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The Differences between Extraverts and Introverts in Conformity Rates

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In many social situations, people change their behaviour so that it coincides with that of the group. This is known as conformity.

Researchers have identified two explanations of conformity. They are: normative social influence and informational social influence. Normative social influence is going along with the crowd to avoid rejection or gain approval by the other group members (Deutsch & Gerard, 1955). An example of this is dressing the same way as others in a group in order to be accepted. Informational social influence leads people to adopt others' behaviour in a desire to be correct. (Deutsch & Gerard, 1955). An example of this is watching people at a fancy restaurant to see which fork to use with which course.

The person who started research in the area of conformity was Solomon Asch (Asch, 1952). In his classic conformity study, also known as the Asch Paradigm, Asch had a subject enter a room that was occupied by three of his confederates. The participant and confederates viewed a stimulus line and a set of three comparison lines. The subject was asked to judge which of the three comparison lines matched the stimulus. The confederates chose an obviously incorrect answer on 6 of 12 stimulus sets. When people were studied individually (with no confederates) they responded correctly 98% of the time (as cited in Brewer & Crano, 1984). However, when tested in a group with three confederates who gave an answer that was obviously incorrect, more than 75% of the participants agreed at least once with the confederates

(McKelvey & Kerr, 1988). Asch found extreme individual differences in response to majority pressure, which ranged from complete independence to complete yielding (Asch, 1952).

Kurosawa (1993) utilized the Asch paradigm to study the effects of pressure level on conformity to a majority. Ninety five undergraduate students made judgements of line lengths under different levels of conformity pressure. Kurosawa found that an increase in pressure level resulted in an increase in conformity rate. Therefore, the higher pressure, the more conforming responses were given.

Asch developed the main model for studying conformity; however he did not study the variables that affected conformity. There are two categories of variables that affect conformity; personality characteristics and situational variables. Some of the personality characteristics that affect conformity are: extraversion, Type A or Type B personality, social desirability, acquiescence, self consciousness, assertiveness, and desire for control.

One personality characteristic that has not been examined is extraversion. This is important because extraversion is one of the "Big Five" personality characteristics. The other four are neuroticism, openness, agreeableness and conscientiousness (Colin, DeYoung, Peterson, Daniel, & Higgins, 2000). Extraversion is a bipolar trait with the extremes being an extravert or an introvert. Extraverts are characterised as being assertive, confident, and having a sense of sociability. Conversely, introverts tend to be alone quite often, behave in a shy

manner, and prefer solitary activities to social activities (McCrae & Costa, 1987).

Colin et al. (2000) stated that plasticity is made up of two of the "Big-Five" personality traits: extraversion and openness. Plasticity is described as the tendency to explore or to engage voluntarily with novel activities, and it is associated with flexibility in behaviour and cognition. Stability is comprised of the other three personality traits of the "Big Five": agreeableness, conscientiousness, and neuroticism. Stability is described as the tendency to set goals and work toward them in an organized fashion. Colin et al. hypothesized that stability will be positively correlated with conformity because stability governs the maintenance of stable social relationships. In order to keep social relationships stable, people must conform to the standards of the group. The more stable a person is the more they will conform. Plasticity will be negatively correlated with conformity because it is associated with flexibility in behaviour. People who were tested and scored high on agreeableness, conscientiousness, and neuroticism were put in the stability group, and people who scored high on extraversion and neuroticism were put in the plasticity group. A questionnaire with a lie scale was used to determine whether conformity occurred or not. The hypothesis was confirmed, stability was positively correlated with conformity. However, it is unclear which individual personality traits affected conformity.

There are many differences between extraverts and introverts; perhaps two of the most important are how they view social contexts and how they are viewed in social contexts. According to Cooper and Scalise

(1974), in Jung's view extraverts focus their attention on external objects and are concerned with their relationships with other people. Also, the way they view themselves is dependent on how others view them. Conversely, an introvert is a person whose attention is on his/her inner psychological processes. They are not concerned with the opinions of other people, but are more concerned by their own feelings and opinions (Cooper & Scalise, 1974). This was then extended by Hans Eysenck. Davis (2003) states that extraverts direct their attention toward the outer, objective world and perceive external objects as primary sources of stimulation while introverts direct their attention toward the inner, subjective world. Dohn (2003), states that introversion correlates negatively with sociability. Therefore, extraverts are more concerned with the social world and how they are viewed which means that they are high in the need to be viewed as socially desirable. On the other hand, introverts are more interested in their own thoughts and cannot be bothered by the social world.

