal or relational (Card et al., 2008). An act of indirect verbal aggression might be spreading gossip around the office to hurt somebody's reputation. An example of this would be emotionally manipulating a friend by acting in a vague or confusing manner. It is also important to note that relational aggression is always pertaining to relationships. It is possible that these behaviors are verbal, non-verbal, direct or indirect.

Other types of aggression are impulsive and instrumental aggression. Impulsive aggression, also known as reactive or emotional aggression, is unplanned aggression driven by affect. This type of aggression can be seen in clinical populations such as those with intermittent explosive disorder or borderline personality disorder (Schmahl, Vermetten, Elzinga & Bremner, 2003). However, it is possible for typically developing populations to display this type of aggression. For example, if a person were to catch their spouse cheating on them, said person might react out of line, instantaneously leading to an act of aggression.

Instrumental, also known as proactive, aggression on the other hand is aggression planned with the lack of emotion. This type of aggression is thought to be purposeful and

used to achieve something desired like money or power. Manipulating others to obtain their goals is more preferable than direct physical aggression in most cases. Instrumental aggression is exhibited by psychopathic individuals. This population is defined as having a lack of guilt, empathy, no fear of negative consequences, being charming, and manipulative (Glenn & Raine, 2009). An example of instrumental aggression would be a man sabotaging his co-worker to make himself look better for a promotion.

Aggression often has negative consequences in relationships. In romantic relationships aggression can affect the quality of the relationship and the psychological adjustment of both parties (Coffey, Leitenberg, Henning, Bennett & Jankowski, 1988). Although there are many types of aggression, a majority of research that pertains to romantic relationships measures physical aggression. Relational, verbal, and physical aggression are distinct constructs. Physical aggression is instrumental when looking at aggression in relationships, however, relational aggression can occur without the presence of physical aggression (Werner & Crick, 1999).

Gender is an important variable to consider when examining different constructs of aggression. Physical aggression is reported to be more common among males. However, when relational aggression is examined alone, findings indicate that there are no gender differences. Men and women report themselves using the same level of romantic relational aggression (Linder, Crick, & Collins, 2002).

Negative consequences of aggression occur not only with romantic relationships; peer relationships are also affected. Adolescents that experience relational aggression in peer groups are associated with loneliness, depression, and peer rejection (Crick & Grotpeter, 1995). In college students, relational aggression with peers was associated

with peer rejection, antisocial behavior, depression, eating disorders (Werner & Crick, 1999). From middle childhood to young adults, it was shown that aggression is commonly used in relationships. Is there an underlying reason why we have relationships with aggressive individuals even though it may prove to be detrimental to our well-being?

In previous studies participants found aggression to be undesirable. Typically, in survey work, participants will rate aggression as unattractive (Arriaga, Catezza, & Daly, 2015; Vandello, Ransom, Hettinger, & Askew, 2009). Aggression was also found to be undesirable in behavioral studies. One study manipulated aggression behaviorally by having a fake stranger administer doses of voltage onto participants (Hendrick & Taylor, 1971). This research demonstrates when paired up with an aggressive opponent (one that would increase the voltage more often), participants would not only respond aggressively back (increasing the voltage) they would also rate their opponent as unlikable. There has been a lack of studies on how aggression behaviorally affects interpersonal attraction, most of the literature consists of self report and vignettes.

Similar research demonstrates that we tolerate our romantic partner being aggressive over a stranger. When participants read a conflict scenario and inserted themselves with either a stranger or their partner, results showed that participants were willing to tolerate aggression in their partner more than in a stranger (Arriaga, Catezza, & Daly, 2015). Additional research has looked at male misperceptions of aggression and its effect on attraction to the opposite sex. Women rated the aggression trait as undesirable while men overestimated how attracted women were to aggression. In addition, men incorrectly assumed women would find violence against other men more

attractive than walking away from a fight (Vandello et al., 2009).

The transition from peer to romantic aggression is not tenuous. There are many similarities shared between these types of aggression and some studies suggest there might be a connection between the two. Aggression in both peer and romantic relationships can have negative consequences for quality of the relationships and the psychological adjustment of both people involved (Crick and Grotpeter, 1995; Prather, Dahlen, Nicholson, & Bullock-Yowell, 2012).

Intimate partner violence (IPV) is typically associated with physical violence, such as assaulting a spouse or loved one, however, relational aggression has been shown to be a predictor of traits (anger, acceptance of violent behavior, and sex role attitudes) related to IPV (Prather, Dahlen, Nicholson & Bullock-Yowell, 2012). IPV is understood to be a serious public health problem with such consequences as chronic injuries, traumatic stress, depression, anxiety, substance abuse, and physical symptoms (Johnson & Bunge, 2001).

Crick and Grotpeter (1995) ran an assessment for relational aggression focused on gender differences and social-psychological adjustment. Their sample consisted of children in third to sixth grade. Children who were relationally aggressive were disliked by their peers more than children who were not relationally aggressive. Children that were relationally aggressive reported being lonelier and depressed more than their peers with low relational aggression. When feelings of acceptance are considered, relationally aggressive children perceive themselves more negatively and isolated compared to children that report low relational aggression.

A longitudinal study following children from their early adolescence until early adulthood suggests that there is a connection between early peer relational/physical aggression and romantic relational aggression. This study observed aggressive behavior of 662 children from the age of 12 until the age of 18. More specifically, the researchers targeted early relational and physical aggression in peer relationships and later relational aggression in romantic relationships. Peer and romantic relational aggression were all self-report measures. In addition, the length of their romantic relationships was also recorded (Woodin, Sukhawathanakul, Caldeira, & Homel, 2016).

The results of the longitudinal study demonstrated that early peer relational and physical aggression significantly predicted romantic relational aggression when the participants were older. No gender differences were found, showing that both male and female participants that engaged in peer relational aggression were also likely to engage in romantic relational aggression. This was surprising due to the researchers involving physical aggression as a predictor. Girls were significantly less likely than boys to engage in physical aggression against their peers. The study concludes that no matter the level of aggression the participants engaged in, it was likely to be associated with romantic relational aggression.

Other findings suggest that people with aggressive personalities perceive more hostility in others. In a study where participants watched movies in three conditions (aggressive, ambiguously aggressive, and not aggressive), it was shown that participants with an aggressive personality perceived more hostility from the ambiguous and aggressive conditions than did nonaggressive participants (Dill, C. Anderson, K. Anderson, & Deuser, 1997).

Although we view aggressive people as undesirable, there is a possibility of finding them attractive if they share similar attitudes. Group membership might explain this phenomenon. It is shown that we like people with whom we share group membership, this is because in-group members typically share beliefs and attitudes more often than out-group members (Brewer, 1979). Participants may show leniency towards aggressive and similar strangers that are part of their in-group rather than an out-group. Previous work has shown that people consider others with similar attitudes and who are part of the in group to be desirable. In addition, if strangers are shown to have dissimilar attitudes after being established as an in-group member, then participants will rate them as less attractive (Chen & Kenrick, 2002). Group membership may prove fruitful in exploring how aggressive strangers are evaluated.

