

REDD, RILEY C. M.A. An Examination of Devaluation of Alternatives Beyond Physical Attractiveness. (2022)  
Directed by Dr. Levi R. Baker. 36 pp.

Individuals in romantic relationships often encounter threats to the longevity of their current romantic relationship, such as noticing attractive alternative partners. To protect against such threats, committed individuals engage in a devaluation process in which they evaluate physically attractive individuals as less attractive than objectively warranted. The present study examines how individuals in romantic relationships evaluate attractive alternatives that possess desirable qualities beyond just physical attractiveness. One hundred and fifty-six participants were recruited from Amazon's Mechanical Turk and my university's research participation pool for this study. Participants completed the commitment subscale of the Investment Model Scale (Rusbult et al., 1998) to measure commitment and evaluated fake dating profiles that independently varied in physical attractiveness, intelligence, status, and friendliness. Participants rated targets in accordance with their objective coding, creating a set of validated dating profiles. Surprisingly, this study also found that highly committed individuals devalued low status alternatives; however, no other devaluation effects were found. Future research can use these profiles to further study how individuals rate strangers.

AN EXAMINATION OF DEVALUATION OF ALTERNATIVES BEYOND PHYSICAL  
ATTRACTIVENESS

by

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A Thesis

Submitted to

the Faculty of The Graduate School at

The University of North Carolina at Greensboro

in Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Greensboro

2022

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## CHAPTER I: INTRODUCTION

People often encounter threats to the stability and satisfaction of their romantic relationships. Given that most people in romantic relationships are expected to be monogamous (Conley et al., 2013), one of the most deleterious threats that people face is the presence of a desirable alternative partner. Indeed, people who notice and pay greater attention to attractive alternatives are at a higher risk of infidelity and relationship dissolution (McNulty et al., 2018) than are people who ignore such alternatives. Thus, people who are highly committed to their relationships tend to devalue others who are physically attractive by evaluating alternatives as less attractive than do individuals who are less committed (e.g., Johnson & Rusbult, 1989; Lydon et al., 1999).

However, research has yet to examine whether committed intimates similarly devalue desirable alternatives in domains other than physical attractiveness. For example, it is still unknown whether committed intimates evaluate highly-intelligent alternatives as less intelligent than they objectively are. There is reason to expect that they might devalue other desirable qualities in alternative partners though. In particular, given that people often desire romantic partners that possess qualities like intelligence, warmth, status, humor, and wealth (e.g., Edlund & Sagarin, 2014; Edlund & Sagarin, 2010; Fisher et al., 2008; Fletcher et al., 1999), alternative partners should be more threatening to the extent that they possess these desirable qualities. Accordingly, committed intimates might devalue such qualities in alternative partners to reduce their attraction toward those individuals and thus protect their current romantic relationship against the threat of infidelity or relationship dissolution.

The present study aimed to address whether committed intimates also devalue desirable qualities, other than physical attractiveness, in alternatives. Specifically, I examined whether



committed intimates devalue alternatives' intelligence, friendliness, and resources. Further, I examined whether devaluation occurs in each domain independently or in a holistic manner (i.e., simultaneously devaluing all desirable qualities). The rest of this introduction is divided into four sections. The first section presents theory and research that describes devaluation and explains why it occurs. The second section outlines why it could be expected that devaluation occurs in other domains in addition to physical attractiveness. The third section provides theory and research exploring the possibilities of devaluation as a holistic and as a domain-specific process. Finally, the fourth section outlines the goals and hypotheses of the current study.

### **Devaluation of Alternatives Helps Maintain Committed Relationships**

The idea that attractive alternative partners can threaten one's commitment to, and thus stability of, a romantic relationship is central to many theories of close relationships. For example, interdependence perspectives (e.g., Rusbult, 1980; Thibaut & Kelley, 1959) suggest that people compare the positive and negative outcomes that result from their current relationship to the outcomes they anticipate would emerge from a relationship with an alternative partner. If the anticipated alternative outcomes are more desirable than their current outcomes, their commitment to the current relationship wanes and they are more likely to terminate their current relationship. Similarly, evolutionary perspectives on close relationships (e.g., Kenrick et al., 2003) suggest that individuals have adapted cognitive biases, such as devaluation, that protect their long-term relationships against the threat of alternatives and thus increase the likelihood that their offspring will survive. Finally, attachment theory (e.g., Bowlby, 1969) posits that people often form attachment bonds with romantic partners and become distressed when something threatens their relationship with that partner. For example, people often experience jealousy (Rydel et al., 2004) and engage in mate retention behaviors (French et al., 2017) when a

