# Interaction Between High and Low Utility groups and Self Threat

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**Honors Thesis** 

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## Abstract

Research examines the Model of Ingroup as a Social Resource (Correll & Park 2005) and self-affirmation theory (Steele 1988). We build on the current research by examining how high and low-utility groups affirm the self. For our experiment, we manipulated whether participants contemplated a high or low utility group, or a control, and whether participants' self-esteem was threatened, affirmed, or not. Our results revealed that as threat increases, there is trivial evidence that writing about a group can work to buffer individuals' self-esteem.

*Keywords:* ingroup, high-utility, low-utility, self-esteem, self-affirmation

### Introduction

Individuals belong to many different groups, which can vary in importance. Certain ingroups, such as a sorority or a church, may significantly contribute to an individual's sense of self in ways that other ingroups do not. Groups such as musicians may inspire a sense of pride for an individual to be a part of that group. while a group like drug addicts, might not have that same effect. We attest that such varied groups will work differently to effect how members deal with self-threat.

### **Self-Affirmation**

Steele (1988) describes how individuals strive to view themselves positively, and will cope with threats to this positive image of the self by using resources to reaffirm the self. The theory of self-affirmation entails that in order to protect a selfimage of adequacy, people will respond by attempting to reduce the threat. In fact, Steele even demonstrates that an aspect of the self need not be related to the threat to work as an affirmation (Steele 1988).

Steele (1988) describes a self-system that an individual forms to explain how the self and the world fit together. He asserts that people continually rationalize themselves and the world in order to maintain a stable, positive theory of the self. For example, Steele describes how cigarette smokers might rationalize their smoking behavior with the health risks. A smoker could reason that the benefits outweigh the costs. In the same way, a person who believes he or she is good at chess might rationalize why they lost a game. They might reason that their weren't motivated in the first place.

This self-system works to respond to self-threat, in order to maintain a consistent image of the self. Steele explains that this process is fluid, so that rather than attending to specific aspects of the self, the self-system works to keep a positive view of the self as a whole (Steele 1988). We would like to expand on this research, and explore the possibility that a group membership could serve as an affirmational resource, much like an unrelated aspect of the self.

## **Group membership**

Cialdini and colleagues (1976) describe a person's tendency to bask in reflected glory when a group is successful, even if that person did not contribute to the success. People use group membership to make themselves feel good. If a group is successful, a person invested in the group will be empowered by this success.

Cialdini (1976) describes how students at various universities were more likely to wear apparel that identified their school when their football team had recently won a game. He explains that people might display their associations with a winning team in hopes that observers will view them positively. A series of experiments reveal that individuals are more likely to use resources like this association with a positive group when they feel they have been threatened in the eyes of an observer. So, This affirmation based on the success of a group is used as a resource to maintain a positive image in the eyes of one's peers. Cialdini emphasizes that his paper focused on how the basking in reflected glory phenomenon works to

Running Head: Interaction Between Low and High Utility Groups and Self Threat 5 shape the way one is viewed by peers. He does not, however, factor in the possibility that a person may bask in reflected glory for the benefit of their own personal selfesteem. This is a possibility that we would like to examine more closely.

We would like to ask a question about how contemplating an ingroup can in fact work to reduce self-threat. Sherman, Kinias, Major, Kim, and Prenovost (2007) describe how a group with which a person strongly identifies can serve as an affirmational resource. They explain that a group affirmation can serve as a resource for coping with a threat to the group itself. Their research examines only group threat, however, and not self-threat. In one study, they found that when members of a losing team reflected on affirmational values of their team, they were less defensive in their responses to questions about the game. After experiencing a threat to the group (losing a game) members can utilize an affirmation (shared values) to reduce the threat.

We want to examine this concept further by manipulating both group identification, and looking at self-threat as opposed to group-threat. The existing literature does not explore the effect of groups on self-concept, and we would like to explore how the two might work together.