A pilot study was conducted using the same variables as in the current experiment. Attitude similarity and level of aggression were manipulated. Results showed that participants preferred attitudinally similar and low aggressive strangers over those who were attitudinally dissimilar and high in aggression. There was a marginally significant difference between participants in the similar attitude/high aggression and dissimilar attitude/low aggression conditions. Participants rated those in the similar attitude/high aggression condition as more attractive than those in the dissimilar attitude/low aggression condition. This pilot study consisted of a small sample size, and the current study was designed in part to understand the relationship between these two conditions (Pacaiiller, Davis, & Tooley, 2016).

In the present study, level of aggression and attitude similarity were investigated to determine their influence on interpersonal attraction. The focus of the current study

was on peer relationships (attraction towards a stranger with the same gender as the participant). Previous work has demonstrated that there was no bias between males and females when they report how aggressive a stranger of their own gender was (Hammock, Richardson, Lamm, Taylor, & Verlaque, 2016). There is a possibility that participants will find aggression unacceptable in strangers with similar attitudes. In addition, the current study was designed to replicate the previous findings of attitude similarity on attraction.

Three hypothesis were developed. First, we hypothesized that participants would rate strangers more attractive when they exhibit similar attitudes than when they exhibit dissimilar attitudes. Second, we predicted the strangers that display high levels of aggression would be less attractive than those are that display low levels of aggression. Third, we hypothesized that percent of attitude similarity would have a greater impact on interpersonal attraction than level of aggressiveness. Therefore, we predicted that participants would rate strangers with similar attitudes more attractive even when the strangers are portrayed as aggressive. Participants may view strangers with similar attitudes as part of their own group and overlook any negative influence aggression might have over their attraction ratings.

II. METHOD

Participants

Participants consisted of 258 students (201 female) recruited from college courses and offered credit for their research participation. The age range of participants was from 18 to 35. The classification of participants consisted of 148 freshmen, 74 sophomores, 31 juniors, and 5 seniors. Participants were recruited through the SONA system, a software system that offers opportunities to volunteer for various experiments and receive credit in their classes. Students who chose not to participate in research had an option to write a research article summary for an equivalent amount of credit.

Research Design

The study used a 2 x 2 between subject's factorial design. Percent of attitude similarity and level of aggression were manipulated to observe how it affects attraction. Participants were randomly assigned to one of 4 conditions: similar attitude/high aggression ($n = 64$), similar attitude /similar low aggression ($n = 64$), dissimilar attitude /high aggression ($n = 65$), dissimilar attitude /low aggression ($n = 65$).

Materials and Instruments

The Buss Perry Aggression Questionnaire (BPAQ) consists of 29 items and is used for assessing hostility and aggression. It includes four subscales: physical aggression, verbal aggression, anger and hostility (Buss & Perry, 1992). Items are scored on a likert scale from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). The current study used the physical and verbal aggression subscales. All together, the questionnaire for the current study contained 14 items. The physical subscale contained 9 items and the Verbal subscale contained 5 items. These subscales were to

portray physical and verbal aggression. The intention of using direct measures of aggression is to clearly portray the bogus stranger as an aggressive individual.

We might assume that relational aggression plays a role with attraction. For the current experiment, it was decided to exclude relational aggression. One reason being that a number of studies on relational aggression tend to focus on adolescents or young adults (Crick and Grotpeter, 1995; Woodin, Sukhawathanakul, Caldeira, & Homel, 2016). Most measures of relational aggression are not reliable for adults. There are some methods to measure relational aggression in adults, such as using the Self-report measure of aggression and victimization and the Adult Romantic Relationship Questionnaire (Linder, Crick, & Collins, 2002), or by using 7 items on the Peer Assessment of Relational Aggression and Social Adjustment questionnaire (Werner & Crick, 1999). A problem with these measures is that some of them rely on peer nominations, observations and teacher-report methods (Crick et al., 2007). Due to these circumstances, it was decided using the physical and verbal subscales of the Buss-Perry aggression questionnaire would be more appropriate for portraying aggression in this experiment.

Participants completed the 14 item Survey of Attitudes as a measure of attitude similarity. This assessment tool is used to obtain the attitudes of participants for a collection of topics. One topic, for example, is attitude towards political party. The participants are given six responses that range from showing strong support for democrats to showing strong support for republicans. Items on this survey were directly taken from Byrne's 56-item attitude survey (Byrne, 1961; Byrne, 1971). The items in the survey were identified as the most relevant to the present time.

The number of items on the survey were decreased to 14 to be congruent with the

two subscales of the BPAQ. Previous research has found that attitudes can accurately be manipulated using a Survey of Attitude with 4, 8 or 16 items (Gouaux & Lamberth, 1970). The number of items on the survey is not relevant to reproduce the similarity effect as long as there is a minimum of four items.

Participants attraction rating was measured using the Interpersonal Judgment Scale (IJS). This is a 6 item survey with a rating scale from one to seven. (Byrne, 1961). Participants are asked how they feel about their stranger on six different topics. The first four on the IJS are filler items. The last two items; how participants felt about the stranger and their willingness to cooperate in an experiment, are the measures of attraction. The other four items evaluate the stranger's intelligence, knowledge of current events, morality, and adjustment.

Procedure

When participants came to the lab, they were briefed about participating in an experiment that assessed the general attitudes of undergraduates at Texas State University. After completing the informed consent form, they were instructed to complete the 14 item attitude survey and the two subscales of the BPAQ. Afterwards they were asked to read an article while the researcher's assistant selected a previous student for the participant to evaluate. This "student's" survey was actually completed to be either attitudinally similar or attitudinally dissimilar to the participants' answers on the survey of attitudes. The BPAQ is randomly assigned to be aggressive or non-aggressive. While the participant was reading the article the research assistant created the bogus survey.

Surveys were randomly manipulated to be in one of four conditions: similar/high aggression, similar/low aggression, dissimilar/high aggression, and dissimilar/low

aggression. In the similar condition, the survey was manipulated to show that the stranger had similar attitudes by marking the item one away and on the same side of the attitudinal issue. The dissimilar condition was created by marking the survey three items away from the participants' answer. All fourteen items were manipulated the same depending on the condition providing conditions of 100% similarity or 0% similarity.

To manipulate aggression, The BPAQ was filled out prior to the experiment. These surveys were manipulated to shown either high or low aggression. For the high aggression condition, 6 out of the 9 answers were the most aggressive answer on the physical aggression subscale. The rest of the physical subscale was rated the second most aggressive response. The verbal subscale contained 3 of the most aggressive answers while the remaining 2 was the second most aggressive response. The same method was used to manipulate low aggression by using the least and second least aggressive responses.

