

# Effects of Personality and Mood on Perception of Others: Shifting Standards or Social Projection?

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Volume 29, No. 1 (2016)

## **Abstract**

The present research tested two hypotheses regarding social perception: (1) that observers judge the actions of others in reference to the group to which they belong and (2) that observers project their own personality characteristics onto others during the judgment process. In Experiment 1, participants reported their perceptions of people from different groups engaging in group-atypical behavior. Participants rated our atypical character as more introverted than a typical cheerleader, and our atypical chess club president as more extroverted than the typical chess player. These results support our hypothesis that participants do, indeed, employ shifting standards when judging others. In Experiment 2, the same procedure was used, except participants also reported their level of introversion and extroversion so that we could measure social projection. The results suggest that participants rated the atypical chess player as more extroverted than a typical chess player. There was an interaction of introversion and extroversion on the perceived outgoingness and shyness measures, such that participants who were high in extroversion viewed the chess player as particularly extroverted, whereas participants who were high in introversion viewed the chess player as particularly introverted. Together, these results suggest that participants do use shifting standards when judging others and also project their personality characteristics onto others. In Experiment 3, a third personality dimension, agreeableness, was added to the procedure. Again, participants rated characters as being significantly different from the group to which the characters belonged on the dimensions of introversion, extroversion, and agreeableness, and participants high in one personality trait projected that trait onto the characters in the vignettes as well. These results support both the social projection hypothesis and the shifting standards hypothesis.

## **Key Words:**

extraversion, introversion, perception, personality, mood

Personality judgments are typically formed quickly when meeting new people. These first impressions can be formed based on any information that is available within the first few milliseconds of meeting someone new (Bar, Neta, & Linz, 2006). One important component of the impression-formation process is group membership. The Shifting Standards Effect occurs when an individual makes a judgment about another person based on that person's salient group membership (Biernat & Manis, 1994). That is, when perceiving others, individuals often will use social group membership as a baseline for assessment. For example, research suggests that

stereotypes of male athletic ability influence judgements of men's athletic performance. Male batting performances in co-ed softball were judged significantly better than female performance, although males and females were actually similar in level of athleticism (Biernat & Vescio, 2002).

Similarly, research on judgments of academic ability found that black students with high ACT scores were rated as smarter than white students with the same ACT scores. This suggests that black students were judged based on a different (and lower) standard than white students, based on their group membership

alone. It is important to note, however, that there was no correlation between the tendency to shift standards and explicit prejudice or implicit racial attitudes (Biernat, Collins, Katzarska-Miller, & Thompson, 2009).

Research also suggests the same traits may give rise to different behavioral expectations, depending upon the target's group memberships. For example, Kobrynowicz and Biernat (1997) demonstrated that gender stereotypes moderate the shifting standards effect. Mothers and fathers were evaluated by different standards, and furthermore, mothers were held to stricter standards than fathers. Therefore, a woman and a man who engage in the same childrearing behavior may well be judged differently due to their group memberships. In addition, the kinds of behaviors that signify a particular trait could differ, based on a person's group membership. A father might be seen as nurturing by playing sports with his children. However, a mother performing the same behavior might not be seen as nurturing and, in fact, may be judged negatively (Kobrynowicz & Biernat, 1997).

We hypothesized that individuals will judge the personality (and mood) of others based on their social group membership during the impression-formation process. In other words, the person's group becomes the baseline used to understand that person. This hypothesis is consistent with the shifting standards effect. For example, a height that may be considered "very tall" is quite different for a child compared to a man or a woman. And a woman who is six feet tall might be considered very tall compared to the average woman, whereas a man who is six feet tall would not be considered particularly tall compared to the average man (Biernat & Manis, 1994; Kobrynowicz & Biernat, 1997).