### Psychological utility of a group

Perhaps contemplating group values does work to affirm individuals. However, it is likely that not all groups have this effect to the same extent. A group, like a gymnastics team, might serve as a greater affirmational resource than a group

Running Head: Interaction Between Low and High Utility Groups and Self Threat 6 of students who serve detention together. Certain groups seem to be more of an asset than other groups that seem to be more detrimental.

Certain ingroups mean more to individuals than others, and high-utility ingroups may work to buffer an individual's self esteem when it is threatened. The Model of the Ingroup as a Social Resource (Correll & Park 2005) explains that there are a few factors to a group that make its utility. These factors are perceived value: how important an individual feels the group is and whether they feel it is a good thing, entitivity; or how tightly knit the group is through shared qualities, and identification; or the extent to which an individual feels they are a part of the group. Correll and Park found that these aspects of utility worked independently, although they were correlated, to enhance the psychological function of a group. A group that is high in utility, then, can be better used as an affirmational resource, because an individual feels a stronger identification with that group.

Correll and Park (2005) have isolated factors that determine utility, and we attest that a high utility group can be used as affirmation when the self is threatened. Perhaps if a high utility group entails more overlap between the group and the self, it can also serve to maintain the self-concept discussed by Steele (1988).

### Two Hypotheses

There are two accounts for the way that belonging to different types of groups might affect self-esteem. The first account is based on social identity theory (Taifel & Turner, 1986). Their research suggests that groups benefit members by

giving them a sense of social belonging and favorability. This account suggests that contemplating a group makes a positive aspect of the self more salient, and thus affirms participants. It is important to note that, according to this account, a groupbased boost to self-esteem could conceivably occur even if the individual were not under threat. That is, even if the individual has relatively high self-esteem, thinking about a positive aspect may further inflate feelings of self-worth. Contemplating an important group may then boost an individual's self-esteem no matter what. We refer to this prediction as H1.

In contrast, the second account is that affirming a valuable group serves to buffer the individual against a self-threat, allowing him or her to maintain an adequate level of self-esteem. We refer to this as H2. According to this account, the impact of writing about a high-utility group (rather than a low-utility group) will be most dramatic when the individual is threatened. Belonging to a group, then, would serve as an affirmational resource, which can be accessed to maintain the positive self-regard discussed by Steele (1988). This account frames high-utility groups as a buffer particularly when an individual is exposed to threat.

Our research aimed to disentangle these two possibilities by manipulating self-threat. We intended to examine whether the affirmation happened with or without the present of a threat to the self, and thus gain insight into which model might be more valid.

We first experimentally manipulated whether participants' self-esteem was affirmed, threatened, or controlled by administering a test that claims to assess

social skill and cognitive ability. We then offered positive, negative, or no feedback for their performance on the test. We next manipulated whether participants contemplated a group that was ranked high or low in psychological utility (we also included a control condition that involved writing about the room), in order to build on the Model of the Ingroup as a Social Resource (Correll & Park, 2005) and selfaffirmation theory (Steele, 1988).

We suggest that belonging to a group can work as an affirmation to selfthreat. We predict that writing about a high- rather than a low-utility ingroup will more effectively affirm the self, in general, leading to higher levels of state selfesteem. Importantly, we predict that this difference (the relative advantage of writing about a high-utility group) should be more pronounced for threatened participants and less pronounced for affirmed participants. Because a high-utility group should provide a more meaningful buffer, writing about a high-utility ingroup should lead to relatively high self-esteem regardless of whether the participants were in the threatened or affirmed group. However, writing about a low-utility ingroup should offer a much less effective buffer. As a consequence, participants self-esteem scores should depend more heavily on feedback, such that threatened participants will score much lower than affirmed participants. In this way, writing about a high- or low-utility ingroup will affect the difference between the threatened and affirmed test groups.