The participants then received a packet containing the manipulated attitude survey and BPAQ. In addition, they received the IJS to rate their attraction towards the stranger. The measure of attraction was a combined score of the last two items on the IJS. The lowest rating of attraction was a 2 while the highest rating was a 14. When the participants were finished, they were thanked and debriefed about the experiment.

Analytic Strategy

A two-way ANOVA was conducted to examine the effect of attitude similarity (similar vs. dissimilar) and aggression (high vs. low) on attraction ratings of the stranger. The main effects of attitude similarity and aggression were investigated as well as any potential interaction.

In addition to the main analysis on attraction ratings of the stranger, two-way ANOVAs were conducted on the filler items on the IJS. These analyses include intelligence, knowledge of current events, morality, and adjustment of the stranger. These additional analyses examine whether the similarity paradigm holds true using other factors than attraction.

III. RESULTS

Correlation and Descriptive Statistics

Correlations were run between items on the Interpersonal Judgment Scale (Table 1). Overall, each of the items was related to each other. Intelligence had a significant moderate positive relationship with knowledge of current events ($r(255) = .45, p < .05$), morality ($r(255) = .56, p < .05$), adjustment ($r(255) = .47, p < .05$), personal feelings ($r(255) = .63, p < .05$), and working together in an experiment ($r(255) = .52, p < .05$).

Knowledge of current of events had a significant moderate positive relationship with morality ($r(255) = .32, p < .05$), adjustment ($r(255) = .35, p < .05$), personal feelings ($r(255) = .40, p < .05$), and working together in an experiment ($r(255) = .41, p < .05$).

Morality had a significant moderate positive relationship with adjustment ($r(255) = .52, p < .05$), personal feelings ($r(255) = .69, p < .05$), and working together in an experiment ($r(255) = .61, p < .05$). Adjustment also had a significant moderate positive relationship with), personal feelings ($r(255) = .55, p < .05$), and working together in an experiment ($r(255) = .59, p < .05$). There was a significant correlation between personal feelings and working together in an experiment ($r(255) = .74, p < .05$). Responses on the Personal Feelings and Working Together items were added together to provide the attraction score.

Table 1

<i>Correlations between IJS items</i>						
	1	2	3	4	5	6
1. Intelligence	—					
2. Knowledge of current events	.445*	—				
3. Morality	.561*	.322*	—			
4. Adjustment	.469*	.353*	.522*	—		
5. Personal feelings	.628*	.400*	.686*	.551*	—	
6. Working together in an experiment	.519*	.408*	.608*	.592*	.735*	—

* indicates correlation is significant

Attraction ratings were accounted for each of the four conditions (Table 2):

Similar/high aggression ($M = 8.64$, $SD = 2.53$), similar/low aggression ($M = 11.42$, $SD = 1.61$), dissimilar/high aggression ($M = 4.44$, $SD = 2.21$), and dissimilar/low aggression ($M = 6.48$, $SD = 2.77$).

Table 2

Descriptive Statistics

	Similar/High Aggression	Similar/Low Aggression	Dissimilar/High Aggression	Dissimilar/Low Aggression
Attraction	8.64	11.42	4.44	6.48
Rating	(2.53)	(1.61)	(2.21)	(2.77)
Intelligence	4.68	5.47	3.53	4.08
	(.87)	(.89)	(1.02)	(1.01)
Knowledge of	4.38	4.59	3.34	3.88
Current Events	(1.12)	(1.31)	(1.06)	(1.22)
Morality	4.50	6.02	2.63	4.40
	(1.36)	(.81)	(1.16)	(1.46)
Adjustment	3.92	5.23	2.86	3.69
	(1.44)	(1.33)	(1.23)	(1.33)

Standard Deviations appear in parentheses below means

Main Results

For the three main hypothesis three outcomes were expected: we predicted a main effect for attitude similarity, a main effect for aggression, and that strangers in the similar/high aggression condition will be rated significantly more attractive than the dissimilar/low aggression condition. A two-way ANOVA was run for levels of aggression (high vs low) and attitude similarity (similar vs dissimilar) on attraction ratings (Figure 1). There was no significant interaction between aggression and attitude similarity ($F(1, 253) = 1.637, p > .05$).

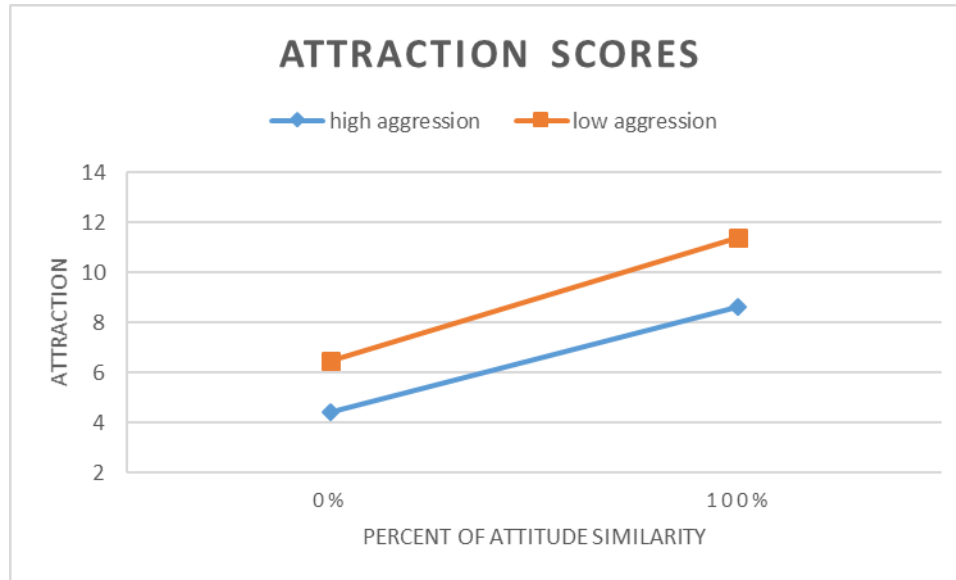


Figure 1: Main effects of aggression and attitude similarity on attraction scores

Hypothesis One

The first hypothesis on the main effect of attitude similarity was supported. There was a significant main effect for attitude similarity in regards to attraction ratings, $F(1, 253) = 248.90, p < .001, \eta^2 = .50$. Participants rated strangers in the similar condition more attractive ($M = 10.03, SD = 2.53$) than strangers in the dissimilar condition ($M = 5.47, SD = 2.70$).