Extraverts and introverts do not differ only in the ways they interact socially; they also differ biologically, including in their level of arousal in the brain. This is Eysenck's underlying neurological basis for extraversion/introversion. According to Benziger (2003), the Reticular Activating System (RAS) affects whether a person is introverted or extraverted. The RAS is located in the core of the brain stem and is linked to the frontal lobes. It is the regulator of level of wakefulness or arousal. People who are extroverted are minimally aroused and take in much less information per second than a highly aroused person, causing

them to seek to increase the "volume" of stimulation around them so they can "feel alive". In contrast to this, those who are introverted are highly aroused and take in much more information per second than a less aroused extraverted person and therefore may need to lower the "volume" of stimulation around them, or avoid stimulation, so that they do not feel overwhelmed.

Tran, Craig and McIsaac (2001) support the claim of biological differences between extraverts and introverts. They state that, in the past, research has found a positive association between EEG alpha activity and extraversion. Tran et al. hypothesised that the difference in the brainwave activity of introverts and extraverts supports Eysenck's theory of extraversion, which stated that cortical arousal is greater in introverts than extraverts. The data support this claim; however, the activity in the study was found only in the frontal lobes. This makes sense because, as Benziger (2003) stated, extraversion and introversion are associated with level of arousal in the frontal lobes. This level of arousal causes people to either direct their attention to the social world or their own internal world.

Nussbaum (2002) supports the claim that cognitive arousal is different for extraverts and introverts. He states that higher cortical arousal increases the cognitive load on introverts. This produces heightened social anxiety over time, which, in turn, creates even higher cognitive loads. Nussbaum performed a study in which introverts and extraverts engaged in a discussion about a project. He observed that extraverts made a larger number of contradictions to the opinions of others and discussed the issue in an adversarial manner whereas

introverts worked together to construct solutions. Extraverts also rigidly adhered to one side of the argument whereas introverts did not. This leads to the assumption that extraverts would defend their opinion, whereas introverts would not. This may be applicable to conformity situations as well.

The Type A personality is often associated with extraversion, however, this is not necessarily the case. According to Yarnold, Grimm and Mueser (1986), when compared to people with a Type B personality, people with a Type A personality are characterized as being competitive and hostile, feeling responsibility for negative events and having a sense of time urgency. Type A people often set higher performance standards, are more aggressive when interrupted during a task, feel more responsibility when outcomes are negative, and exhibit more dominance in conversation. These characteristics led Yarnold et al. to believe that Type A people would conform less on a discriminatory task than Type B people. Yarnold et al. had introductory students who scored at the extreme ends of Type A behaviour and Type B behaviour make judgements following the Asch paradigm, that is they made judgments regarding differences between stimuli when they were placed with confederates who gave identical responses to critical trials. The results supported their hypothesis; Type B subjects conformed significantly more than Type A subjects. It would be dangerous to infer from these results that extraverts would conform more than introverts because it is not always the case that someone with a Type A personality is an extravert and someone with a Type B personality is an introvert (Yarnold et al,

1996). Therefore it is still not clear if extraverts and introverts differ in conformity rates.

Social desirability affects how a person acts in a group. Those who get a large amount of attention are most often viewed as being socially desirable. Mullen (1983) states that self-attention is linked to one's desire to be socially desirable. Certain social behaviours, such as conformity, have been conceptualized as self-attention-induced attempts to match-to-standards of behaviour to become more socially desirable.

Social desirability can cause people to compromise; this can be seen as conforming. Myers (1978) states that when people in a group are asked a question, they tend to compromise their response between their ideal preference, which is often toward an extreme, and the group norm, which they assume to be more moderate.

A trait that has been negatively correlated with social desirability is acquiescence. Acquiescence is a form of conformity in which people passively go along with the group. Goldsmith (1987) called it yeasaying. Goldsmith described yeasayers as being impulsive, eager to express themselves freely, active, and also in search of novelty, excitement, and external stimulation. These people are also described as extremely extroverted. Despite their eagerness to express themselves and their impulsiveness, yeasayers find themselves going along with the group and offering little resistance. Yeasaying is negatively correlated with social desirability, yet extraverts are seen as socially desirable. So therefore extraverts should go along with the group with little resistance, which is

not a socially desirable act, yet the extravert should still want to be socially desirable.

