

SELF-OTHER OVERLAP, DISGUST, AND RELATIONSHIP SUCCESS

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Abstract

Individuals define themselves through both their own internal processes and their relationships with others. Research suggests that the closer the relationship, the more one's self-definition overlaps with another's. I suggest an adaptive evolutionary mechanic relating the embodiment of contamination and necessary interdependent care needs and provide a research framework to develop a Relationship-Disgust Index, relate it with self-other overlap, and evaluate its predictive effect on relationship success. It is expected that the degree of overlap between the relational and personal selves will moderate individual evaluations of disgust, increasing beneficial relationship maintenance behaviors and reducing interpersonal criticism. Additionally, physical disgust measures will be analyzed to determine if they increase moral judgment of partners.

Self-Other Overlap, Disgust, and Relationship Success

Introduction

We are shaped by our closest relationships. The closer the relationship, the more we gain definition from it, our identity overlapping with our nearest & dearest. Baumeister and Leary (1995) argue that interpersonal attachments are a fundamental human need, but what role does it fulfill? Functional relationships are heavily communal in nature, with each giving as needed and provided for as capable. They are also remarkable for providing care when individuals are at their most wretched and vulnerable. Our partners love us at our most unlovable. To achieve this, they must ignore their disgust and focus on their shared closeness. For this reason, disgust can be seen as a moderator of the division between self and other and will reduce with increasing self-other overlap.

Disgust, in many schools, is an adaptation to avoid biological contamination, prompting individuals to avoid actions that may make them sick. Beyond anecdotal embodiment explanations showing how facial expressions are about protecting against inhalation or consumption of the offending matter, experimental evidence appears to strongly support this mechanism (Oaten, Stevenson, & Case, 2009). However, terror management theory insists that disgust reminded key reminder of our “animalness”, the carnal, temporal nature of human existence. To avoid the anxiety of this mortality salience, we affirm cultural ideals which serve to buffer against this anxiety by insisting that we, as humans, are unique and distinct from animals (Goldenberg, Pyszczynski, Greenberg, & Solomon, 2000; Goldenberg et al., 2001). Whatever the perspective, disgust creates a distancing mechanism between the self and its surroundings, provoking anxiety and demanding a response, whether to reduce the threat of the source or to appeal to a higher shared construct between individuals.

According to Tybur, Lieberman, and Griskevicius (2009), disgust can be broken down into three components. Pathogenic disgust refers to the classic fears of biological contamination. Moral disgust prevents the violation of social norms, preserving group connections and values. Sexual disgust prevents the selection of biologically costly mates. While the focus of the first two studies is pathogenic disgust, the latter two components can be seen as extensions of the pathogenic model. Even when the “higher” levels of disgust are involved, such as in xenophobic rhetoric addressing racial mixing, pathogenic/physical disgust is still frequently included (Faulkner, Schaller, Park, & Duncan, 2004). Additionally, it is not clear how much intersection exists between physical and moral disgust, with some reporting a higher occurrence of moral judgment after physical disgust (Wheatley & Haidt, 2005) and others suggesting that the effect is so mild as to be difficult to measure (Abitan & Krauth-Gruber, 2015; Landy & Goodwin, 2015). Does increasing physical disgust erode relationships to enable greater moral disgust?

Disgust is one of the universal emotions and is easily identified by humans (Ekman et al., 1987). When taken in its original context, this recognition helps identify what is safe to eat or not, but in a social context, it serves as an indicator of status and desirability within the group. In the sense of relationships, it is possible that facial expressions of disgust, even minute, may affect the relationship, reducing perceptions of warmth and acceptance. This suggests that, for stable relationships, the expression of disgust should be reduced. For the case of extremely close relationships, where individuals are at their most vulnerable and most biologically interwoven (sharing hygiene practices and food), disgust becomes less biologically protective and more socially threatening.

As the biological need for separation between self and other reduces, the perception of separation should be smaller as well. In the closest of dyadic relationships, there may be some

confusion between where the self ends and the other begins. Relationships high in self-other overlap lead individuals to defend close others much as they defend themselves and to downplay domain relevance when making unfavorable social comparisons. Likewise, those with high self-other overlap maintain high positive assessments of their partner even when reminded of their particular domain inferiority (Thai & Lockwood, 2015). Individuals also demonstrate a difficulty in making “me/not me” decisions on traits that are similar between them and their partner (Aron, Aron, Tudor, & Nelson, 1991).