Hypothesis Two

The second hypothesis on the main effect of aggression was also supported. There was a significant main effect for aggression in regards to attraction ratings, $F(1, 253) = 69.12, p < .001, \eta^2 = .215$. Participants rated strangers in the high aggression condition less attractive ($M = 6.54, SD = 3.17$) than strangers in the low aggression ($M = 8.93, SD = 2.77$).

Hypothesis Three

The last hypothesis was also supported. A t-test was run between the similar/high aggression group and the dissimilar/low aggression group. Those in the similar high aggression condition were rated more attractive ($M = 8.64$, $SD = 2.53$) than those in the dissimilar low aggression condition ($M = 6.48$, $SD = 2.77$), $t(127) = 4.629$, $p < .05$.

Additional Analysis

Additional tests were run on the four filler items of the IJS (intelligence, knowledge of current events, morality, and adjustment) as an outcome measure. These filler items all resembled the findings of the main results.

A two-way ANOVA was run for of aggression (high vs low) and attitude similarity (similar vs dissimilar) on the stranger's intelligence rating (Figure 2). There was no interaction between the aggression and attitude similarity ($F(1,253) = .072$, $p > .05$). There was a significant main effect of aggression ($F(1,253) = 23.75$, $p < .001$). It was shown that those with low aggression ($M = 4.77$, $SD = 1.18$) were thought to be more intelligent than those with high aggression ($M = 4.20$, $SD = 1.16$). There was a significant main effect on attitude similarity ($F(1,253) = 131.73$, $p < .001$). Strangers that were similar ($M = 5.16$, $SD = 3.81$) were thought to be more intelligent than those that were dissimilar ($M = 3.81$, $SD = 1.05$). There was a significant difference between the similar/high aggression condition and the dissimilar/low aggression condition ($t(127) = 4.724$, $p < .05$). The similar/high aggression condition was rated to be more intelligent ($M = 4.86$, $SD = .87$) than the dissimilar/low condition ($M = 4.08$, $SD = 1.01$).

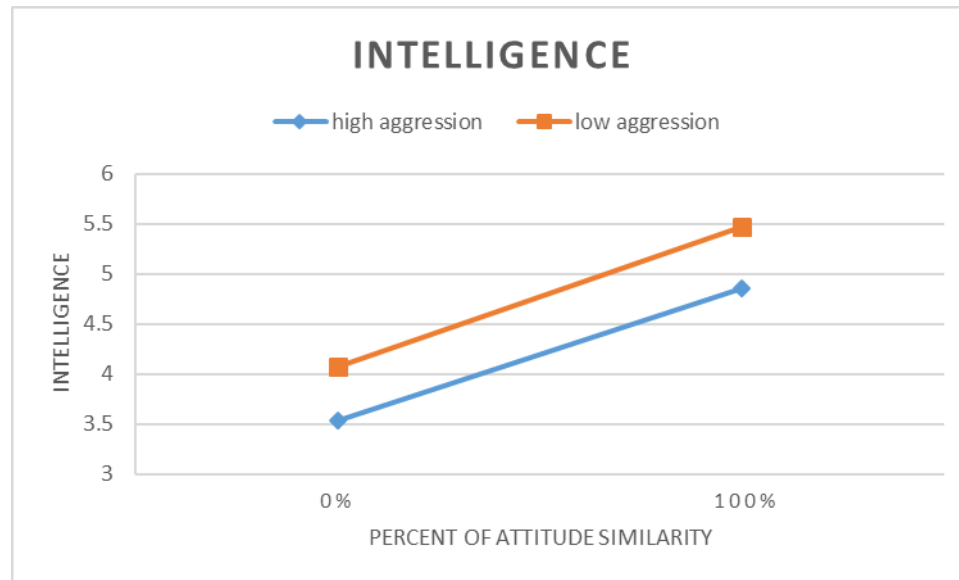


Figure 2: Main effects of aggression and attitude similarity on intelligence ratings

Weaker results were found when knowledge of current events was run as the outcome variable (Figure 3). There was no interaction between the aggression and attitude similarity ($F(1, 253) = 1.14, p > .05$). Two significant main effects were found. There was a significant main effect of aggression ($F(1, 253) = 6.529, p < .05$). It was shown that those with low aggression ($M = 4.23, SD = 1.31$) were thought to have a better understanding of current events than those with high aggression ($M = 3.86, SD = 1.20$). There was a significant main effect on attitude similarity ($F(1, 253) = 35.29, p < .001$). Strangers that were similar ($M = 4.48, SD = 1.22$) were thought to have a better understanding of current events than those that were dissimilar ($M = 3.61, SD = 1.17$). There was a significant difference between participants in the similar/high aggression condition and the dissimilar/low aggression condition ($t(127) = 2.416, p < .05$). Strangers in the similar/high aggression condition were viewed to have a better knowledge of current events ($M = 4.38, SD = 1.12$) than those in the dissimilar/low aggression condition ($M = 3.88, SD = 1.22$).

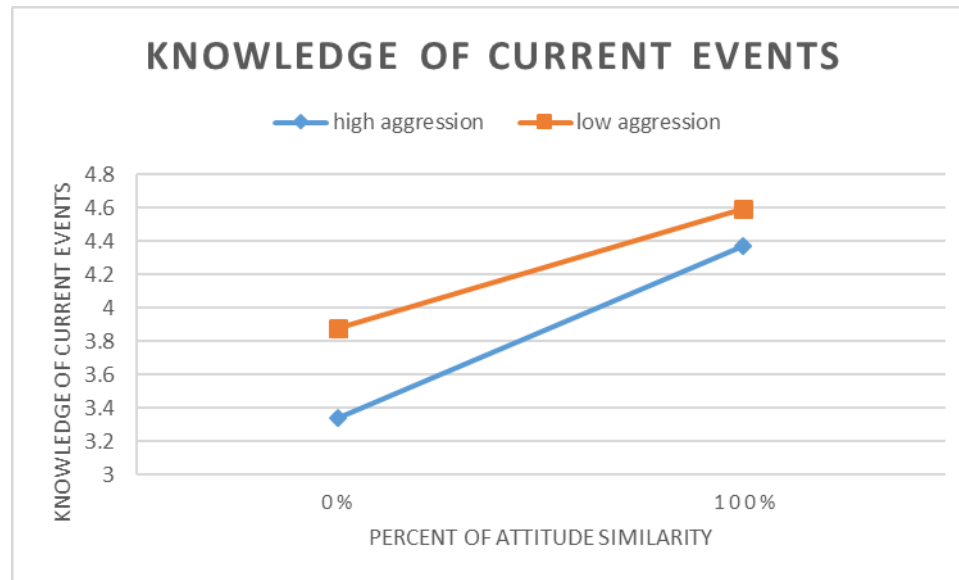


Figure 3: Main effects of aggression and attitude similarity on knowledge of current event ratings

Participants were asked rate the morality of the stranger (figure 4). There was no interaction ($F(1,253) = .72, p > .05$). There were main effects for both aggression ($F(1,253) = 116.535, p < .001$) and attitude similarity ($F(1,253) = 131.13, p < .001$). It was shown that those with low aggression ($M = 5.2, SD = 1.43$) were thought to less immoral than those with high aggression ($M = 3.56, SD = 1.57$). Strangers that were similar ($M = 5.26, SD = 1.35$) were thought to be less immoral than those that were dissimilar ($M = 3.52, SD = 1.59$). An independent t-test was run between the similar/high aggression condition and the dissimilar/low aggression condition. There was no significant difference between these two groups ($t(127) = .403, p > .05$).