#### Method

### Participants & Design

71 students from the University of Colorado at Boulder participated for credit in their intro psychology class, 56 participants were female and 15 were male. The study involved a 3 (feedback: positive, control, and negative) X 3 (writing: high utility, control, low utility) between-participants design. The first factor we manipulated was the feedback participants received on a false personality test. We will refer to this factor as feedback. The feedback had three levels. Students were randomly assigned to feedback that was 1) affirming, 2) threatening, or 3) a control condition with no meaningful feedback about their performance. The second factor we wanted to manipulate was the writing condition, or the topic participants were asked to write about. This condition we will refer to as the writing condition. The writing conditions were to write about 1) a high utility group, 2) a low utility group. or 3) a control condition to write about the room. By manipulating both of these factors, we will be able to make observations about the extent to which the difference between the self-esteem of the low utility versus the high utility is affected by different types of feedback received.

### **Materials**

We used a pre-measure questionnaire with a ranking task designed to identify high- and low-utility groups; this measure also included a scale designed to Running Head: Interaction Between Low and High Utility Groups and Self Threat 10 assess both groups value, identification and entitativity (Correll & Park, 2005, see Appendix for all materials). To measure self-esteem, we used the McFarland and Ross (1982) scale. We also developed the "BSM test" to manipulate threatening or affirming feedback. The BSM was a bogus intelligence test derived from several tasks including questions from remote associates tasks, pattern matching, self-monitoring, etc. We used a 6"x4.5" box for participants to write about a high utility group, a low utility group, or the control of the room. Last, we used a state self esteem questionnaire (McFarland & Ross 1982).

### **Procedure**

Participants were required to complete a pre-measure survey before the study took place. This survey was emailed to them upon signing up for the study. Participants were asked to name an ingroup for each of 10 categories, and then to rank these groups from 1 to 10, from most important to least important. After that, each participant completed a scale to assess value, identification, and entitativity with the group they ranked as 1 and the group they ranked as 10. The group ranked as 1 was considered to be a high utility group and the group ranked as 10 was considered to be a low utility group.

When participants arrived in the lab, an experimenter greeted them and asked them to sign an informed consent form. Participants were then told that they would complete several tasks. The first task was completed on the computer.

Participants were sent to individual cubicles and completed the "BSM"

questionnaire on the computer. Unbeknownst to them, participants were randomly

Running Head: Interaction Between Low and High Utility Groups and Self Threat 11 assigned to complete different versions of the "BSM." The instructions for the control version stated, "Please answer the following questions as accurately and honestly as possible. Your answers will be anonymous and completely confidential." The control version offered no feedback.

The affirmation and threat conditions asserted that the BSM test measured cognitive skill, intellectual maturity, and social sensitivity of the test taker. Both versions explained that the BSM indicated the likeliness of success and satisfaction later in life. This was explained at the beginning and again at the end of the test. The instructions for both the affirmation and threat versions stated, "Please answer the following questions to the best of your ability. The following items are proven measures to test social sensitivity, intellectual maturity, receptiveness, and cognitive skills of the test taker. The scores on this test have been shown to predict potential for successful achievement of goals in the test taker." The affirmation offered feedback upon completion that said the participant scored 81 when the average CU student scores 62. The threat offered feedback upon completion that said the participant scored 43 when the average CU student scores 62. Both the affirmation and threat displayed a bell curve with an arrow indicating where the student fell on the bell curve in comparison with other students. The feedback for both versions also stated, "This test measures the ability to respond well to personal and cognitive challenges. Scores on this test have been shown to reflect the social sensitivity. intellectual maturity, receptiveness and cognitive skill of the test taker. The BSM is a strong predictor of future success."

After completing the BSM test, participants were randomly assigned to write a few paragraphs about either the group they ranked most important on the premeasure survey (high utility group), the group they ranked least important on the premeasure survey (low utility group), or about the objects in the room (control condition.) Participants were provided single sheet of paper on which there was a 6"x4.5" box in which they could write a paragraph or two. For both the high utility group and the low utility group condition, the instructions stated, "In the prequestionnaire, you mentioned that you were a member of (Experimenter wrote in name of Low or High utility group). Please write a few brief paragraphs explaining your involvement in (Experimenter wrote in name of Low or High utility group.) Please tell us about this group and how long you have been a member. What does it mean to be a member of this group? Please explain your involvement as accurately and honestly as possible. Your response is extremely valuable to us. What you write will remain anonymous and confidential." For the control condition, the instructions stated, "There are many different objects in this room. Please describe in detail the various objects you see around you."