It is important to note, however, that there are other factors involved in person perception that may interact with, or even negate, the influence of group memberships. One such factor is the personal characteristics of the perceiver. For example, research suggests that individuals will perceive their own unique traits in others (Beukeboom, Martin, & Vermeulen, 2013; Borkenau, Brecke, Mottig, & Paelecke, 2009; Fishman, Ng, & Bellugi, 2011; Human & Biesanz,

2011; Schaefer, Heinze, & Rotte, 2012). This social projection occurs when individuals knowingly or unknowingly consider others to be similar to themselves or otherwise project onto others what they know about themselves (Cho & Knowles, 2013). In addition, if two traits correlate in one's own personality, that individual will often assume those traits correlate in the personality of others, thereby projecting their own personality structure into others (Critcher & Dunning, 2009).

Social projection has been documented for other knowledge states as well. For instance, social projection has been documented for belongingness needs, goals, sexual intent, and transient drive states (Boven & Loewenstein, 2003; Collisson, 2013; Lenton, Bryan, Hastie, & Fischer, 2007; Oettingen, et al., 2014). We argue that social projection may also occur for mood. Although, to our knowledge, social projection of mood has not been documented. Boven and Loewenstein (2003) reported that individuals project their current transient drive states (such as hunger, thirst, or exhaustion) onto predictions of how they would feel in different situations. Furthermore, individuals also predict how other people feel by imagining how they themselves would feel in their situation (Boven & Loewenstein, 2003).

### ***The Present Research***

The present research is an attempt to test two hypotheses. First, that observers judge the actions of others in reference to the group to which they belong (Shifting Standards Hypothesis). Second, that observers project their own personality characteristics onto others during the judgment process (Social Projection Hypothesis). In Experiment 1, we used an online survey with vignettes that described a character who acted differently from what would be expected from that character's social group. We then measured participants' perceptions of the character in order to test our Shifting Standards Hypothesis. Experiment 2 employed the same procedure, except that it was administered in a classroom setting along with a personality scale in order to assess both the Shifting Standards Hypothesis and the Social Projection Hypothesis

in the same study. Specifically, this procedure allowed us to observe whether participants engaged in shifting standards, projected their own personality into the character, both of these, or neither. Lastly, Experiment 3 expanded upon the previous studies to include a third personality measure, agreeableness, which allowed us to test our projection hypothesis with more than one personality characteristic at a time. As was the case in Experiment 2, the procedure for Experiment 3 allowed us to observe whether participants engaged in one of these processes, both, or neither in the same setting.

### Experiment 1

In the present study, we tested the Shifting Standards Hypothesis by giving participants two different character vignettes followed by questions assessing the perceptions of the person in the vignette. The vignettes featured a cheerleader who acted more shyly than other cheerleaders and a chess player who acted more outgoing than what would be expected. The purpose of atypical behavior was to examine if participants used the character's group membership as a baseline to judge the individual cheerleader and chess player.

### Method

#### Participants

In the present study, 100 participants (71 females) with ages ranging from 18 to 44 years old ( $M = 20.34$ ,  $SD = 3.67$ ) completed an anonymous online survey. Volunteers were granted extra credit in their undergraduate psychology course in exchange for participation in the survey.

#### Materials and Procedure

Participants were given two different vignettes with three questions each. Each vignette had a character who acted atypical compared to other individuals in the same role. One scenario featured a cheerleader who was introverted:

Jennifer, the head cheerleader at her high school, went home to play video games. After playing Call of Duty for about four hours, she decided to play chess online. The chess matches can go on for hours because she likes to think very carefully about the next move and what its implications are in relation to entire game. Jennifer always looks forward to the weekend, so that she can relax and play games. Although she is not always victorious, she loves the challenge of a good game.

The other scenario featured a chess club president who was extraverted:

Larry, the president of the chess club, had to go to the mall as soon as school let out on Friday. He wanted to get his hair cut and buy some new jeans for the party after the big game. Everyone in the school was planning on going. Therefore, he wanted to look his very best. Larry loves going out to parties and meeting new people.