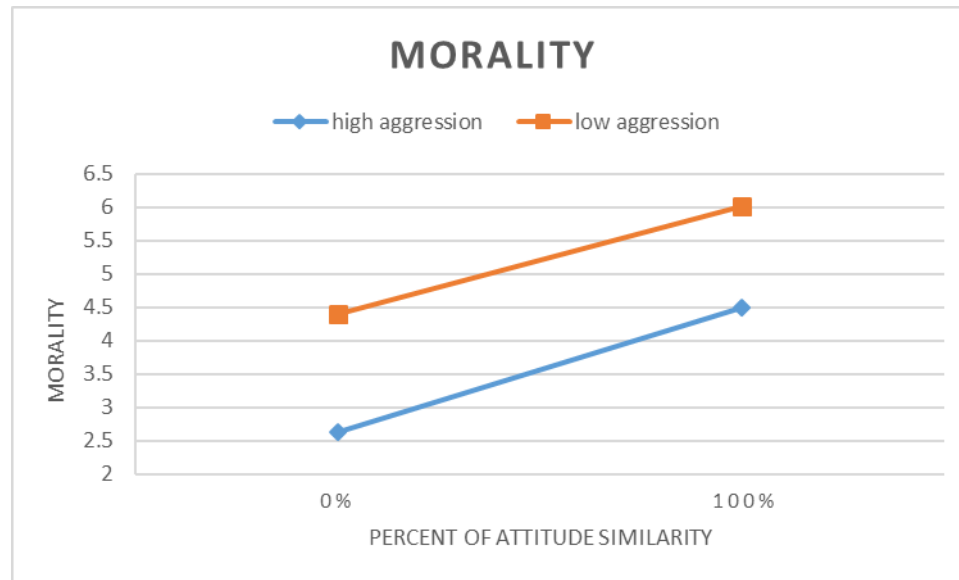


Figure 4: Main effects of aggression and attitude similarity on morality ratings

The last filler item was how well the stranger is adjusted (Figure 5). There was no interaction ($F(1,253) = .207, p > .05$). There were main effects for both aggression ($F(1,253) = 41.41, p < .001$) and attitude similarity ($F(1,253) = 61.03, p < .001$). Those with low aggression ($M = 4.46, SD = 1.54$) were thought to be less adjusted than those with high aggression ($M = 3.39, SD = 1.44$). Strangers that were similar ($M = 4.58, SD = 1.53$) were thought to be less maladjusted than those that were dissimilar ($M = 3.28, SD = 1.35$). There was no significant difference between the similar/high aggression condition and the dissimilar/low aggression condition ($t(127) = .939, p > .05$).

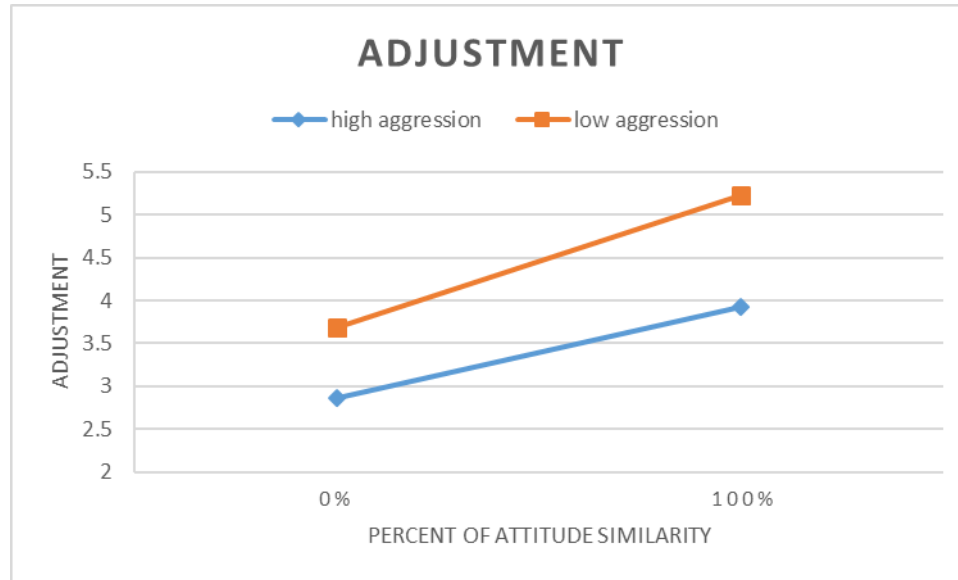


Figure 5: Main effects of aggression and attitude similarity on adjustment ratings

MANOVA

To avoid alpha inflation all 5 dependent variables were run together using a two-way MANOVA. Results revealed significant main effect for similarity, Wilks' $\lambda = .442$, $F(5, 250) = 63.033$, $p < .001$, multivariate = .362. In addition, results indicated a significant main effect for aggression, Wilks' $\lambda = .638$, $F(5, 250) = 28.376$, $p < .001$.

ANOVA was conducted on each of the dependent variables as a follow-up test.

Participants rated similar strangers as more attractive, $F(1, 254) = 251.19$, $p < .001$, $\eta^2 = .50$, as more intelligent, $F(1, 254) = 132.92$, $p < .001$, $\eta^2 = .34$, as having a better knowledge of current events, $F(1, 254) = 36.49$, $p < .001$, $\eta^2 = .13$, as more moral, $F(1, 254) = 133.14$, $p < .001$, $\eta^2 = .34$, and better adjusted, $F(1, 254) = 62.40$, $p < .001$, $\eta^2 = .20$, than strangers that were dissimilar.

Participants rated aggressive strangers as less attractive, $F(1, 254) = 69.84$, $p < .001$, $\eta^2 = .22$, less intelligent, $F(1, 254) = 24.90$, $p < .001$, $\eta^2 = .09$, as having a worse understanding of current events, $F(1, 254) = 7.12$, $p < .001$, $\eta^2 = .03$, as immoral, $F(1,$

254) = 118.43, $p < .001$, $\eta^2 = .32$, and as more maladjusted, $F(1, 254) = 42.54$, $p < .001$, $\eta^2 = .22$, than strangers that were non-aggressive.