When participants finished the writing task, they immediately completed a state self esteem scale (McFarland & Ross, 1982) where they responded to 20 semantic differential items regarding how they felt about themselves at that time. Each item presented two opposing words, such as useful and not useful, separated by a Likert scale ranging from -3 to 3. Participants indicated the degree to which the words described how they felt about themselves using this scale.

When the participants were finished, they were carefully debriefed and received credit for their class. The experimenter took care to alleviate any lingering discomfort from the threat induction. Participants were given the opportunity to ask questions and were thanked for their time.

#### Results

There are two possible hypotheses for why self-esteem might be higher after writing about a high utility group.

The first hypothesis (H1) is that it is simply a reflection of the social identity of the participants. Contemplating a high-utility group affirms participants because a positive aspect of the self is made more salient. If this hypothesis is indeed correct, then the difference between the self-esteem of writing about high versus low utility groups should remain constant regardless of feedback. The difference between the self-esteem of high verses low utility writing condition should be the same for the threatening as for the affirming feedback. This result would suggest that writing about a high utility group makes a positive aspect of the self-concept salient, but may not necessarily provide a buffer that bolsters threatened self-esteem.

The second hypothesis (H2) is that when threatened, a group can be used as a strategy to maintain a certain level of self-esteem. If this is the case, participants who write about a high utility group should maintain higher self-esteem regardless of the feedback condition. This would mean that the difference between self-esteem

Running Head: Interaction Between Low and High Utility Groups and Self Threat 14 scores of participants who wrote about a low verses a high utility group should increase as we move from affirming feedback to threatening feedback.

We assessed the reliability of the SSE (McFarland & Ross, 1982) which was shown to have good reliability, alpha=.93. We submitted these SSE scores to a 3x3 between-subjects analysis of variance with feedback and writing task as our primary factors (see Figure 1). In this analysis, we simultaneously controlled for race and gender (both contrast coded) in order to be consistent with previous research (Goyle &Correll, 2013).

We first wanted to examine the difference between writing about a highutility group versus writing about a low-utility group. In this way we would be able to see the benefit of contemplating a valued group. This question concerns only the different writing conditions. Our first hypothesis (H1) was that writing about a high utility group would be more beneficial to participants' self-esteem than writing about a low utility group. To begin our analysis, we specified one contrast code that compares participants who wrote about any group (either high- or low-utility) with participants who wrote about the control of the room (HU=1, LU=1, control=-2). This code effectively analyzes the benefit of writing about any ingroup. This contrast yielded a non-significant main effect, t(60) = -0.92, p < 0.37. This is not a significant result, but it implies that participants scored slightly lower on SSE after writing about a group than after writing about the control. We used a second, orthogonal code (HU=1, LU=-1, control=0) to examine how writing about a high utility group compares to writing about a low utility group to affect a person's self-esteem. This comparison also failed to reach significance, t(60) = 0.56, p < 0.581. This implies that Running Head: Interaction Between Low and High Utility Groups and Self Threat 15 participants who wrote about a high utility group scored trivially higher on SSE than those who wrote about a low utility group. However, these results are still not significant. This null effect offers no clear support for H1.

Now that we have observed a (non-significant) difference between writing about a high verses a low utility group, we can examine how this difference changes as a function of feedback. This question concerns difference between writing about high versus low utility groups, and how that difference is affected by our other factor, feedback, Our second hypothesis (H2) was that the difference between writing about a high versus a low utility group would become larger as we move from positive to negative feedback (here we are focusing on the linear feedback contrast, negative = -1, control = 0, positive = +1). Our results revealed no evidence of an interaction (no change in the difference between writing about a high versus a low utility group as a function of feedback), t(60) = -0.13, p < 0.897. This implies that the difference between writing about a high versus a low utility group does not change as a function of feedback. Focusing on the other writing condition effect (the difference between writing about any ingroup rather than the control condition), our data showed a marginal interaction with feedback: writing about either group helps more when feedback is negative, rather than positive, t(60) = -1.84, p < 0.071. So, as the level of threat increases, there is weak evidence that writing about a group can buffer self-esteem.