In the case of Gottman’s work on marital success, several factors are identified as the “four horsemen” of marital dissolution: criticism, defensiveness, stonewalling, and contempt, with contempt serving as the largest primary indicator. (Gottman, Coan, Carrere, & Swanson, 1998; Straus, 1979). Contempt is strongly connected with lower levels of marital satisfaction and lower stability (DeMaris, 2000; Holman & Jarvis, 2003). At its root, contempt, or disdain, is a combination of anger and disgust (TenHouten, 2006).

With all of these factors taken into account, the following are likely observations:

Hypothesis 1: Relationships with a higher self-other overlap will demonstrate a lower level of disgust

Hypothesis 2: Relationships that demonstrate a lower level of disgust will also be more successful.

Hypothesis 3: If physical disgust is induced in individuals, their perception of relationship success will also be reduced, with the effects moderated by higher pre-existing self-other overlap.

Hypothesis 4: If physical disgust is induced in individuals, they will demonstrate an increased perception of moral disgust with their partner.

Methods

Research will be performed in three phases. First, an initial survey will establish evidence to directly connect disgust and self-other overlap. Ideally, those who report high degrees of self-other overlap should demonstrate less disgust with their partner and vice-versa. Data will be used to establish a survey measure for disgust. The second phase will test the connection between the newly developed disgust measure and relationship success in newlywed couples, mimicking similar research paradigms by Gottman. The final phase will establish if there is a connection between physical disgust and moral disgust by priming the former. Ideally, individuals with higher physical disgust should prove more willing to demonstrate moral disgust with their partners.

Study 1: Elicitation of Measure Items

Initial investigation into disgust and self-other overlap will focus on a Qualtrics online survey recruited through Amazon's Mechanical Turk service. Doing so increases the ease of collecting a sizeable population, allows for the collection of regionally diverse data, and provides a more diverse sample than traditional collegiate convenience samples (Buhrmester, Kwang, & Gosling, 2011). Additionally, as we're primarily interested in antecedents of stable relationships, a collegiate convenience sample may systematically under-sample more established couples and over-sample those of higher socio-economic status.

Early subject selection will consist of a blind demographic selection questionnaire, limited to participants in the United States and Canada. Subjects will provide basic demographic information: age, sex, highest level of education completed, ethnicity, estimated annual household income, relationship status, and current length of relationship. The discriminating factor for study selection will be for participants who have a total relationship length greater than

a month. This is intended to insure that data reflects relationships with some level of mutuality, shared experience, and stability without eliminating early developmental stages. Those who do not meet the cut-off will be paid US \$.01 and thanked for their participation, as per standard Mechanical Turk screening practices.

Subjects who are selected for the survey, itself, will be randomly assigned into two groups, based on which component they will perform first: the self-other overlap measure or the disgust elicitation questionnaire.

To measure self-other overlap, subjects will complete the Likert-type 10-item self-other overlap questionnaire from Lockwood, Dolderman, Sadler, and Gerchak (2004). This should serve as reliable, validated measure that is comparable with related literature.

The disgust measure will consist of an initial prompt, as follows: “Sometimes people can be really disgusting. What does your significant other do that grosses you out?” Subjects will respond with three initial free response boxes, with a clear option to add more items, if desired. Subjects will be prompted with the follow-up Likert-type questions for each item. For “How frequently does this happen?” the scale will be a continuum labeled with “Almost never”, “Infrequently”, “Sometimes”, “Regularly”, and “Almost Always”. For the questions “How upsetting is this behavior?” and “How sensitive are you to things that are disgusting?”, the scale will be a continuum labeled with “A little”, “Somewhat”, “Moderately”, “Very”, and “Extremely”. The lack of specific units should support a continuous subjective evaluation from subjects.

Answer formats for all Likert-type options will be provided in a continuous slider-bar format to better support a level of continuous response, rather than traditional ordinal Likert-type format.

Ideally, the subject group that starts with disgust elicitation will report less self-other overlap, when controlling for other factors, and vice-versa.

Study 2: Relationship Disgust Index vs. Length of Relationship

Subjects will be newlyweds, brought in together. Sampling will need to be systematic to ensure that a variety of ethnicities and socio-economic levels are represented. It may also be wise to enlist the aid of researchers in other regions to ensure variety in response.

Couples will be randomly assigned to separately complete the Relationship Disgust Index (RDI) developed in Study 1, and the same self-other overlap questionnaire alongside a Likert-style report of their confidence in the long-term success of the relationship. Separation will allow for within-dyad analysis to determine subject agreement. If priming of disgust was found to have a significant effect in Study 1, then couples will be assigned to complete either the relationship measures or the RDI first, to limit these effects.