romantic partner notices an attractive alternative partner, suggesting that the presence of such alternatives threaten the stability of that relationship. Both cross-sectional (Duffy & Rusbult, 1986; Gaertner & Foshee, 1999; Sanderson & Kurdek, 1993) and longitudinal (e.g., Bui et al., 1996; Impett et al., 2001) research is consistent with these ideas. In fact, a recent meta-analysis of over two hundred studies revealed a moderately-sized association between perceiving attractive alternative partners and lower levels of relationship commitment ( $r = -.43$ ; Tran et al., 2019).

Because the presence of attractive alternative partners can threaten the stability of close relationships, it would be adaptive for people who desire to maintain their relationships to avoid the temptation of alternative partners. Indeed, when people are committed to their romantic relationships, they tend to be motivated to ward off threats (Lydon, 2010) and engage in processes (Lydon & Quinn, 2013; Rusbult et al., 2004) that can protect the relationship from such threats. When committed individuals encounter an attractive alternative partner, for example, they tend to pay less attention to (Brady et al., 2020; Miller, 1997), remember fewer details about (Karremans et al., 2011), and discount the positive feedback from (Gagne et al., 2008) that alternative, compared to less attractive individuals. These processes are quite effective: people are less likely to engage in infidelity (Brady et al., 2020; McNulty et al., 2018) and dissolve their current romantic relationships (McNulty et al., 2018) to the extent that they avoid the temptation of desirable alternative partners.

Another way that committed individuals minimize the threat of an attractive alternative is by devaluing that alternative—i.e., evaluating that alternative in a less desirable manner than what is objectively warranted (Johnson & Rusbult, 1989). Indeed, people who are in romantic relationships (Simpson et al., 1990), especially those that are highly-committed to their

relationships (Lydon et al., 1999), tend to rate targets of the opposite sex as less attractive than do individuals who are not involved in a romantic relationship. This tendency is also highly selective. In particular, highly-committed individuals tend to only devalue alternatives that would threaten their relationships (i.e., attractive alternatives), not alternatives that do not pose a threat (i.e., unattractive alternatives; Lydon et al., 1999; Lydon et al., 2003).

### **Beyond Physical Attractiveness**

Nevertheless, research on devaluation (e.g., Johnson & Rusbult, 1989; Lydon et al., 1999; Simpson et al., 1990) has only addressed whether committed individuals devalue the physical attractiveness of alternatives, and thus, it is unknown whether committed individuals similarly devalue other desirable qualities of alternatives. Indeed, people consider numerous other desirable qualities when evaluating how attractive another person is. Specifically, multiple studies (e.g., Edlund, 2008; Edlund & Sagarin, 2010; Edlund & Sagarin, 2014; Fisher et al., 2008; Fletcher et al., 1999) suggest that some of the most important qualities that people look for in a potential partner are status, friendliness, intelligence, family orientation, health, and liking children. Although physical attractiveness is an important determinant of how people evaluate others' global attractiveness, other qualities are equally (Edlund & Saragin, 2010), or sometimes even more (Nevid, 1984; Sprecher & Regan, 2002), influential for shaping global evaluations of another's desirability as a partner.

Given that these other qualities are highly desirable in a potential partner, a potential alternative partner who possesses these other desirable qualities should be as threatening to the stability of a romantic relationship as would an alternative who is physically attractive. Thus, it is expected that committed individuals would be similarly motivated to devalue the other desirable qualities that potential alternative partners possess. For example, a committed individual might

conclude that an objectively intelligent alternative partner is only moderately intelligent.

Nevertheless, as noted, research has yet to examine whether committed individuals only devalue the physical attractiveness of others or whether they also devalue their other desirable qualities.