In addition, we observed a rather intuitive main effect of feedback t(60)=2.45, p<0.018. This demonstrates that positive feedback increases the self-

Running Head: Interaction Between Low and High Utility Groups and Self Threat 16 esteem of participants. This serves as a manipulation check, to verify that the feedback manipulation functioned as we had hoped.

### **Discussion**

This study expands on Correll and Park's (2005) ideas about a group's utility indicating its ability to be used as an affirmational resource for the self. We explore Steele's (1988) self-affirmation theory, and examine how belonging to different types of groups factors in with self-concept.

Our data reveal several trends. (See chart.) The first is that there was no effect shown for contemplation of high- versus low-utility group on self-esteem. This result does not agree with previous work, which has revealed that contemplating a high-utility group increases self-esteem more than contemplating a low-utility group (Goyle & Correll, 2013). This means that there was no support offered for either H1 or H2 because the impact of utility, or the writing condition, did not emerge on its own, nor did its impact change across the feedback condition.

We did find that receiving positive feedback for the BSM test increased the SSE scores of participants. This suggests that we were in fact affirming/threatening participants. We also found that the impact of writing about either group is marginally more pronounced when participants received threatening feedback than when they receive affirming feedback.

Our data suggest that in our study, high- and low-utility groups were operating similarly, which other research shows should not be the case (Goyle & Correll 2013). This could be an issue of power. We had a dwindling subject pool, and

Running Head: Interaction Between Low and High Utility Groups and Self Threat 17 therefore did not obtain as many participants as would have been desirable. We need more participants, particularly in the affirming condition.

Power was a major limitation of our study. By obtaining more participants, we could derive more accurate results. Another limitation was that we only examined one type of self-threat with the BSM. It might be interesting to observe how different types of threats factor in. For example, what if participants were told that they were inadequate drivers, or that they were uncoordinated? It might be interesting to examine whether the effect of a group based affirmation changes for different types of self-threat.

It is likely that belonging to different types of groups affects a person's self-esteem. Our experiment contributes to a conversation about how group identification can cross over to serve as a buffer when the self is threatened. Our results warrant further research to examine the strength of the effect. In a future study, it would be ideal to acquire more participants in order to assess the reliability of the findings of this study.

### References

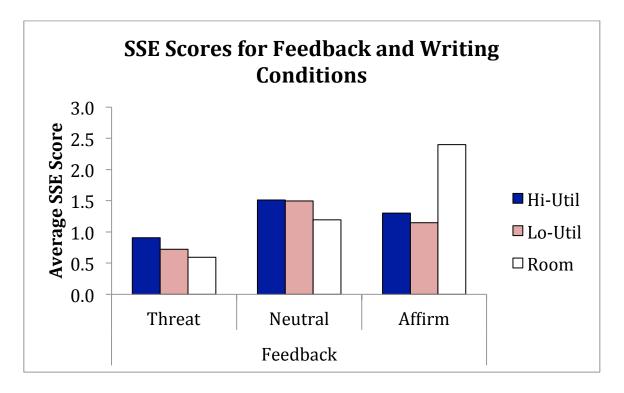
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Figure 1. Mean levels of state self-esteem as a function of writing task and feedback condition



### **Appendix**

### Script

### Initially

Hi, thanks for coming in today. My name is Brittany.

First of all there are informed consent forms for u to sign. Please read them and sign.

#### **BSM**

Ok, so your task today will be to complete the questionnaires, which will be completed on the computer.

The questionnaire you are about to fill out involve a series of items measuring cognitive and social abilities. I want you to please choose the best answer.

Please make sure to read the instructions carefully before starting. The instructions are self-explanatory, but if you require any clarification at all let me know.

Please stick to the order in which the different parts of the questionnaire are presented. And finally, please answer all questions carefully and to the best of your ability. Your responses are extremely valuable to us. All your responses will be completely anonymous and confidential.