Society views self-consciousness as being a positive attribute that is associated with many other positive attributes, including the tendency to conform. It has been shown that those who are less self-conscious will not conform as much as those that are self-conscious. Schlenker and Weigold (1990) stated that people high in public self-consciousness are portrayed as outer-directed, meaning they are conscious of and concerned with social awareness. These people are conformists who follow the direction of the group in order to be looked upon favourably. People low in public self-consciousness are seen as being independent in social situations and as less likely to conform. Furthermore, those who are viewed as being independent are less concerned with social approval and therefore are less susceptible to conformity. People who are privately self-conscious emphasize autonomy and the importance of personal facets of identity, and those who are publicly self-conscious emphasize conformity and fear of negative evaluation. This is contrary to many other studies in conformity research, which show that by conforming people are viewed as being more socially desirable. According to Schlenker and Weigold, conformity is viewed as a negative trait.

A common belief is that those who are more assertive conform less. Williams and Worchel (Williams, 1984) suggested that assertive people would be more likely to state their opposition to peer expectations than less assertive people. This was suggested in response to Asch's (1952) speculation that openly expressing opposition is an effective

method for a person to resist peer pressure for conformity (Williams, 1984). Williams and Worchel performed an experiment in which subjects were randomly assigned to either the high status or low status confederate group. In the high status confederate group, the subject was the person of the highest social status, whereas in the low status confederate group, the subject was the person of lowest social status. Subjects were then exposed to ten visual discrimination tasks and asked to choose the darker of two figures. Before the subject answered, both confederates gave either a correct or incorrect response. Williams and Worchel found that subjects high in assertiveness conformed significantly less often to both high and low status confederates than did subjects low in assertiveness.

Past research has also identified situational variables that have an effect on conformity. The situational variables include the importance of a task, a person's status within the group and whether the group is made up of friends or strangers. Task importance was studied by Baron et al. (1996) who theorized that when judgments are important, participants may be more likely to engage in social comparison as part of their search for an accurate answer. Task importance was defined as the extent to which making the correct judgment affected rewards and punishments. This is the pressure participants feel about having to offer accurate judgements on the tasks. Baron et al. found that as task difficulty increased, participants would eventually process the stimuli inaccurately and conform to the group. Therefore, the more important a task was to the subject, the less likely the subject was to conform.

A person's social status within a group can affect whether or not they conform. To study the effects of social status, Ring (1964) had undergraduate students listen to an audio tape and asked them either to identify with the high-status person and to rate the low-status person on a variety of characteristics, or to identify with the low-status person and subsequently rate the high-status person. For half the subjects in each condition, the person the subjects were rating had consistently agreed with the statements expressed by the others, and for the other half, the response was always one of disagreement. The results showed that the high-status complier was ranked higher than the high-status non-complier. Those who conform or comply are more accepted than those who do not; thus conformists are viewed as being more socially desirable.

McKelvey and Kerr (1988) assumed that if people spend large amounts of time with their friends, it is logical to assume that friends and members of cohesive groups are more likely to conform than are those who are not friends or are part of a non-cohesive group. Friends conform more with friends because they are afraid of losing their status within the group if they go against the norm, as groups have their own set of norms to which every member adheres (McKelvey & Kerr, 1988). McKelvey and Kerr then predicted that the tendency to conform in an experiment similar to Asch's line comparison would be even stronger in groups of friends than in groups of strangers. To test this, McKelvey and Kerr had subjects report whether or not they detected a tone within a series of static noise. The confederates answered first, followed by the subject. When the experiment was concluded, the subjects were asked whether they knew

the confederates. If they answered "no", they were put into the stranger group: however, if they answered "yes", they were placed in the friends group. The data from this experiment did not support McKelvey and Kerr's claim that subjects would conform more among friends. The data supported the finding that individuals are less likely to conform among friends than strangers. This could be because McKelvey and Kerr's friend variable was not reliable. Simply asking the subjects whether they knew the confederates does not give enough evidence to assume they are friends. It could also be that people feel that they can disagree with people they know will like them anyway. The experiment needs to be replicated with a clearer definition of 'friend' and 'stranger' before one can infer that there is a difference in conformity rates when in a group of people.

Burger (1987) hypothesized that people high in desire for control are less likely to conform because they see themselves as being in control of the situation. People high in desire for control often aim to achieve a high social status in a group; to them, social status means they have more control over the group. Burger tested this hypothesis by using a variation on the Asch line experiment. Subjects were asked to evaluate the level of humour in a series of cartoons. Confederates gave their answers first, followed by the subject. People high in a desire for control were found to conform less than those low in desire for control.