After reading the scenarios, participants were asked three questions. The first two questions asked how outgoing and shy the character in the vignette was, each rated on a 7-point Likert scale (1 = *not at all*, 7 = *extremely*). The third question asked how the character compared to others in his or her group, rated on a 7-point Likert scale (1 = *very shy*, 7 = *very outgoing*).

### Results and Discussion

We subjected the outgoing, shy, and comparison items to a one-sample t-test, with the comparison number set to the midpoint of the scale (3.50). The results suggest that Jennifer was rated as less shy than the midpoint ( $M = 2.76$ ,  $SD = .79$ ),  $t(99) = 3.28$ ,  $p < .001$ . However, she was rated more shy compared to other cheerleaders ( $M = 2.12$ ,  $SD = .87$ ),  $t(99) = -4.38$ ,  $p < .001$ . The results suggest that Larry was rated as more outgoing ( $M = 4.40$ ,  $SD = .68$ ) than the midpoint,  $t(99) = 27.87$ ,  $p < .001$ . Larry was also rated as

less shy than the midpoint ( $M = 1.53$ ,  $SD = .66$ ),  $t(99) = -14.73$ ,  $p < .001$ . And finally, Larry was rated more outgoing compared to other chess players ( $M = 4.17$ ,  $SD = .70$ ),  $t(99) = 23.96$ ,  $p < .001$ .

These results support our Shifting Standards Hypothesis. Specifically, participants viewed Jennifer as more introverted than a typical cheerleader. Participants also viewed Larry as more extraverted than the typical chess player. Both results suggest that participants used group membership as a baseline with which to judge the characteristics of the person in the vignette. This pattern of results is consistent with previous research on the shifting standards effect (Biernat & Manis, 1994; Kobrynowicza & Biernat, 1997).

## Experiment 2

We tested two hypotheses in Experiment 2. First, we tested the Shifting Standards Hypothesis using a procedure similar to the one described above. Second, we tested the Social Projection Hypothesis by including personality measures in the procedure. Specifically, in order to test these hypotheses, participants read and responded to a vignette modeled after those used in Experiment 1. They then completed an extraversion-introversion scale (Eysenck, 1971) to measure their own traits of extraversion and introversion. We predicted that shifting standards would influence perceptions of the characters in the vignettes and that participants would project their introversion and extraversion onto the vignette characters.

## Method

### Participants

Fifty-one participants (42 females) with ages ranging from 18 to 49 years old ( $M = 23.86$ ,  $SD = 7.26$ ) completed an anonymous survey in a large group setting. Volunteers were recruited from an undergraduate psychology course in exchange for extra credit points. A research assistant introduced the study as follows:

You are being invited to volunteer for a brief psychology study. If you would like to participate, please stay and complete the survey. The survey is anonymous, so please do not put any identifiable information, like your name, on the survey. Once you are finished, you will turn the document in to me. In exchange for participating, you will receive 5 points extra credit for this class. If you wish to receive extra credit but do not want to do the brief survey, contact [the instructor] for an alternative assignment for the extra credit. Does anyone have any questions?

### Materials and Procedure

Participants completed an extraversion-introversion scale (Eysenck, 1971). The measure consisted of 18 items rated on a 7-point Likert-type scale (1 = *not at all*, 7 = *very much*). A median split was performed on the introversion and extraversion subscales, respectively, which allowed us to classify participants into four groups: (1) low in introversion and low in extraversion, (2) low in introversion and high in extraversion, (3) high in introversion and low in extraversion, and (4) high in both introversion and extraversion.

Participants also read and responded to a single vignette with three questions each. This vignette featured Larry, an extraverted chess player. The associated response items were identical to those used in Experiment 1. Only one vignette was used because the addition of personality items to the procedure increased the amount of time required to complete the study.