### **Essay Portion**

Next I would like to ask you to please take the time to write a few paragraphs on a group you mentioned. After you finish that, you can fill out this final questionnaire.

### Debriefing

You all completed a personality survey and received different types of feedback. I want to apologize, as the feedback you received for the BSM was not real feedback. In fact, it is not a real test at all, and it does not accurately measure social sensitivity, intellectual maturity, receptiveness, or cognitive skill. It does not in any way predict future success. The feedback you received was randomly assigned to you before you came in, and therefore says nothing about you.

The reason we gave you this feedback was because we wanted to measure how people use belonging to a group to deal with self-threat. We wanted to see how thinking about different types of groups effects a person's threatened or affirmed self-concept. Any questions?

Now I need to tell you, it has been shown that even after people have been told that feedback is arbitrary, they can sometimes still hold the belief that the feedback was true, which is why I want to emphasize that the feedback you received today was completely made up.

I want to thank you, because your participation today is helping me to answer an interesting question about how identifying with different types of groups comes into play when self-concept is threatened or affirmed. I sincerely appreciate you participating, and I thank you so much for your time. Did you have any questions?

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Writing portion
There are many different objects in this room. Please describe in detail the various objects you see around you.

In the pre-questionniare, you mentioned that you were a member of Please write a few brief paragraphs explaining your involvement in Please tell us about this group and how long you have been a member. What does it mean to be a member of this group? Please explain your involvement as accurately and honestly as possible. Your response is extremely valuable to us. What you write will remain anonymous and confidential.

### **BSM Instructions**

### Control

Please answer the following questions as accurately and honestly as possible.

Your answers will be anonymous and completely confidential.

### Threat and Affirm

Please answer the following questions to the best of your ability. The following items are taken from the BSM survey, a test that has been designed to assess your social sensitivity, intellectual maturity, receptiveness, and cognitive skills. Performance on this test has been shown to predict success and satisfaction later in life. At the end you will receive personalized feedback and information about how your scores compare to other CU students'.

### **BSM Test**

You have never been good at games like charades or improvisational acting. Yes

You enjoy having a wide circle of acquaintances. Yes No

You are usually the first to react to a sudden event, such as the telephone ringing or an unexpected question. Yes No

You find it hard to imitate the behavior of other people. Yes No

You are more interested in a general idea than in the details of its realization.

Yes No

You believe the best decision is one that can be easily changed. Yes No

In different situations and with different people, you often act like very different persons. Yes No

You find it difficult to speak loudly. Yes No

You're driving on your way to a friend's house, when suddenly you get cut off by a young adolescent talking on a cell phone. How do you feel about this?

- Angry. I'm going to catch up and scream at the driver!
- I'm upset but won't let it get to me. People make mistakes.
- If I get mad, that negativity will just come back to me in a bad way.
- Driving laws/etiquettes are outdated. Why bother get angry? It's just wasted energy.

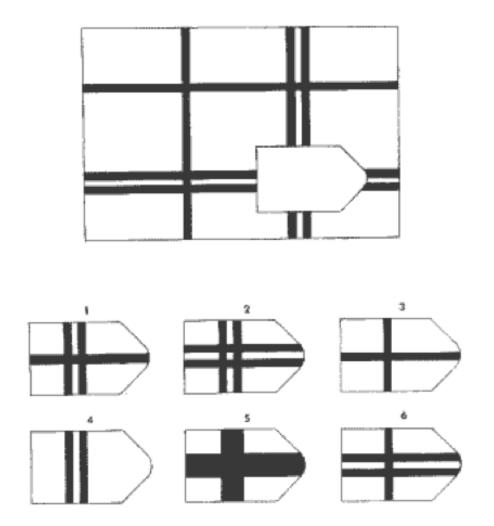
You're married to a person who is suffering from a terminal illness. You don't make enough money or have the insurance to pay for treatment. You can't afford an expensive medicine that will get your partner through this illness alive. What would you do?