Couples will also be randomly assigned for a follow-up period of 1 year, 3 years, or 5 years. If couples are still together, they will be asked to complete the same measures to analyze changes in self-other overlap and RDI.

Study 3: Disgust versus Strength of Relationship: Moral Judgment?

Study 1 develops the RDI and sees if discussing partner-related disgust provides a separation between self and other. Study 2 explores the relationship between the RDI, self-other overlap, and relationship success. Where the previous studies focus strongly on physical disgust, Study 3 is an investigation into the connection between types of disgust. The goal is to test Hypotheses 3 & 4 and to demonstrate that increasing physical disgust also increases sensitivity to moral disgust.

Study 3 can, once again, be completed through Mechanical Turk recruitment and a Qualtrics survey. Recruitment, initial screening, and compensation will follow the same model as Study 1. Subjects will be randomly assigned into four different groups based on two treatment cases. First, subjects will either read a distinctive pathogenically disgusting passage or something innocuous. Secondly, participants will complete the RDI and the self-other overlap measure, either before the reading assignment or after it. This enables the measurement of whether or not general physical disgust was able to affect relationship-related physical disgust and self-other overlap.

Finally, all participants will read hypothetical stories including their partner that place them in morally compromising situations in a balance between individual responsibility and situational context. Participants will use Likert-type ranking scales to indicate the following: how typical of their partner this action would be, how distasteful the action would be, and how much the action would be shaped by the situation or by their partner's decisions.

Results

Study 1: Elicitation of Measure Items

Reported disgust behaviors will be compared between-subjects to identify behaviors that have the highest frequency. Additionally, reported behaviors will be compared on the mean and standard deviation of their perceived frequency and level of disruption. Behaviors will be categorized based on how common, how frequent, and how upsetting they are and will be analyzed with Cohen's alpha to build a measure of the most commonly reported, so that general partner disgust can be measured.

Simple linear regression will be used to compare self-other overlap versus reported frequency of behavior and its level of offense.

The randomly assigned subject groups based on presentation order will be used as a covariate for an ANCOVA analysis of reported self-other overlap. This measure should establish if the pseudo-experimental component of the study was effective at using disgust to change reported self-other overlap.

Study 2: Relationship Disgust Index vs. Length of Relationship

ANOVA will be used to determine if the order of completion shapes self-other overlap and RDI levels. This should reflect the results of Study 1 and will serve as a minor replication. The major unit of analysis for this study will be the relationship dyad, not the individual, so predictions and levels of each measure should also be compared within-dyad to see if there is a wide variation in agreement for the couples themselves. The level of variation between them may also be used as a covariate for other analyses.

Follow-up measures should analyzed with regression against the timeframe categories. While a chi-square method may be useful if RDI and self-other overlap are broken into n-tiles, doing so would discard potential information from the distribution itself. If chi-square is used, there should be some justification for where the divisions are made, to ensure that results are not overly affected by arbitrary divisions.

Ideally, what should be seen in Study 2 is that relationships that had a higher initial RDI resulted in one of two conditions: long-term relationship failure or relationship success moderated by a significantly lower RDI.

Study 3: Disgust versus Strength of Relationship: Moral Judgment?

A 2x2 ANOVA for both RDI and self-other overlap would be used to determine if either order of response or the physical disgust passage were significant. It is not expected that there

will be an interaction effect, but, to be thorough, it is advisable to first check before moving to main effects analyses.

Ideally, results should show that the physical disgust passage reduces self-other overlap and increases both the RDI and judgment of one's partner. Additionally, the controls alone may also allow for regression to establish if subjects with a higher RDI are also more willing to morally judge their partners.

Conclusion

While the nature of this proposal is highly hypothetical, there is reasonable evidence to suggest that disgust can be viewed as an evolutionary mechanism for policing the boundaries of the self, and, as such, would need to be reduced to allow for more individually-risky, group-positive behaviors. This line of inquiry may serve to connect embodiment, evolutionary, social, and relationship lines of psychological thought in a unique way. While the claims made are not overly ambitious in their own right, they are easily subjected to empirical scrutiny and provide a reasonable narrative to establish the boundaries of the individual and socially-constructed selves.

Nice job, Trey. I'm guessing you aren't planning on actually running these studies given how much of your own work you already seem to have going on – but if you ever do – we should chat more about it! I think the idea is certainly interesting. The methods could be further refined – but I like the premise.

Also, I want to thank you for a great semester. I really enjoyed the group this semester and I'm going to miss our weekly discussions! Best of luck with your dissertation and finishing up your program.

Semester Grade: A.

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