### **The Specificity of Devaluation**

If committed individuals devalue other desirable qualities of alternatives, one emergent question would address whether those individuals devalue others in a holistic or domain-specific manner. That is, when committed individuals encounter an alternative who possesses a desirable quality, do they devalue all qualities of that alternative, regardless of whether those qualities are threatening or not (i.e., holistic devaluation), or do they devalue only the specific qualities that are threatening (i.e., domain-specific devaluation)? For example, if a committed individual encounters a physically attractive alternative who is only moderately intelligent, research suggests that they should perceive that alternative to be only moderately physically attractive. However, it is unknown whether they would also devalue that alternative's intelligence, such that they would perceive that the alternative is unintelligent, or instead accurately evaluate that alternative's intelligence.

On one hand, there is reason to expect that people may make holistic judgements about others and thus devalue other non-threatening qualities. For example, research on the halo effect (Thorndike, 1920) suggests that a favorable rating on one quality often influences evaluations of other unrelated qualities. This effect exists even when the attributes are independent (e.g., Landy & Sigall, 1974) and when there is sufficient information to make informed judgments about the attributes (Nisbett & Wilson, 1977). For example, people who are objectively physically attractive are often perceived to be more competent spouses, have better jobs, be happier, and have more socially desirable personalities than people who are unattractive (Dion et al., 1972).

This research suggests that people who possess certain desirable qualities may be judged to be threatening in a variety of ways to committed individuals, and thus committed individuals may similarly devalue all of their qualities, regardless of whether those specific qualities are threatening or not.

On the other hand, there are reasons to expect that individuals would devalue attractive others only in the specific domain that is threatening. In particular, Lydon and colleagues (1999) found that devaluation tends to only occur when the level of threat matches the level of commitment to one's relationship. That is, highly-committed individuals tend to devalue alternatives who are highly threatening to the relationship; however, they tend not to devalue alternatives who are less threatening to the relationship. Similarly, moderately-committed individuals tend to devalue alternatives who are moderately threatening; however, they tend not to devalue alternatives who are either highly threatening or are not threatening to the relationship. Given that devaluation only occurs when the level of threat matches the level of commitment (Lydon et al., 1999), it is possible that individuals would not devalue alternatives in domains that are not sufficiently threatening to the relationship. For example, if a highly-committed individual encountered someone who was moderately intelligent and highly physically attractive, they may devalue that person's physical attractiveness but not intelligence.

## CHAPTER II: CURRENT STUDY

### **Goals and Hypotheses**

This study investigated how people in exclusive romantic relationships evaluate the specific qualities of alternative relationship partners who vary in four specific qualities (i.e., physical attractiveness, intelligence, friendliness, status/resources). These qualities were chosen for three reasons. First, as noted earlier, numerous studies (e.g., Edlund, 2008; Edlund & Sagarin, 2010; Edlund & Sagarin, 2014; Fisher et al., 2008; Fletcher et al., 1999) have revealed that people reliably desire these qualities when evaluating potential partners. Second, the three novel qualities that we are examining (i.e., status, friendliness, intelligence) are qualities that men and women tend to value equally (e.g., Edlund & Sagarin, 2014; Fisher et al., 2008). Finally, these qualities can be communicated effectively via dating profiles, which were used in the current study.

First, to replicate previous research, I examined whether committed individuals devalue the physical attractiveness of objectively attractive alternative partners more than individuals who are less committed. Second, I extended this research by examining whether committed individuals only devalue the physical attractiveness of desirable alternative partners or whether they also devalue other threatening qualities (e.g., intelligence). Finally, I examined whether committed individuals devalue desirable alternatives in a domain-specific (i.e., devaluing qualities only if they are threatening) or holistic (i.e., simultaneously devaluing all qualities of alternatives who possess some threatening qualities) manner.

## CHAPTER III: METHOD

### **Participants**

To increase external validity, roughly half of the total participants were recruited from Amazon's Mechanical Turk (MTurk) and half of the total participants were recruited from my university's undergraduate participant pool. All participants were required to be between 18 and 29 years of age because this age group is most likely to engage with dating apps (Vogels, 2020). Participants were also required to currently be in a romantic relationship of at least 3 months. Participants were required to be fluent in English to ensure comprehension of questionnaires.