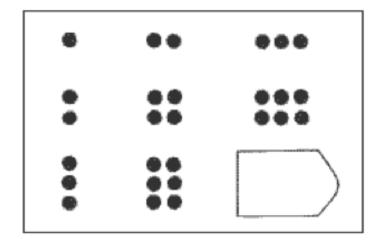
- I would steal the medication because I love my wife/husband and made a pact when I decided to marry him/her to protect them.
- I would not steal the medication because it's against the law.
- I wouldn't steal the medication because someone else would suffer if I did that.
- I would steal the medication. My partner doesn't deserve to suffer as a result of petty circumstances.

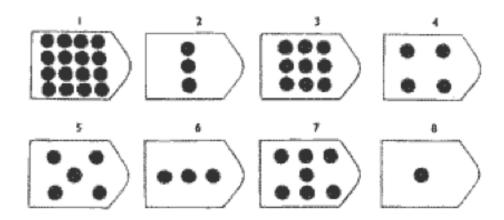
You go to the store to get a new outfit for yourself. The stuff you have right now is just getting too repetitive to wear. What do you buy for a new outfit?

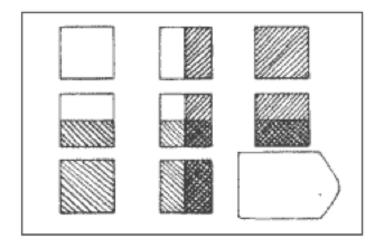
- I get more of what I already have. Comfort and safety in what I already know.
- I buy some new things. It's fun to experiment.
- I buy some things I don't have at ALL at home. Why not?
- I buy things that most people would consider strange, but I really don't give a damn what others think or say about it.

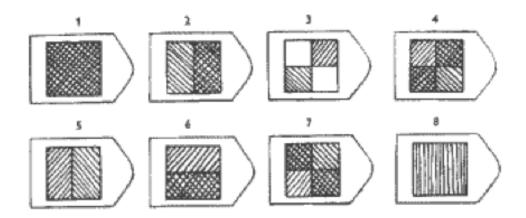
For the following questions, identify the item that best completes the pattern.

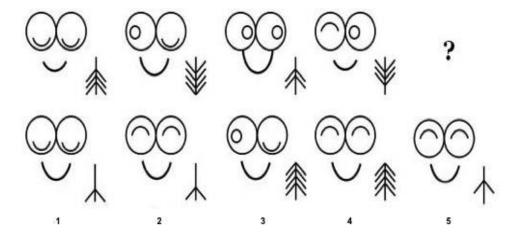












Please answer the following.

When you are uncertain how to act in a social situation, you look to the behavior of others for cues. Yes No

You value justice higher than mercy. Yes No

You tend to rely on your experience rather than on theoretical alternatives. Yes

You avoid being bound by obligations. Yes No

Deadlines seem to you to be of relative, rather than absolute, importance. Yes

You prefer to isolate yourself from outside noises. Yes No

You sometimes appear to others to be experiencing deeper emotions than you actually are. Yes No

You usually place yourself nearer to the side than in the center of a room. Yes

You stop off at an office store to pick up some supplies you need. You've heard about a pen that doesn't run out of ink for months, even with heavy use. You find where this product is, and there's one package left. However, another person walks up before you can get it and takes the package. What do you do?

- Nothing. It's just a pen. It's not like I can't go to another office supply store and find it there.
- I follow that person to whatever line they purchase their pen in and mutter very loudly under my breath that I wanted to get that pen.
- There's no need to get upset. Maybe that person wanted it more than me.
- I feel angry about it but I won't do anything about it now. I'll just vent later.

You've been married to one particular person for over 10 years now. You've worked hard to find your partner, and you feel like you two make a very good and compatible match. You make the shocking discovery that your partner has committed adultery What happens now?

- I'd track down and attack the person my partner's been seeing.
- I'd immediately get a divorce.
- If it wasn't meant to be, it wasn't meant to be. Clearly, something was wrong with the relationship.
- I would try to figure out if we can save our relationship.