IV. DISCUSSION

The purpose of the first hypothesis of this experiment was to replicate previous findings of Byrne's interpersonal attraction research. The current experiment supports Byrne's findings. Participants had a higher attraction score towards similar strangers than dissimilar. These results were expected as this finding has been replicated numerous times. People tend to have an attraction towards others who share the same attitudes.

The second hypothesis was there to explore the influence of the aggression variable. Previous research has shown that aggression in another person is undesirable (Arriaga, Capezza, & Daly, 2015; Vandello, Ransom, Hettinger, & Askew, 2009). The results of the current experiment replicate these findings. Participants were less attracted to strangers that scored high on the BPAQ than strangers with a low rating.

The last hypothesis of the similar/high aggression group having a higher attraction rating than the dissimilar/low aggression group was supported by the results. Of the four conditions, we predicted that the similar/low aggression group would be most attracted to the stranger while the dissimilar/high aggression group would be least attracted to the stranger group. The question was, what group would become rated more attractive when one condition contained something desirable and something undesirable. We predicted that participants would prefer a similar stranger even if the stranger was portrayed as aggressive. This prediction was due in part from the attraction paradigm which has shown that similar attitudes have a strong effect and that aggression was the only negative characteristic of the stranger. Our results show that between the similar/ high aggression and dissimilar/ low aggression participants found the former to be the most attractive.

One way to interpret this finding is that the attitude similarity effect was strong enough that participants partially overlooked the aggression level of the strangers. When we have nothing else on which to judge another person except for their attitudes and aggression ratings, attitude similarity may take an important role in determining attraction. Although aggression is undesirable by itself, when it is paired with attitude similarity, it has the potential to trump the negative associations of an aggressive individual. Perhaps when aggressive people are similar to us, we could believe that their aggression will be directed at somebody other than ourselves.

Another view is that aggression was not extreme enough to compete with the similarity effect. The study by Novak & Lerner (1968) had shown that the results of the attraction paradigm can be nullified by including a variable that was undesirable. Although the current experiment had a similar format, using an undesirable variable along with the similarity effect, the Novak & Lerner study had a different outcome. The undesirable variable they used was if the stranger was admitted to a hospital for a mental breakdown. Although previous research (Arriaga, Cappelz, & Daly, 2015; Vandello, Ransom, Hettinger, & Askew, 2009) as well as the current experiment show that aggression is unappealing, its influence is not enough to determine our attraction when paired with the similarity effect. Future researchers may want to investigate other variables with a social stigma attached to determine if it will negate the attraction paradigm.

Additional tests were run to see how attitude similarity and aggression affected intelligence, knowledge of current events, morality and adjustment. Most of these measures mimicked the main results in the manner of having two main effects of attitude

similarity and aggression. Only two of the four filler items showed a statistically significant differences between the similar/high aggression and dissimilar/low aggression conditions. Strangers that were similar and aggressive were seen as more intelligent and having a better understanding of current events. They were not seen as being more moral or as being more well adjusted.

The aggression variable had its biggest effect size with morality. When assessing a stranger's morality, the participants took aggression into consideration more than any other factor in the study, even attraction. This response seems to be typical. If we assume moral as good actions versus bad actions, it is easy to understand why aggression would be an influential variable. Aggression is thought to be a harmful behavior that harms another person. This existing relationship between aggression and morality may be the reason why the similarity effect was not as strong compared to the other dependent measures.

All the items on the IJS were positively correlated with each other. To simply describe this, the more attracted we are to an individual the more we believe them to be intelligent, more knowledgeable about current events, more moral and well adjusted. These findings coincide with our main results. If we like a person, it comes naturally that we harbor much respect for them. Perhaps these results can be best explained by Montoya and Horton's (2004) cognitive modeling and a mediating effect. If we imagine a stranger we view as desirable, it is possible we create a cognitive representation of them and view them more respectfully. In this case, the representation enables us to infer that this stranger will be intelligent and well adjusted. Of course, The opposite direction as

our mental model of an undesirable person will lack intelligence and have low moral standards.

Limitations

Due to an error with connecting the participant's attitude and aggression survey to their stranger packet there were a number of limitations to the current study. The first being we were unable to run comparisons of gender differences. Gender does not affect the attraction paradigm. However, it is possible gender was a factor on why aggression was undesirable. Research by Vandello et al. (2009) suggested that females found acts of physical aggression to be undesirable while male participants had a misperception on how attractive aggression is. It is possible that there would have been gender differences between males and females.

Some previous research suggests there a lack of gender differences. results show that most gender differences are considerate of a victim and a perpetrator. The Hammock et al. (2016) study had male and female participants look at male and female aggressors. There was no difference between when males rated male aggressors and when females rated female aggressors. The current study did not establish a victim, just an aggressive perpetrator. It was left up to the participant's mental representation of whether the stranger had a role of perpetrator or otherwise.

Another part of the survey that went unused is how aggressive the participant rated on the BPAQ. By using the participant's aggression as a controlled variable it would have been possible to understand how that affected attraction towards the stranger surveys. Would participants that scored high on the BPAQ rate the strangers with a high BPAQ score attractive? If we take the results from the Ajzen (1974) study, we could infer

that aggressive participants would not favor strangers with aggressive tendencies. Their results show that sharing a negative personality trait will not influence attraction. Another possible reasoning for this outcome would be that aggressive participants might perceive that other aggressive people will dislike them even if they share similar attitudes (Dill et al., 1997).

Another limitation of this study is the lack of external validity. On paper, we find people who share similar interests to us desirable, even with some conflicting undesirable factors. These results might prove hard to relate to experiences outside the laboratory. There are plenty of external factors that are hard to control with regard to interpersonal attraction. How does physical attraction compete with attitude similarity? Subjective factors make it difficult to make this research applicable in these real world situations. Further research using a speed dating paradigm (Tidwell, Eastwick, & Finkel, 2013). would be the next step to compensate for the lack of external validity.

Further Studies

One issue these results bring up is how the participants viewed the aggressive strangers. The aggression variable by itself was viewed as undesirable, but paired with attitude similarity, it seemed to be accepted by most participants. One reasoning might be that participants believed that the strangers might not behave aggressively around or towards them. A potential solution for this problem is changing the wording on the BPAQ. The only questions that mentioned conflict with a peer are located in the verbal subscale. The physical subscale implies that violence is enacted towards another person, not necessarily a friend. Perhaps changing the wording of some of the questions to reflect aggression towards their peers. For example, item number six on the physical subscale

could be reworded from “there are people that pushed me so far that we came to blows” to “my peers have pushed me so far that we came to blows.” By changing a couple of words in these items, we can inform the participants that the stranger is aggressive towards everyone around them and does not play favorites with his peers.