Participants were 75 individuals recruited from MTurk and 81 individuals recruited from my university's undergraduate research pool. Participants had a mean age of 22.93 (SD=4.42) and had been in a romantic relationship for 3 to 156 months (M=20.59, SD=23.38). Fifty nine (37.8%) identified as male, 94 (60.3%) as female, one (.6%) as transgender, and two (1.3%) as having no gender identity. Eighty eight (56.4%) of participants were in a relationship with someone who identified as male and 68 (43.6%) were in a relationship with someone who identified as female. Ninety five (60.9%) participants identified as White, 29 (18.6%) as Black or African American, 15 (9.6%) as Hispanic or Latino/a, six (3.8%) as Asian, three (1.9%) as American Indian/Alaskan Native, and eight (5.1%) identified as having multiple ethnicities.

A priori power analyses were conducted to determine the ideal sample size. Given that prior research has yet to examine the effect size of the devaluation of domains other than physical attractiveness, I do not yet know what that effect size would be. However, given that most social psychological effects are small-to-medium (Richard et al., 2003), I used the midpoint between Cohen's recommended small and medium size effects (Cohen, 1992) to determine the predicted effect size. Optimal Design software (Raudenbush et al., 2011) indicated that 31

participants would be necessary to detect a small-to-medium ( $d = .35$ ) effect size with 81 trials with power  $> .80$  for a significant interaction in a nested regression analysis. Given my prediction that only people who are highly committed to their relationship will devalue attractive alternatives in all dimensions, approximately four times the number of participants will be required to have sufficient power to detect the simple effects from the predicted knock-out interaction (see Giner-Sorolla, 2018, January 24). Accordingly, a minimum of 124 participants are needed. To increase power, I collected data from 156 usable participants. Data collection continued until at least the minimum number of usable participants had been reached. Data were excluded from participants that fail attention checks (described below).

### **Procedure**

Participants signed up via either MTurk or my university's undergraduate participant pool system. They were then presented with a link that will direct them to the survey on Qualtrics. On Qualtrics, participants were given an informed consent before proceeding to the survey questionnaires. Participants first answered the demographic questions of age, relationship status, and length of relationship to ensure that they are eligible to participate (see Appendix C). Participants were also asked the gender of their current partner to ensure that they view only profiles to each gender preference. Participants then completed a questionnaire assessing their relationship commitment. They were then presented with 81 dating profiles, one at a time, and were asked to evaluate the qualities of the person in the profile. Participants repeated this until all profiles had been evaluated. The remainder of the demographic questions found in Appendix D were collected at the end of the study. The participants were debriefed and thanked for their participation. Participants on MTurk were compensated \$6.00 for their participation. Participants



on my university's undergraduate participant pool were compensated with course credit for their participation.

## **Materials**

### **Relationship commitment.**

Commitment was evaluated using the commitment level subscale of the Investment Model Scale (IMS; Rusbult et al., 1998). The IMS has been validated (Rusbult et al., 1998) and the commitment subscale used has high reliability ( $\alpha=.85$ ). This measure requires participants to respond to the extent to which they agree with seven items (e.g., "I want our relationship to last for a very long time") on a scale ranging from 1 (do not agree at all) to 8 (agree completely); see Appendix A for scale items. Two items were reverse coded. This questionnaire was scored by averaging the responses to each item. On average, participants were highly committed to their current romantic relationships ( $M=5.90$ ,  $SD=0.94$ ).

### **Dating profiles.**

Participants evaluated 81 dating profiles of individuals who vary in physical attractiveness, friendliness, status/resources, and intelligence. Each profile consisted of a profile picture and a biography. The profile pictures consisted of photographs of individuals of the participants' preferred gender who are similar in age to the participants (18-29 years old) and photos varied in physical attractiveness and ethnicity. The biographies were written by a team of six research assistants with the goal of creating statements that independently vary in friendliness, resources, and intelligence. To measure the psychometric properties of the fake dating profiles, a second team of 9 research assistants coded each profile for levels of friendliness ( $\alpha=.92$ ), resources ( $\alpha=.89$ ), intelligence ( $\alpha=.92$ ), and physical attractiveness ( $\alpha=.86$ ).

The average rating across research assistants of each trait for each profile was used as the objective score for that trait.