## Results and Discussion

Participants' personality traits were measured using Eysenck's (1971) extraversion-introversion scale (Cronbach's  $\alpha = .86$  for extraversion, Cronbach's  $\alpha = .81$  for introversion). Participants were then categorized based on their level of extraversion ( $n = 27$ ) and introversion ( $n = 28$ ) groups using a median split procedure. This procedure allowed us to create groups of participants who were high (or low) in introversion and extraversion. As noted below, in

order to test our projection hypothesis, we used these groupings to create four categories of participants - those who are (1) low in introversion and low in extraversion, (2) low in introversion and high in extraversion, (3) high in introversion and low in extraversion, and (4) high in both introversion and extraversion.

**Shifting Standards Hypothesis.** We subjected the outgoing, shy, and comparison items to a one-sample t-test, with the comparison number set to the midpoint of the scale (3.50). The results suggest that Larry was rated as more outgoing ( $M = 5.86, SD = .92$ ) than the midpoint,  $t(50) = 18.40, p < .001$ . Larry was also rated as less shy than the midpoint ( $M = 2.33, SD = 1.21$ ),  $t(50) = -6.88, p < .001$ . And finally, Larry was rated more outgoing compared to other chess players ( $M = 5.63, SD = 1.25$ ),  $t(50) = 12.17, p < .001$ . These results support our Shifting Standards Hypothesis. In addition, the results replicate the pattern of effects found in Study 1.

**Projection Hypothesis.** We subjected the outgoing and shy items to an analysis of variance (ANOVA) using our four personality groups (low introversion-low extraversion; low introversion-high extraversion; high introversion-low extraversion; and high introversion-high extraversion) as the factor variable. We predicted an interaction, such that individuals high in extraversion would rate Larry as more extraverted, whereas individuals high in introversion would rate Larry as more introverted (and vice versa). The results support this hypothesis. There was an interaction of introversion and extraversion on the outgoing measure [ $F(1, 47) = 6.33, p < .02, d = 1.08$ ] and on

the shyness measure [ $F(1, 47) = 4.33, p < .05, d = .70$ ]. These interactions are depicted in Figures 1 and 2, respectively. Also see Table 1 for the means and standard deviations of these outcomes.

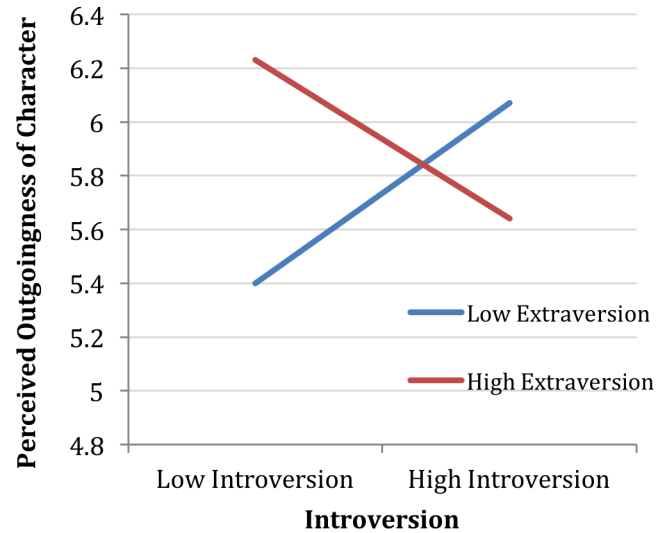


Figure 1. Perceived outgoingness of character.

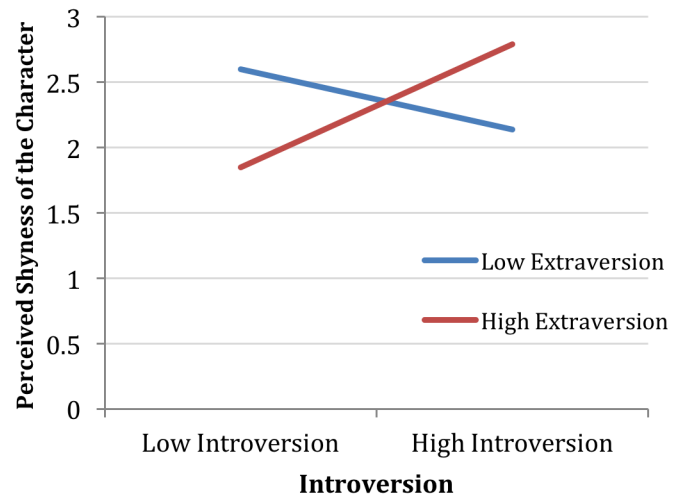


Figure 2. Perceived shyness of character.