Another addition that would be interesting to examine would be how aggressive participants viewed aggressive strangers. Although it was not included in the current experiment, it could prove fruitful to learn if aggressive participants were more accepting of aggressive strangers. By taking the participants aggression rating on the BPAQ we could identify a high aggressive and low aggressive participant group. Potentially, participants might not be aggressive or may choose to not report themselves as aggressive when filling out the questionnaire. If this happens perhaps using a median split to create a high aggression and low aggression group would suffice.

Relational aggression would be another variable to include for a future study. One benefit of using relational aggression would be the lack of gender differences. Previous studies typically find that both men and women tend to engage in relational aggression (Linder, Crick, & Collins, 2002; Woodin, Sukhawathanakul, Caldeira, & Homel, 2016). The current research focuses on peer relationships, which is a primary focus of relational aggression. The downside of using relational aggression is finding a suitable measure. Most of these measures rely on observing the individual or using peer-nominations. There are some self-report measures, but they were recently created and it was best decided to leave them out this time. Another experimenter may want to include a self-report measure alongside the BPAQ and compare differences between the types of aggression.

The effects for the third hypothesis may have been attributed to the survey order. In the stranger packet, participants received the attitude similarity manipulation before the aggression manipulation. Future studies may want to account for this potential primacy effect by switching around the order on the surveys or presenting the aggression manipulation before attitude similarity.

A concept mentioned, but not touched upon, in this research was group membership. When we consider another person as part of our in-group we assume they share similar attitudes. If we can establish that the stranger on the bogus survey to be part of the participant's in-group we can further examine how aggression affects attraction. Group membership could be established by using the survey of attitudes and producing stranger surveys that reflect similar attitudes. Afterwards, we could manipulate the stranger as being aggressive in three conditions: physical, verbal, and relationally aggressive. This experiment would allow us to further look at the condition of similar/aggressive as well as examining differences between types of aggression.

The mediating variables of interpersonal attraction can offer another explanation of attraction to the similar/high aggression group. Participants may overlook the aggressive part of the stranger due to inferred attraction or even respect. While reading the stranger's survey, participants might be judging based on how they think the stranger would be attracted to themselves. The participants might also respect the stranger for sharing the same ideals. When a person is similar we believe them to be more competent (Montoya & Horton, 2004).

Only positive affect fails to provide a satisfactory explanation of the results. Those in the similar/high aggression condition have been established as having low

morals and maladjustment. For the current results, we would presume that positive affect would not be a mediating variable for the similar/high aggression condition for this reason. However, it is not impossible for this effect to be there. Participants might infer that the stranger could be a positive individual that would not hit another person without a good reason.

Now that there is evidence that demonstrates we can overlook aggression in favor of common attitudes we should look at why. These mediating variables would be a valuable starting place. If positive affect, inferred attraction, or respect underlie interpersonal attraction, we may come one step closer in understanding why we choose to engage aggressive people we think as immoral or maladjusted. A future study could incorporate measures of these mediating variables and assess them separately before the participant provides their attraction rating.

Conclusion

In conclusion, we are attracted to individuals that share similar attitudes as us. In addition, we are less attracted to aggressive individuals but also view them as somewhat attractive under the condition that they are similar. These results shed some light on if we are attracted towards an individual even if they possess an undesirable trait such as aggression. There are multiple explanations for this attraction. Inferred attraction, respect, overlooking aggression, and believing the stranger has a good reason are some potential theories. Future studies can use these possible explanations to focus on why we are attracted to those with undesirable qualities. Understanding the reasoning behind why a person would accept something undesirable has potential to deepen our understanding of the processes behind interpersonal attraction and the similarity effect.

APPENDIX SECTION

Survey of Attitudes

Name: _____ Section: _____ Date: _____

Age: _____ Sex: _____ Class: Fr. _____ Soph. _____ Jr. _____ Sr. _____

Hometown: _____

1.) Fraternities and Sororities (check one)

- ☐ I am very much against fraternities and sororities as they usually function.
- ☐ I am against fraternities and sororities as they usually function.
- ☐ To a slight degree, I am against fraternities and sororities as they usually function.
- ☐ To a slight degree, I am in favor of fraternities and sororities as they usually function.
- ☐ I am in favor of fraternities and sororities as they usually function.
- ☐ I am very much in favor of fraternities and sororities as they usually function.

2.) Belief in God (check one)

- ☐ I strongly believe that there is a God.
- ☐ I believe there is a God.
- ☐ I feel that perhaps there is a God.
- ☐ I feel that perhaps there is no God.
- ☐ I believe that there is no God.
- ☐ I strongly believe that there is no God.

3.) Smoking (check one)

- ☐ In general, I am very much in favor of smoking.
- ☐ In general, I am in favor of smoking.
- ☐ In general, I am mildly in favor of smoking.
- ☐ In general, I am mildly against smoking.
- ☐ In general, I am against smoking.
- ☐ In general, I am very much against smoking.

4.) Acting on Impulse vs. Careful Consideration of Alternatives (check one)

- ☐ I feel that it is better if people always act on impulse.
- ☐ I feel that it is better if people usually act on impulse.
- ☐ I feel that it is better if people often act on impulse.
- ☐ I feel that it is better if people often engage in a careful consideration of alternatives.
- ☐ I feel that it is better if people usually engage in a careful consideration of alternatives.
- ☐ I feel that it is better if people always engage in a careful consideration of alternatives.

5.) Social Aspect of College Life (Check one)

- ☐ In general, I am very much against an emphasis on the social aspects of college life.
- ☐ In general, I am against an emphasis on the social aspects of college life.
- ☐ In general, I am mildly against an emphasis on the social aspects of college life.
- ☐ In general, I am mildly in favor of an emphasis on the social aspects of college life.
- ☐ In general, I am in favor of an emphasis on the social aspects of college life.
- ☐ In general, I am very much in favor of an emphasis on the social aspects of college life.

6.) College Education (check one)

- ☐ I strongly believe it is very important for a person to have a college education in order to be successful.
- ☐ I believe it is very important for a person to have a college education in order to be successful.
- ☐ I believe that perhaps it is very important for a person to have a college education in order to be successful.
- ☐ I believe that perhaps it is not very important for a person to have a college education in order to be successful.
- ☐ I believe that it is not very important for a person to have a college education in order to be successful.
- ☐ I strongly believe that it is not very important for a person to have a college education in order to be successful.

7.) Drinking (check one)

- ☐ In general, I am very much in favor of college students drinking alcoholic beverages.
- ☐ In general, I am in favor of college students drinking alcoholic beverages.
- ☐ In general, I am mildly in favor of college students drinking alcoholic beverages.
- ☐ In general, I am mildly opposed to college students drinking alcoholic beverages.
- ☐ In general, I am opposed to college students drinking alcoholic beverages.
- ☐ In general, I am very much opposed to college students drinking alcoholic beverages.