The more socially desirable someone wants to be, the more they conform. Since extraverts want to be socially desirable, they should conform more than introverts. On the other hand, extraverts are more

confident, assertive and more controlling, three traits that are negatively correlated with conformity. If there is a difference in conformity rates between extraverts and introverts, it may be because introverts do not care what others think of them and are not concerned with being socially accepted. The extraverts' need to be socially desirable may overcome their need to be assertive and confident, causing them to conform. Also, if the task is important to the extravert, he or she may risk not being socially accepted and go along with the group in order to defend their opinion. Extraverts and introverts will attribute their conformity to normative social influence or informational social influence or both.

Summary

The research that has been done to date on conformity and extraversion leaves one with a lot of questions. Extraverts are more concerned about what other people think of them and how they are viewed in social situations (Cooper & Scalise, 1974), therefore they may conform more than introverts. Introverts are not always aware of what's going on around them so despite their lack of confidence (Cooper & Scalise, 1974), which might cause them to conform more, they might not conform as often as extraverts.

Since extraverts are more concerned with the external world (Cooper & Scalise, 1974), they might be more likely than introverts to attribute their conformity to normative social influence. They may do this because they are more aware of what is going around them than introverts and strive to be more socially desirable. An example of this is dressing the same way as everyone else to be accepted into the group.

Extraverts could be less likely than introverts to attribute their conformity to informational social influence. This is because introverts are focused more on their own internal state and therefore may not notice all of what is going on around them (Cooper & Scalise, 1974). An example of this is watching people at a fancy restaurant to see which fork to use when.

The more pressure applied by the group, the larger number of conforming responses are given (Kurosawa, 1993). Extraverts should give a different number of conforming responses in response to different pressure levels. Because introverts are not as concerned with being socially desirable, they should conform the same to any level of pressure applied by the group.

Therefore extraverts should conform more than introverts. Extraverts should conform differently to different levels of pressure applied by the group while introverts conform the same to all levels. Extraverts should attribute their conformity to normative social influence more often than informational social influence while introverts should attribute their conformity equally to both reasons.

In conclusion, there may be a link between extraversion/introversion and conformity because extraverts and introverts differ in the types of interactions they prefer and conformity deals with changing behaviour when in groups. It could be that extraverts and introverts change their behaviour differently when in a group. There are many variables, both situational and personality characteristics, which affect conformity. Situational variables that affect conformity are: the importance of a task, a person's status within the group and whether the

group is made up of friends or strangers. The personality characteristics that affect conformity are: moral judgement level, identity status, acquiescence, the person's desire for control, confidence/assertiveness, self-consciousness, whether they have a Type A or Type B personality and finally, how socially desirable the person wants to be. A personality characteristic that has not been examined is extraversion/introversion. It is one of the "Big Five" personality characteristics. Extraverts differ both socially and biologically. There is a considerable lack of research on the relationship between extraversion/introversion and conformity. All one can do is infer from the research on each variable separately how extraverts and introverts would behave when faced with a conformity situation.

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Do Extraverts and Introverts Respond Differently to Pressure to Conform?

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Abstract

Extraverts and introverts differ in some personality characteristics that affect conformity. Extraverts and introverts may show differences in levels and types of conformity. In a 2X2 mixed factorial design, differences in conformity rates between extraverts and introverts were examined under high and low pressure conditions. In the high-pressure condition, three confederates gave an incorrect answer, in the low-pressure condition, only one of the three confederates gave the incorrect answer. Participants were from Algoma University (N=36) and rated as extraverted or introverted using the EPI. Participants were asked to view a target object and 3 comparison objects, and then to choose the comparison most similar to the target. Participants' answers were compared to confederate answers for conformity rates. Extraverts conformed more than introverts in both the high and low-pressure conditions. Extraverts conformed more in the high-pressure condition than the low-pressure condition, while introverts conformed equally to both. Participants attributed their conformity to informational social influence more than normative social influence.

Do Extraverts and Introverts Respond Differently to Pressure to Conform?