Participants evaluated the friendliness (i.e., this person is friendly), status/resources (i.e., this person has high financial resources), intelligence (i.e., this person is intelligent), and physical attractiveness (i.e., this person is physically attractive) of each profile using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

### **Attention checks.**

Participants were also presented with three attention check questions throughout the study to ensure they are paying sufficient attention. For example, they were asked what is most likely to fall out of the sky with three nonsensical answer choices and “rain” as the correct option. Similarly, they were also asked to describe the last thing they ate in exactly ten words. Any response that uses less or more than ten words was counted as a failed attention check. Finally, there were two profiles (one in each gender) that contained an additional question where participants were asked to select the second bubble. If a participant answered two or more of the attention check questions incorrectly, their data were excluded from analyses.

## CHAPTER IV: RESULTS

### **Preliminary Analyses**

Correlations and descriptive statistics are presented in Table 1. Consistent with predictions, objective levels of target domains were positively associated with participant ratings of target's status, friendliness, intelligence, and physical attractiveness. The size of these associations varied from moderate to large, indicating that the stimuli were perceived how intended and little devaluation likely occurred.

**Table 1. Descriptive Statistics and Correlations Among Variables**

Variable	1	2	3	4	5	6	7	8	M	SD
(1) Status Ratings									4.58	1.54
(2) Friendliness Ratings	.23**								4.92	1.52
(3) Intelligence Ratings	.41**	.42**							4.81	1.42
(4) Attractiveness Ratings	.28**	.37**	.40**						4.07	1.80
(5) Objective Status	.40**	.01	.17**	.07**					4.26	1.01
(6) Objective Friendliness	.04**	.50**	.21**	.17**	.04**				4.60	1.22
(7) Objective Intelligence	.19**	.18**	.42**	.16**	.46**	.46**			4.51	1.09
(8) Objective Attractiveness	.18**	.27**	.25**	.38**	.28**	.28**	.45**		3.88	1.00

*Note.* \*\*  $p < .01$

All subsequent analyses were two-level models conducted in HLM (Raudenbush et al., 2013) in which participants' multiple responses to each profile were nested within persons. To examine whether commitment has a main effect on ratings of each domain, I conducted four separate analyses in which one of the four evaluations of each profile was regressed onto commitment. Results from these analyses can be found in Table 2. As revealed there, commitment significantly predicted how an individual evaluated one's status and friendliness, such that individuals who were more committed to their relationship were more likely to give targets lower status ratings and higher friendliness ratings. No other main effects of commitment were significant.

**Table 2. Regression Analyses of Commitment Predicting Target Ratings**

	$\beta$	SE	t	df	r	p
Status	-0.15	0.08	-1.98	154	0.16	0.050
Friendliness	0.01	0.07	0.10	154	0.92	0.008
Intelligence	-0.01	0.07	-0.19	154	0.02	0.849
Attractiveness	-0.23	0.15	-1.58	154	0.13	0.116

To examine whether gender effects rating of each domain, I conducted four similar analyses in which one of the four evaluations of each profile were regressed onto sex. Results from these analyses can be found in Table 3. As revealed there, gender significantly predicted how an individual evaluated one's status, friendliness, intelligence, and attractiveness, such that participants who identified as female rated targets as being lower status, less friendly, less intelligent, and less attractive than did participants who identified as male.

**Table 3. Regression Analyses of Gender Predicting Target Ratings**

	$\beta$	SE	t	df	r	p
Status	-0.43	0.12	-3.75	151	0.29	<0.001
Friendliness	-0.62	0.11	-5.87	151	0.43	<0.001
Intelligence	-0.34	0.11	-3.11	151	0.25	0.002
Attractiveness	-1.30	0.17	-7.76	151	0.53	<0.001

**Do Objective Ratings Predict Target Ratings?**

To determine whether objective ratings of each profile domain predict participant ratings of that domain, one of the four evaluations of each profile (i.e., physical attractiveness, friendliness, status/resources, intelligence, romantic interest) were regressed onto the objectively coded level of the trait of that profile, a variable indicating the order in which the profile appeared as a fixed effect, and a randomly varying intercept for profiles in the first level of the model. Results from these analyses can be found in Table 4. As seen there, each objective rating was positively associated with participants' reports, thus corroborating the objective ratings of profile friendliness, intelligence, status, and attractiveness and providing further evidence for the validity of the dating profiles as stimuli.