8.) Money (check one)

- ☐ I strongly believe that money is not one of the most important goals in life.
- ☐ I believe that money is not one of the most important goals in life.
- ☐ I feel that perhaps money is not one of the most important goals in life.
- ☐ I feel that perhaps money is one of the most important goals in life.
- ☐ I believe that money is one of the most important goals in life.
- ☐ I strongly believe that money is one of the most important goals in life.

9.) Political Parties (check one)

- ☐ I am a strong supporter of the Democratic party.
- ☐ I prefer the Democratic party.
- ☐ I have a slight preference for the Democratic party.
- ☐ I have a slight preference for the Republican party.
- ☐ I prefer the Republican party.
- ☐ I am a strong supporter of the Republican party.

10.) Pets (check one)

- ☐ I enjoy keeping pets very much.
- ☐ I enjoy keeping pets.
- ☐ I enjoy keeping pets to a slight degree.
- ☐ I dislike keeping pets to a slight degree.
- ☐ I dislike keeping pets.
- ☐ I dislike keeping pets very much.

11.) Welfare Legislation (check one)

- ☐ I am very much opposed to increased welfare legislation.
- ☐ I am opposed to increased welfare legislation.
- ☐ I am mildly opposed to increased welfare legislation.
- ☐ I am mildly in favor of increased welfare legislation.
- ☐ I am in favor of increased welfare legislation.
- ☐ I am very much in favor of increased welfare legislation.

12.) War (check one)

- ☐ I strongly feel that war is sometimes necessary to solve world problems.
- ☐ I feel that war is sometimes necessary to solve world problems.
- ☐ I feel that perhaps war is sometimes necessary to solve world problems.
- ☐ I feel that perhaps war is never necessary to solve world problems.
- ☐ I feel that war is never necessary to solve world problems.
- ☐ I strongly feel that war is never necessary to solve world problems.

13.) Fresh Air and Exercise (check one)

- ☐ I strongly believe that fresh air and daily exercise are not important.
- ☐ I believe that fresh air and daily exercise are not important.
- ☐ I feel that probably fresh air and daily exercise are not important.
- ☐ I feel that probably fresh air and daily exercise are important.
- ☐ I believe that fresh air and daily exercise are important.
- ☐ I strongly believe that fresh air and daily exercise are important.

14.) Men's adjustment to stress (check one)

- ☐ I strongly believe that men adjust to stress better than women.
- ☐ I believe that men adjust to stress better than women.
- ☐ I feel that perhaps men adjust to stress better than women.
- ☐ I feel that perhaps men do not adjust to stress better than women.
- ☐ I believe that men do not adjust to stress better than women.
- ☐ I strongly believe that men do not adjust to stress better than women.

Buss Perry Aggression Questionnaire

Using your best judgment please rate yourself on the following questions. Only mark one answer.

1) Given enough provocation, I may hit another person.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

2) If I have to resort to violence to protect my rights, I will.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

3) There are people who pushed me so far that we came to blows.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

4) Once in a while I can't control the urge to strike another person.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

5) If somebody hits me, I hit back.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

6) I get in fights a little more than the average person.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.

- ☐ Extremely characteristic of me.
- 7) I can think of no good reason for ever hitting a person.
- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.
- 8) I have threatened people I know.
- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.
- 9) I have become so mad that I have broken things.
- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.
- 10) I tell my friends openly when I disagree with them.
- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.
- 11) When people annoy me, I may tell them what I think of them.
- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.
- 12) My friends say that I'm somewhat argumentative.
- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

13) I often find myself disagreeing with people.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

14) I can't help getting into arguments when people disagree with me.

- ☐ Extremely uncharacteristic of me.
- ☐ Somewhat uncharacteristic of me.
- ☐ Neither uncharacteristic nor characteristic of me.
- ☐ Somewhat characteristic of me.
- ☐ Extremely characteristic of me.

Interpersonal Judgment Scale

1.) Intelligence (check one)

- ☐ I believe that this person is very much above average in intelligence.
- ☐ I believe that this person is above average in intelligence.
- ☐ I believe that this person is slightly above average in intelligence.
- ☐ I believe that this person is average in intelligence.
- ☐ I believe that this person is slightly below average in intelligence.
- ☐ I believe that this person is below average in intelligence.
- ☐ I believe that this person is very much below average in intelligence.

2.) Knowledge of Current Events (check one)

- ☐ I believe that this person is very much below average in his (her) knowledge of current events.
- ☐ I believe that this person is below average in his (her) knowledge of current events.
- ☐ I believe that this person is slightly below average in his (her) knowledge of current events.
- ☐ I believe that this person is average in his (her) knowledge of current events.
- ☐ I believe that this person is slightly above average in his (her) knowledge of current events.
- ☐ I believe that this person is above average in his (her) knowledge of current events.
- ☐ I believe that this person is very much above average in his (her) knowledge of current events.

3.) Morality (check one)

- ☐ This person impresses me as being extremely moral.
- ☐ This person impresses me as being moral.
- ☐ This person impresses me as being moral to a slight degree.
- ☐ This person impresses me as being neither particularly moral nor particularly immoral.
- ☐ This person impresses me as being immoral to a slight degree.
- ☐ This person impresses me as being immoral.
- ☐ This person impresses me as being extremely immoral.

4.) Adjustment (check one)

- ☐ I believe that this person is extremely maladjusted.
- ☐ I believe that this person is maladjusted.
- ☐ I believe that this person is maladjusted to a slight degree.
- ☐ I believe that this person is neither particularly maladjusted nor particularly well adjusted.
- ☐ I believe that this person is well adjusted to a slight degree.
- ☐ I believe that this person is well adjusted.
- ☐ I believe that this person is extremely well adjusted.

5.) Personal feelings (check one)

- ☐ I feel that I would probably like this person very much.
- ☐ I feel that I would probably like this person.
- ☐ I feel that I would probably like this person to a slight degree.
- ☐ I feel that I would probably neither particularly like nor particularly dislike this person.
- ☐ I feel that I would probably dislike this person to a slight degree.
- ☐ I feel that I would probably dislike this person.
- ☐ I feel that I would probably dislike to this person very much.

6.) Working together in an Experiment (check one)

- ☐ I believe that I would very much dislike working with this person in an experiment.
- ☐ I believe that I would dislike working with this person in an experiment.
- ☐ I believe that I would dislike working with this person in an experiment to a slight degree.
- ☐ I believe that I would neither particularly dislike nor particularly enjoy working with this person in an experiment.
- ☐ I believe that I would enjoy working with this person in an experiment to a slight degree.
- ☐ I believe that I would enjoy working with this person an experiment.
- ☐ I believe that I would very much enjoy working with this person in an experiment.

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