In social situations, people often change their behaviour to go along with that of the group; this is known as conforming. There are two explanations offered for conformity, normative social influence and informational social influence. Normative social influence is going along with the crowd to avoid rejection or gain approval by the other group members (Deutsch & Gerard, 1955). An example of this is dressing the same way as others in a group in order to be accepted. Informational social influence leads people to adopt others' behaviour in a desire to be correct (Deutsch & Gerard, 1955). Take for example a person's first time at a fancy restaurant; they may not know what utensil to use with which course, so they watch to see what the other people around them use and use the same utensil so that they are correct.

In his classic conformity study, also known as the Asch Paradigm, Asch (1952) had a subject enter a room that was occupied by three of his confederates. The participant and confederates viewed a stimulus line and a set of three comparison lines. The participant was asked to judge which of the three comparison lines matched the stimulus line. The confederates chose an obviously incorrect answer on six of twelve stimulus sets. According to McKelvey and Kerr (1988), Asch found that more than 75% of the participants agreed at least once with the confederates when the confederates answered the incorrect answer. This means that the participant changed their behaviour to go along with the group. Asch then asked the question of why people conform when they are perfectly capable

of performing the task themselves. Since then researchers have tried to identify the variables that affect conformity.

Past research has concentrated on two types of variables affecting conformity; these are situational variables and personality characteristics. The situational variables that have been studied include task importance, the number of people in a group, and whether the group is made up of friends or strangers. Another variable that may be related to situational variables is one observed by McKelvey and Kerr (1988). They state that Asch found extreme individual differences in response to majority pressure, which ranged from complete independence to complete yielding (Asch, 1952).

Kurosawa (1993) utilized the Asch paradigm to study the effects of conformity pressure level on conformity to a majority. Ninety five undergraduate students made judgements of line lengths under different levels of conformity pressure. Kurosawa found that an increase in pressure level resulted in an increase in conformity rate. Therefore, the higher pressure, the more conforming responses were given.

Conformity has been shown to be affected by the following personality characteristics: the assertiveness of the person, the person's need to be socially desirable, social status within the group, moral judgement level, identity status, whether the person is a Type A or B personality, and desire for control. Of these, the characteristics that have been shown to be the most important are the assertiveness of the person and the need for social approval. This need for social approval may be linked to extraversion.

One explanation for conformity (normative social influence) is that people conform because they want to be socially accepted. Extraversion/introversion, along with neuroticism, agreeableness, openness, and conscientiousness, is one of the Big Five personality traits (Colin, DeYoung, Peterson, Daniel and Higgins, 2000). One of the defining features of extraverts is they interact with and seek the company of others; whereas introverts seek solitary activities. Extraverts are characterised as being assertive, confident, and having a sense of sociability. Conversely, introverts tend to be alone quite often, behave in a shy manner, and prefer solitary activities to social activities (McCrae & Costa, 1987). All of the "Big Five" personality characteristics might have an effect on conformity however it is extraversion that is a trait of great interest here because extraverts and introverts act differently in social situations.

Cooper and Scalise (1974) agreed that extraverts are more concerned than introverts about what other people think of them and how they are viewed in social situations. Introverts are less concerned with what other people think of them and avoid social situations as much as possible. This social concern might cause extraverts to conform more than introverts. That is, they notice what people think of them and care about what these people think, extraverts might conform so as to be seen as being socially desirable.

Extraverts and introverts differ in behaviour when they are in small groups (Nussbaum, 2002). When discussing issues, such as a project, extraverts make a large number of contradictions and become defensive when their ideas are contradicted. They are also extremely adversarial,

whereas introverts work together to construct solutions. This leads one to postulate that extraverts will conform less on a high pressure task than on the low pressure task.

There is a contradiction between the research done by Cooper and Scalise (1974), and the research done by Nausbaum (2002). According to Cooper and Scalise, extraverts are concerned with how they are viewed in social situations, where as Nausbaum says that when their opinions are opposed, extraverts become adversarial and rarely back down from a challenge. This is a contradiction in that someone who is challenging the other members of a group are not concerned with being socially acceptable. More research into this area needs to be done to clarify this contradiction.

Because extraverts are more concerned with being accepted than introverts; perhaps they are more likely than introverts to attribute their conformity to normative social influence, that is, going along with the crowd to avoid rejection or gain approval by the other group members.