**Table 4. Regression Analyses of Objective Ratings Predicting Target Ratings**

	$\beta$	SE	t	df	r	p
Status	0.61	0.04	15.85	12460	0.79	<0.001
Friendliness	0.61	0.04	14.92	12461	0.13	<0.001
Intelligence	0.54	0.04	14.31	12449	0.13	<0.001
Attractiveness	0.50	0.40	14.22	12456	0.75	<0.001

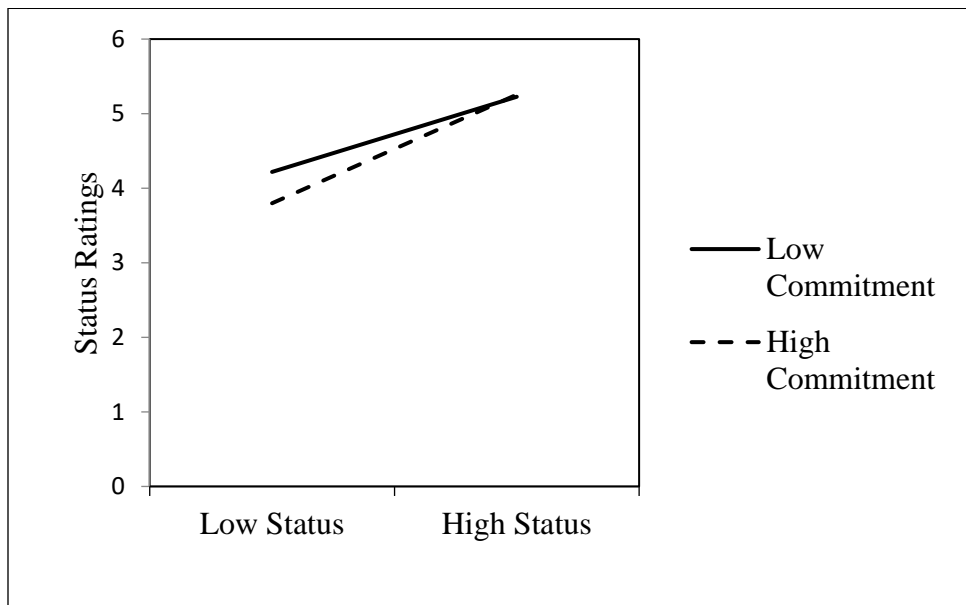
## **Does Commitment Determine How Much Individuals Rely on Objective Information in Evaluating Alternatives?**

To test whether committed individuals rate objectively desirable, but not undesirable, alternatives as less desirable than do less committed individuals (i.e., the devaluation effect), we examined whether the implications of how objectively desirable a person is for how participants rated them depended on participants' commitment. More specifically, one of the four evaluations of each profile were regressed onto the objectively coded level of the trait of that profile, a variable indicating the order in which the profile appeared as a fixed effect, a randomly varying intercept for profiles in the first level of the model, commitment, and the interaction of commitment and the objectively coded level of the trait of that profile. Results from these analyses can be found in Table 5. As revealed there, inconsistent with predictions, commitment did not determine how much individuals rely on objective information in the evaluations of alternatives' friendliness, intelligence, or attractiveness. However, the Objective Rating x Commitment interaction did significantly predict participants' evaluations of status. Although I predicted a significant interaction, simple effects tests revealed a different pattern of results than what I predicted. More specifically, simple effects testing revealed that commitment was not associated with ratings of high-status individuals (1 SD above the mean),  $\beta = -0.31$ ,  $SE = 0.39$ ,  $t(12,459) = 0.01$ ,  $p = .417$ ,  $r = .01$ , but was associated with ratings of low-status individuals (1 SD below the mean),  $\beta = 0.61$ ,  $SE = 0.04$ ,  $t(12,460) = 15.82$ ,  $p < .001$ ,  $r = .14$ , such that people rated low-status individuals more favorably to the extent that they were committed to their relationships. This effect is shown in Figure 1. Therefore, it can be concluded that devaluation occurs in the domain of status, but only when the target is low status.