**Table 1**

*Means and Standard Deviations for Projection Measures by Condition*

Measure	Low Introversion	Low Introversion	High Introversion	High Introversion
	Low Extraversion	High Extraversion	Low Extraversion	High Extraversion
	N = 12	N = 13	N = 13	N = 13
Shy	2.60(1.07)	<b>1.85(.90)</b>	<b>2.14(1.03)</b>	2.79(1.58)
Outgoing	5.40(1.07)	<b>6.23(.83)</b>	<b>6.07(.73)</b>	5.64(.93)

Note. Bold font indicates significant values at  $p < .05$ .

An alternative strategy for assessing the effects of projection on perceptions of the character is to examine the correlations between participants' personality characteristics and their ratings of the character's personality characteristics. The association between participants' introversion and the characters' perceived shyness was not significant,  $r(49) = -.02, p = .89$ . The association between participants' extraversion and perceived outgoingness of the character was marginally significant,  $r(49) = .25, p = .07$ . This lack of strong, significant effects using this strategy of analysis is likely due to the substantial overlap between data from the introversion and extroversion scales in this sample,  $r(49) = .59, p < .001$ . Consequently, the categorization approach using the median split procedure that we reported above is the more direct test of the projection hypothesis in this procedure.

Our hypothesis that participants' own degree of extroversion or introversion will be projected onto others was supported. Participants with high levels of extraversion rated Larry as significantly more outgoing than participants with high levels of introversion who, instead, rated him as significantly more shy. This finding is similar to results from a study of first impressions that found evidence that individuals will perceive their own unique traits in others (Human & Biesanz, 2011). It is also consistent with the Social Projection Hypothesis (Cho & Knowles, 2013; Critcher & Dunning, 2009).

### Experiment 3

In Experiment 3, a third personality trait, agreeableness, was added to the procedure (Furnham & Cheng, 2014). The procedure was also expanded to measure social projection of mood and shifting standards for mood based on one's social group membership. We tested if participants' current mood would be projected onto others and if shifting standards occurred based on one's ideas about what another person's mood should be due to their group membership.

## Method

### Participants

In Experiment 3, 58 participants (42 females) with ages ranging from 18 to 39 years old ( $M = 20.76, SD = 4.47$ ) completed an anonymous survey in a laboratory setting. Undergraduate psychology students were invited to participate in the study in exchange for extra credit points.

### Materials and Procedure

Upon arrival to the laboratory, participants were taken to a small room and asked to complete an informed consent document. Then, participants were asked to follow a PowerPoint presentation, which led them through four parts of paper-based survey. In Part 1, participants were given four vignettes with three questions each in order to measure shifting standards and projection of introversion, extraversion, and agreeableness. See Table 2 for a description of the vignettes involved in Part 1 of the procedure.

Participants were then asked to assess how outgoing and shy the main characters in the first two vignettes were on a 5-point Likert-type scale (1 = *not at all*, 5 = *extremely*) and how the character compared to other individuals in his/her same group (1 = *very shy*, 5 = *very outgoing*). The next two vignettes were designed to measure shifting standards regarding agreeableness. One featured a corporate CEO who was very agreeable and the other featured a non-profit volunteer who was very cold. Participants were asked to rate how warm, agreeable, cold, and aloof each main character was on a 5-point Likert-type scale (1 = *not at all*, 5 = *extremely*). In addition, they were asked to compare the main character to other members of his/her group on a 5-point Likert-type scale (1 = *much more cold*, 5 = *much more warm*).