Informational social conformity is characterized by accepting others' behaviours in a desire to be correct. It is known that extraverts are motivated by a strong desire for being socially desirable, however it is not known if extraverts are motivated by a desire to be correct. Thus, one would expect extraverts to be lower in informational social conformity than normative social conformity. It is not known whether or not introverts are strongly motivated by a desire to be correct, or whether or not they are strongly motivated to be socially desirable. Therefore one might expect introverts to attribute their conformity equally to normative social influence

and informational social influence. In small group discussions, extraverts were more likely than introverts to defend themselves when challenged (Nussbaum, 2002), so one would expect extraverts to conform less on the high pressure task than the low pressure task.

In conclusion, no clear relationship between conformity and extraversion has been established. This study will examine the relationships between both extraversion/introversion and pressure level with conformity by exposing participants to a situation in which they might feel compelled to conform or disagree with the judgements of others. It is predicted that extraverts will conform more than introverts, and that extraverts will attribute their conformity to normative social influence while introverts will attribute their conformity equally to both normative social influence and informational social influence.

This study attempted to answer the following questions: Do extraverts and introverts differ in conformity? What is the effect of level of pressure applied by the group? What is the effect of level of pressure applied by the group? Do extraverts and introverts differ in conformity rate in relation to different pressure levels? Do extraverts and introverts attribute conformity to different explanations?

Method

Participants

The participants were male and female Algoma University College students. They ranged in age from 17 to 62 years. There were 21 extraverts, 15 introverts 9 subjects who scored as equally

extraverted/introverted. There were 45 subjects total. Only the extraverts and introverts were of interest.

Materials

The Extraversion scale from the Eysenck Personality Inventory (EPI) for Adults was used to measure extraversion and introversion. Although the EPI consists of two separate scales, neuroticism and extraversion, the scales may be administered independently. The extraversion scale consists of 24 yes/no items; for example, "Do you like working alone?". There are an additional 9 items that form a "Lie Scale". The lie scale is intended to detect "faking good". The EPI provided criterion scores along a scale that ranged from extremely introverted, to equally introverted and extraverted, to extremely extraverted (Burros, 1974).

Overheads of 24 different stimulus sets were created using Print Master software. They were different shapes and patterns, such as circles, squares, spirals and grids that varied in size, shape, shades of grey. The objects are 1 inch by 1 inch and were printed on transparencies. An overhead projector was used to display the stimulus sets.

Design and Procedures

The experiment was a 2X2 mixed factorial design. The study examined the relationship between 2 variables that may have an effect on conformity. One variable was personality type (Extravert vs. Introvert) and the other was Pressure Level (High vs. Low). There were four conditions; Extravert/High Pressure Level, Introvert/ High Pressure Level, Extravert/Low Pressure Level and Introvert/Low Pressure Level. Pressure level was determined by whether or not all three confederates deliberately

give the same incorrect answer (high pressure) or if only one confederate answered the question incorrectly (low pressure). Participants were exposed to both the high and low pressure levels. The dependent variables were conformity rates and type of explanation for conformity given by the participants.

		Personality type	
		Extravert	Introvert
Pressure Level	High		
	Low		

A female confederate administered the conformity task so as to eliminate any experimenter bias. Participants were let into a room one at a time where they filled out the EPI to determine whether they were extraverted, introverted, or equal. They were asked to sign a form giving informed consent, which stated that they could choose to withdraw from the experiment at any time. When they completed this, the participant and the three confederates (two female and one male) were led into a second room where they performed the conformity task. The task was similar to Asch's classic conformity study; however, instead of judging the length of lines, they were asked to choose which of 3 comparison stimuli matched the target stimulus. The stimuli differed in shape, pattern, size, or shade. For example, the target stimulus was a circle of a medium shade of grey and the comparison stimuli were circles of varying shades of grey, with one being the same as the target stimulus; the participant was asked to pick the shade that most closely resembled that of the target stimulus.

The participants were presented 24 sets of stimuli, each comprised of one target stimulus and three comparison stimuli. The sets were presented one at a time. The stimulus object was on the screen for three seconds and then removed; immediately afterwards the comparison objects were shown for four seconds. Of the twenty four sets, twelve were administered under high pressure and twelve were administered under low pressure. Stimulus sets 1, 2, 4, 6, 11, 14, 15, 17, 18, 20, 22, and 24 were randomly chosen to be the low pressure level sets, while stimulus sets 3, 5, 7, 8, 9, 10, 12, 13, 16, 19, 21, and 23 were the high pressure level sets. The incorrect comparison stimulus the confederates chose was sufficiently different from the target stimulus that the correct answer was obvious to the participant. Only the answers of the participants were recorded.