**Table 5. Regression Analysis of Commitment Determining How Much Individuals Rely on Objective Information to Make Judgements**

	$\beta$	SE	t	df	r	p
Status	0.15	0.06	2.43	12459	0.02	0.015
Friendliness	0.08	0.07	1.22	12460	0.01	0.223
Intelligence	0.12	0.07	1.70	12448	0.02	0.089
Attractiveness	0.08	0.05	1.39	12455	0.01	0.163

**Figure 1. Interactive Effects of Commitment and Objective Status on Evaluations of Target Status**



Given that significant devaluation effects are necessary to examine the research question of whether devaluation is a holistic or domain specific process, I did not conduct the analyses to test this research question.



## CHAPTER V: DISCUSSION

### **General Discussion**

Attractive alternative partners can threaten one's commitment to, and stability of, a romantic relationship. Thus, committed individuals tend to be motivated to engage in processes that limit the threat of alternatives to their current relationship. Specifically, individuals who are committed to their romantic relationship tend to evaluate physically attractive alternatives as less attractive and desirable than do single people. This devaluation of the physical qualities of alternatives is consistent in the literature, but devaluation in domains other than physical attractiveness had yet to be explored. Accordingly, this study aimed to examine how individuals in romantic relationships evaluate specific qualities of alternative relationship partners who not only vary in physical attractiveness, but also in status, intelligence, and friendliness. Specifically, to replicate previous research, this study examined whether committed individuals devalue the physical attractiveness of objectively attractive alternative partners more than individuals who are less committed. This study also extended the research by examining whether committed individuals only devalue the physical attractiveness of desirable alternative partners or whether they also devalue the other desirable qualities of friendliness, status, and intelligence. If so, the final goal of the study was to examine whether committed individuals devalue desirable alternatives in a domain-specific (i.e., devaluing qualities only if they are threatening) or holistic (i.e., simultaneously devaluing all qualities of alternatives who possess some threatening qualities) manner.

To address these questions, participants recruited from MTurk and my university's undergraduate participant pool reported their commitment to their current relationship and evaluated 81 dating profiles on the target's physical attractiveness, status, intelligence, and

friendliness. First, I validated the dating profiles used as stimuli by examining whether participants' ratings of each domain were consistent with the objective codes for those domains. The objective codes for each profile domain significantly predicted participants' ratings of the domain, indicating that the objective codes for each profile were accurate. It is worth noting that these associations were relatively large. On one hand, this suggests that the stimuli were perceived as intended, increasing my confidence in the construct validity of the stimuli. Nevertheless, if highly committed people disregarded objective cues when reporting their perceptions of targets— as suggested by the devaluation effect—the correlation between objective codes and participants' ratings should be relatively weaker. Given the strength of the association, this suggests that little devaluation occurred.

Then, I aimed to determine whether committed individuals devalue physical attractiveness, intelligence, status, and friendliness. Inconsistent with predictions, commitment did not determine how much individuals rely on objective information in the evaluations of alternatives' friendliness, intelligence, or attractiveness, which is inconsistent with the idea that committed individuals devalue alternatives who possess these desirable qualities. However, commitment did predict how much individuals rely on objective information in the evaluations of alternatives' status, but only when the target was low status. Specifically, when targets had low status, committed participants tended to rate them as even lower status than less-committed participants, but this effect did not emerge when participants evaluated high status targets.

### **Strengths and Limitations**

Several strengths of the current research should be noted. First, this study created and validated a set of dating profiles that can be used in future studies. These profiles varied in levels of four traits that are highly valued in potential romantic partners (Edlund & Sagarin, 2014;

Fletcher et al., 1999): friendliness, status, intelligence, and physical attractiveness. Accordingly, these profiles provide a realistic range of potential partners that are found on dating apps (e.g., Tinder). Given that friendliness, intelligence, and status are easily communicated in a dating profile, and these profiles provide a realistic range of potential partners that are found on dating apps (e.g., Tinder), the stimuli created for this study capture an accurate representation of how mate value is shown through dating profile biographies. Further, given that the dating profiles created in this study were validated and varied in levels of multiple domains, it can be assumed that attraction is indeed based on more than physical appearance alone.