In Part 2 of the procedure, participants were given a mood manipulation, in which they were asked to write a brief essay about a day in which they were either very happy, very sad, or very angry (participants were randomly assigned

to conditions). Participants were given 3 minutes to write their essay.

In Part 3, participants were given three vignettes with three questions each in order to assess if shifting standards or projection would occur for mood. The vignettes featured a sad clown, a happy mortician, and an angry stay-at-home mom (see Table 2 for details about these vignettes).

In Part 4, participants completed a modified personality scale (Eysenck, 1971; John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008) and were given a mood manipulation check. The personality scale was used to create separate groups, based on a median split procedure.

## Results and Discussion

**Shifting Standards Hypothesis.** We subjected the comparison item for each vignette to a one-sample t-test, with the comparison number set to the midpoint of the scale (2.50). Jennifer was rated as more shy compared to other cheerleaders ( $M = 2.17, SD = .73, t(57) = -3.42, p < .001$ ). Larry was rated as more outgoing compared to other chess players ( $M = 4.02, SD = .78, t(57) = 14.75, p < .001$ ). These results support our Shifting Standards Hypothesis for the personality traits of introversion and extroversion. Robert was rated as more warm compared to other corporate CEOs ( $M = 4.14, SD = .74, t(57) = 16.94, p < .001$ ). Jill was rated as more cold compared to other volunteers at nonprofit organizations ( $M = 1.88, SD = .80, t(57) = -5.94, p < .001$ ). These results support our Shifting Standards Hypothesis for the personality trait of agreeableness.

Likewise, participants rated Bob as more sad compared to other clowns ( $M = 1.89, SD = .79, t(56) = -5.75, p < .001$ ). And Frank was rated more happy compared to other morticians ( $M = 3.80, SD = .77, t(56) = 12.88, p < .001$ ). Similarly, Janice was rated more angry compared to other stay-at-home moms ( $M = 3.72, SD = .73, t(56) = 12.68, p < .001$ ). Overall, these results support our Shifting Standards Hypothesis not only for

baseline group personality traits, but also for baseline group mood or emotional state.

**Projection Hypothesis.** According to our check on the mood manipulation, the procedure failed to influence participants' mood states. An ANOVA with emotion condition (i.e., writing the happy, sad, or angry essay, respectively) as the factor variable suggests no significant differences between groups on participants' self-reported level of happiness, sadness, or anger [ $F(2, 57) = .78, p = .47, F(2, 57) = 1.19, p = .31, \text{ and } F(2, 57) = 1.12, p = .33$  respectively]. Consequently, this factor will not be discussed further.

However, we also included personality scales for introversion, extraversion, and agreeableness in this part of the procedure. This allowed us to create subgroups of participants that score high versus low on each measure by using a median split procedure. As such, we can use these subgroups to test the predictions of our projection hypothesis on three personality dimensions: that (1) participants high in introversion will rate the characters as higher in introversion than participants low in this trait, (2) participants high in extraversion will rate the characters as higher in extraversion than participants low in this trait, and (3) participants high in agreeableness will rate the characters higher in agreeableness than participants low in this trait. Note that in Experiment 2, we created groups that scored high on one characteristic but low on the other in order to test our social projection hypothesis. However, the larger number of personality characteristics in Experiment 3 would make such groupings more difficult and result in relatively small sample sizes per grouping. To avoid this problem, we did not attempt to create separate groups that scored high on only one characteristic and low on the other two. Instead, we focused only on comparing median-split based groups that scored high versus low on each personality characteristic, respectively. We also calculated an index of perceptions of characters across the vignettes in Experiment 3. For example, both Jen and Larry were rated on how shy (introverted) and how outgoing (extraverted) they were. Therefore, we calculated a measure of perceptions of