Participants were then be let back into the first room where they filled out a demographics sheet asking for information such age, gender, year of study, whether they grew up in a city or small town, their ethnicity, major, and the number of siblings they have. They also filled out another questionnaire asking them why they changed their response to along with the group. The two options were "I don't want to stand out" (normative social influence) and "I don't want to be wrong" (informational social influence). Participants were asked to pick one explanation or the other. If they did not go along with group, this form was disregarded for these participants. There was another question included in the final questionnaire that asked the participants if they felt pressure to conform. This was performed as a manipulation check and showed that participants

did feel pressure to conform. The participants were then debriefed and released.

Expected Results

The expected results were that extraverts would conform more than introverts because they wish to appear to be more socially desirable. High pressure levels would elicit higher levels of conformity than low pressure levels. Extraverts would conform differently to high and low pressure levels, while introverts would conform equally to both. Extraverts would attribute their conformity more often to normative social influence than informational social influence because they want to be socially desirable and accepted into the group. If they conformed, introverts would attribute their conformity equally to both normative social influence and information social influence because there is no evidence that strongly states that introverts conform for a particular reason.

Results

Results (as shown in Figure 1) show that there was a significant difference between the conformity rates of extraverts and introverts, ($F(1, 42)=4.561, p<.05$). Extraverts conform more ($M=7.14, SD=3.245$) overall than introverts ($M=4.86, SD=3.678$). There was a significant difference between extraverts and introverts in conformity rates to high pressure levels ($F(1, 42)=4.923, p<.05$). Extraverts conformed more ($M=3.95, SD=2.133$) than introverts ($M=2.43, SD=2.315$) in the high pressure condition. There was no significant difference found between extraverts and introverts in the low pressure condition, ($F(1, 42)=1.414, p=.241$). Extraverts conformed slightly more ($M=3.19, SD=2.089$) than introverts

($M=2.43$, $SD=2.063$) in the low pressure condition, but it was not found to be significant. Extraverts conformed more in the high pressure ($M=3.95$, $SD=2.133$) condition than the low pressure condition ($M=3.19$, $SD=2.089$) while introverts conformed equally in the high pressure condition ($M=2.43$, $SD=2.315$) and the low pressure condition ($M=2.43$, $SD=2.063$).

Introverts and extraverts both attributed their conformity more often to informational social influence than normative social influence (as shown in Figure 2).

Discussion

The results supported the majority of the hypotheses. Extraverts do indeed conform more than introverts. It may have been the extraverts' need to be accepted socially, whether it be by not wanting to stand out or being correct, that caused them to conform more than introverts. Introverts do not have a high need for social acceptance, explaining why they conformed less.

Extraverts conformed significantly more in the high pressure condition than did introverts. This could simply be because extraverts are more concerned with being socially desirable than introverts are.

The fact that extraverts conformed more to high pressure levels more than low supports the hypothesis that there would be a difference in conformity rates between high and low pressure levels. Past research is somewhat contradictory concerning extraverts and pressure level. Research by Kurosawa (1993) found that the higher the pressure the larger the number of conforming responses, however, research on extraverts and how they interact with others when discussing something in a group found

that when their opinions are opposed extraverts become adversarial and rarely back down (Nussbaum, 2002). Because of this contradictory information, a specific hypothesis was not possible, however it can now be assumed that high pressure applied by the group causes extraverts to conform more than low levels of pressure.

As expected there was no difference in conformity rates in the high and low pressure levels for introverts.

According to the research done in this study, both extraverts and introverts attribute their conformity more often to informational social influence rather than normative social influence. This was contrary to the hypotheses that stated that extraverts would attribute their conformity more often to normative social influence than informational social influence, while extraverts would attribute their conformity equally to both. The attribution to informational social influence could be because the setting was more academic than social. It took place in the school and the group size was not large (three other people), therefore the extravert may not have felt the need to be social. Introverts on the other hand may have a desire to be correct in social situations that research has not uncovered. They may not care what people think of them, but like to be correct. Further research is needed in the area of the exact reason extraverts and introverts conform.

This study could be improved in future replications by having a larger sample size, however due to time constraints and lack of participant involvement, the sample size was small in this study. It would also be better and easier to perform a pre-test on potential participants so that equal sample sizes can be obtained. Equal sample sizes would make the

data analysis much simpler and more sensitive to possible inconsistencies that weighted data may overlook. The judgment stimuli should also be pre-tested on a larger sample of the population to determine their difficulty and appropriateness.