Each of the following questions presents three cue words that are linked by a fourth word, which is the correct answer. Please identify the fourth word.

For example, if the cues are: Salt/Deep/Foam

Then the answer is SEA because it can be combined with each cue to make a meaningful phrase: sea salt, deep sea, sea foam.

Broken/Clear/Eye

Manners/Round/Tennis

Pie/Luck/Belly

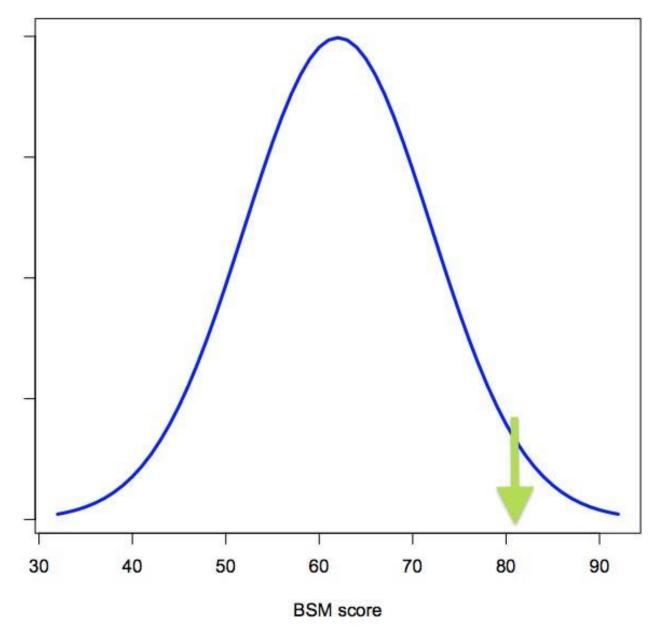
## **BSM Feedback**

## Control

Thank you for taking the survey, your responses are important to our study.

## **Affirming**

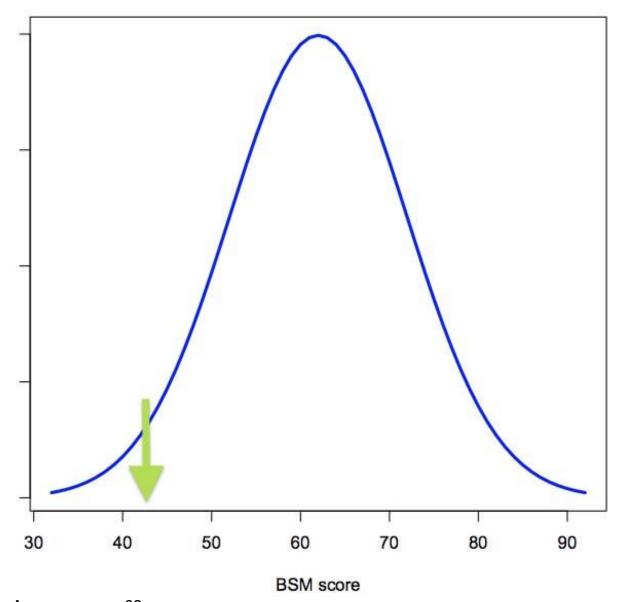
Your score: 81 (see arrow)



Average score: 62 30-44 low 44-56 moderately low 56-68 average 68-80 moderately high 80-94 high. This test measures the ability to respond well to personal and cognitive challenges. Scores on the BSM have been shown to reflect the social sensitivity, intellectual maturity, receptiveness and cognitive skill of the test taker. Over the last 25 years, multiple national studies have established the BSM as a strong predictor of success and satisfaction later in life.

## **Threatening**

Your Score: 43 (see arrow)



Average score: 62

30-44 low 44-56 moderately low 56-68 average 68-80 moderately high 80-94 high

This test measures the ability to respond well to personal and cognitive challenges. Scores on the BSM have been shown to reflect the social sensitivity, intellectual maturity, receptiveness and cognitive skill of the test taker. Over the last 25 years, multiple national studies have established the BSM as a strong predictor of success and satisfaction later in life.