**Table 2***Vignettes Administered in Experiment 3 by Personality Trait or Mood State Measured*

Trait/Mood (Order Administered)	Vignette
Introversion (Part 1)	Jennifer, the head cheerleader at her high school, went home after school on Friday. Instead of going out with friends, she enjoys spending her weekends reading mystery novels. Although her friends often invite her to go out, Jennifer always looks forward to getting some alone time on the weekend so that she can relax. The older she gets, the more important spending time by herself has become.
Extroversion (Part 1)	Larry, the president of the chess club, went to the mall as soon as school let out on Friday. He wanted to get his hair cut and buy some new jeans for the party after the big game. Everyone in the school was planning on going. Therefore, he wanted to look his very best. Larry definitely loves playing chess, but he loves spending time with his friends and getting out of the house even more.
Agreeableness (Part 1)	Robert is the CEO for a major cooperation and was going to spend all weekend helping at a local homeless shelter. His friends had wanted him to go on an expensive ski trip to Aspen and have fun with them. However, Robert thought that the service he was giving the community was more important. He felt it was very rewarding to help others.
Agreeableness (Part 1)	Jill is a volunteer at a non-profit organization. She originally planned to visit her father so she could brag about how successful she was and how great her life is. She would not help her dad with anything because her dad had never believed in her. She put herself through college and worked her way to where she was now. Her dad did not help her do anything, therefore he did not deserve a second chance. The only reason Jill visited him was to boost her own confidence because she is so much better than her father.
Sadness (Part 3)	Bob is a professional clown, and is expected to make people laugh every day. His entire profession is based on entertainment and he should love the fact that he makes children laugh. However, yesterday at a children's birthday party Bob just did not feel like being there. The children kept saying that he wasn't funny and he should get a new job. The mother who hired him tried to cut his pay because she said he wasn't excited enough. He wishes he could say this was the first time this had happened, however it actually occurs often.

**(continued)**



**Table 2 (continued)***Vignettes Administered in Experiment 3 by Personality Trait or Mood State Measured*

Trait/Mood (Order Administered)	Vignette
Happiness (Part 3)	Frank is a mortician (or funeral director), and was excited to get to work today. He loved to help families deal with a hard time, to help them solve their problems regarding the funeral, and to make some money in the process. He sees himself as a guide to helping families who are mourning. He takes care of setting up the funeral, their loved one's body and preparation, and burial or cremation. He truly enjoys his work and looks forward to doing his job for many years to come.
Anger (Part 3)	Janice is a stay-at-home mom. She spends most of her days chasing after her two kids. Sometimes, she drinks a few glasses of wine just to take the edge off. When this does not work, she often will go in the garage throw tennis balls against the wall as hard as she can. This helps to release stress and to help her face another day at home with the kids.

introversion across both vignettes by averaging ratings for the shyness item from these two vignettes. We did the same calculation for extraversion using the outgoing measure from these two vignettes. Then, we performed a similar calculation using the vignettes of Robert and Jill, which had participants rate agreeableness of the characters.

The results of independent-samples t-tests suggest that participants high in introversion rated characters in the vignettes as being more introverted ( $M = 3.58, SD = .83$ ) than participants low in this trait ( $M = 2.71, SD = .92$ ),  $t(56) = -3.78, p < .001$ . The same pattern was found for participants high in extraversion and their ratings of the extraversion of characters in the vignettes ( $M = 4.06, SD = .50$ ) compared to participants who were low in this trait ( $M = 2.85, SD = .55$ ),  $t(56) = -8.73, p < .001$ . Likewise, participants high in agreeableness projected their trait into characters in the vignettes ( $M = 4.07, SD = .44$ ) to a greater degree than participants low in this trait ( $M = 3.08, SD = .44$ ),  $t(56) = -8.52, p < .001$ .