Future implications of conformity research suggest that it will be useful to social psychology and the study of the way people interact in groups. This research may play a part in determining healthy and unhealthy group dynamics as well as who is most at risk for deviant behaviour.

Further analysis will be performed examining the relationships between the demographics information and conformity and extraversion.

In conclusion, conformity is affected by situational variables and personality characteristics. A situational variable of particular interest is the level of pressure applied by the group, and a personality characteristic of interest is whether the person is extraverted or introverted. The explanations extraverts and introverts attribute their conformity to had not been explored until this study. It was found that extraverts conform more than introverts in response to both high and low pressure levels. The higher the pressure, a larger number of conforming responses are given by extraverts however, there is no difference in conforming responses given to high and low pressure levels by introverts. When in an academic setting both introverts and extraverts attribute their conformity to informational social influence in a desire to be correct. Future research should focus on larger equal sample sizes and the exact explanations extraverts and introverts attribute their conformity to.

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Figure 1

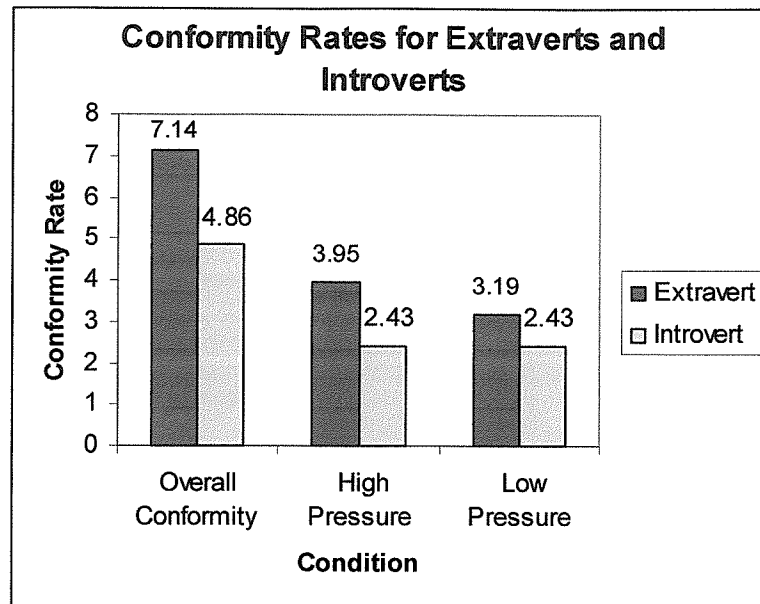


Figure 1. Overall conformity rates for extraverts and introverts, as well as conformity rates for extraverts and introverts in the High Pressure condition and Low Pressure condition.

Figure 2.

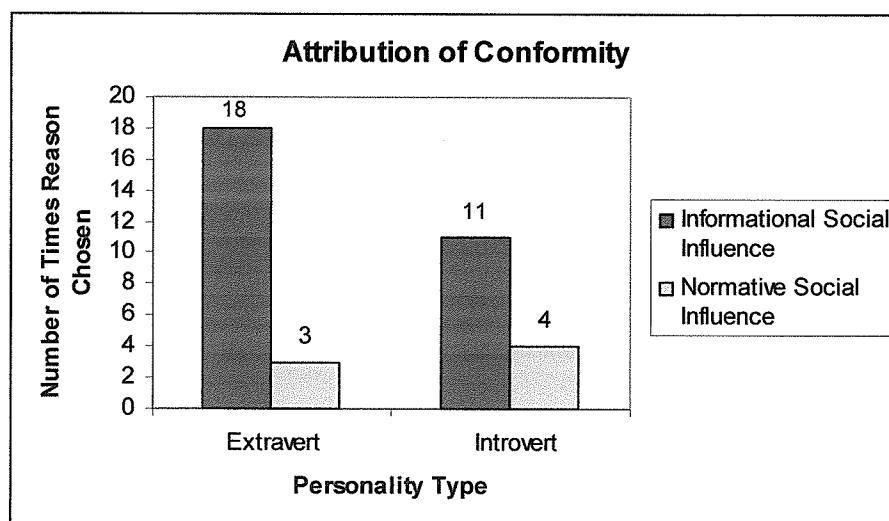


Figure 2. The differences in attribution of conformity for extraverts and introverts, either informational social influence or normative social influence.