An alternative way to assess projection is to examine the correlations among participants' personality traits and their ratings of the traits of characters in the vignettes. We would expect self-

reported scores on the personality scale to positively correlate with ratings of the character in the vignettes. In the current sample, introversion was highly correlated with ratings of introversion in vignette characters,  $r(56) = .72, p < .001$ . Extraversion was correlated with ratings of extraversion in vignette characters,  $r(56) = .83, p < .001$ . Likewise, agreeableness was correlated with ratings of agreeableness in vignette characters,  $r(56) = .78, p < .001$ . See Table 3 for these correlations.

**Table 3**  
*Pearson Correlation Coefficients for Projection Hypothesis*

Character Ratings	Self-Ratings		
	1	2	3
1. Introversion	.72		
2. Extroversion		.83	
3. Agreeableness			.78

*Note.* All correlations are significant at  $p < .001$ .

The results from Experiment 3 suggest that shifting standards occurs for the personality traits of introversion, extroversion, and agreeableness. In addition, we found evidence that shifting standards occurs for mood. Therefore, if a group is typically considered to be happy, sad, aggressive, or kind, those

expectations of group's mood may be used as a baseline to judge the mood of individuals who share that group membership. Our hypothesis that social projection would occur for personality traits was also supported in this procedure for the traits of introversion, extraversion, and agreeableness. Our attempt to manipulate mood failed in this procedure. Therefore, our results for projection of mood are uninterpretable.

### **General Discussion**

The three studies reported here provide evidence to support the shifting standards effect. Our research suggests that people will use an individual's group membership as a baseline to judge the individual in regards to their levels of introversion, extroversion, agreeableness, and mood. This research is important because it can help us understand how individuals perceive other people. Assumptions may be made about an individual as soon as they identify themselves with a social group. For example, when meeting someone new, identifying oneself as a chess player, cheerleader, corporate CEO, volunteer, stay-at-home mom, clown, or mortician is enough information for someone else to draw conclusions about what an individual's general mood should be and their personality traits.

Our hypothesis that people would project their own personality traits onto others was also supported by evidence in Experiment 2 and Experiment 3. As such, we can now add personality traits to the list of things people will project onto others, in addition to belongingness needs, goals, sexual intent, and transient drive states as documented in other studies (Boven & Loewenstein, 2003; Collisson, 2013; Lenton, Bryan, Hastie, & Fischer, 2007; Oettingen, et al., 2014). Unfortunately, the mood manipulation failed to influence the participant's mood in this procedure. A different manipulation (rather than writing a short essay) might have been more effective changing the participant's mood. Consequently, Experiment 3 did not provide a fair test for projection of mood.

### ***Future Research***

Additional research is needed to assess the relationship between shifting standards and social projection in regards to personality traits and mood. Although shifting standards is well documented in several domains, important questions remain. For example, are some characteristics or performance domains more susceptible to the influence of shifting standards? Are some groups more likely to be the target of shifting standards? And, perhaps more importantly, what are the consequences for both the target and recipient of judgments influenced by shifting standards? Answers to such questions can have important applied value in a number of life experiences, such as hiring decisions in the workplace, jury deliberations and trial verdicts in the criminal justice system, and evaluations of students in academic settings.

The same questions also apply to social projection of personality and mood states. Specifically, are some persons or groups more likely targets of social projection? If so, why? And how does projection of one's own characteristics onto others influence the target of the projection and the perceiver's judgments of the target? It would seem likely that misunderstandings and awkward social interactions are a likely consequence of projecting one's own traits and feelings onto others. Further research is needed in order to fully understand how, when, and why this projection phenomenon is likely to occur.

Another line of research involves the intersection of projection and shifting standards. Specifically, the research reported here suggest that both of these phenomena occur in the same situation. However, it is possible that certain features of situations or targets may make one of these phenomena more likely to occur than the other or make one have a stronger influence over perceptions and behaviors than the other. If this is true, what are these features and how can we make use of this information to facilitate communication and productive social interactions? Again, future research is needed on this important, and interesting, topic of study.

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