Second, this study relied on a diverse sample. In particular, this study used two methods of recruiting participants: MTurk and my university's undergraduate research pool. This dual-recruitment approach allows for the results of this study to be generalized to adults in romantic relationships ages 18 to 29. Further, by having the sample comprise of students and adults on MTurk, the dating profile stimuli created and validated in this study can be used in future research with both students and non-students. In addition to having diversity in the recruitment of participants, this study also was comprised of participants representative of the population. For example, the number of participants who were in a relationship with someone who identified or presented as male was roughly equal to the number of participants who were in a relationship with someone who identified or presented as female. Accordingly, roughly half of the participants were shown each set of dating profile stimuli, thus validating both the male and female dating profiles. This study also used participants with diverse ethnic backgrounds, unlike the majority of psychological studies that tend to rely on a majority white sample, which can limit the generalizability of findings to minority populations.

This study also found some results that are consistent with prior research. For example, there was a gender difference in this sample on how targets were evaluated. Specifically, female participants rated targets as having lower financial resources, being less intelligent, being less friendly, and being less physically attractive across all objective levels of the domain. This pattern is consistent with evolutionary perspectives that posits that women are choosier when selecting a mate than are men (e.g., Trivers, 1972). Specifically, women tend to show less romantic interest in initial encounters with potential romantic partners (Kurzban & Weeden, 2005). Thus, we expect that women would rate targets as being less desirable, in accordance with the consistent findings that women are gatekeepers for romantic interactions.

Nevertheless, several limitations of this work should also be noted. For example, this study may have been underpowered. In determining the sample size for this study, I anticipated a small-to-medium-sized effect when calculating power analyses. I may have overestimated the size of the effect and thus did not collect enough data to find an effect if one did exist. However, it should be pointed out that the effect found in the domain of status was in the opposite direction than predicted and thus increasing the sample size may not have provided support for my predictions.

Another limitation is that viewing the dating profiles may not have been particularly threatening to the relationships of individuals in committed relationships. In particular, participants did not interact with an alternative nor did they have the expectation that they would be meeting the alternative in the future. The lack of in-person connection with alternatives could have impacted how threatening the target was perceived. According to theories of devaluation, an individual will only devalue an alternative if the alternative is perceived to be threatening to their current relationship. Thus, if participants did not perceive that the individuals in the dating

profiles were threatening due to an inability to actually form a relationship with those people, they would not be likely to devalue those people.

### **Implications and Future Directions**

These findings have important implications. First, this study created a set of online dating profiles that can be used in future work to assess how individuals assess strangers. Although the hypothesized effects of devaluation were not significant in this study, the stimuli were validated. Participants perceived the dating profile stimuli to vary in levels of intelligence, friendliness, status, and physical attractiveness similarly to how the profiles were designed to vary. Thus, future research can use these stimuli to assess other research questions regarding how individuals perceive strangers. For example, future research investigating how individuals create overall impressions of potential relationship partners from varying levels of intelligence, friendliness, status, and physical attractiveness could use these profiles as stimuli with questionnaires regarding overall attraction to the target.

Although this study did not find significant differences between highly committed and less committed individuals in how they rated targets' friendliness, intelligence, and physical attractiveness, future research can still benefit from these findings. For example, as previously noted, a potential reason why we did not observe a significant devaluation effect may be because the dating profiles were not threatening to the longevity of the participants' current relationship because participants did not believe that they would be in contact with or meeting the individuals in the dating profile stimuli. Accordingly, this study provides initial evidence suggesting that people may only devalue desirable potential alternative partners when those partners pose a legitimate threat to a committed relationship. Future research might further examine this possibility by providing some participants with a fake message from the individual in the profile

showing interest in the participant, and examining whether the degree of threat determines whether or not committed participants devalue those individuals.

Future work should also consider the implications of one's own qualities for the devaluation of attractive alternatives. In particular, people tend to be involved romantically (see Sprecher & Hatfield, 2009), and be more satisfied in their relationship (see Shackelford & Buss, 1997), with people who are similar to their own level of desirability. For example, people who are moderately intelligent tend to be happiest when they are in a relationship with someone who is also moderately intelligent. Given that individuals tend to prefer mates of similar mate value, they may only perceive threat to their current relationship when the alternative has a similar level of attractive domain as themselves. For example, someone who is moderately intelligent might perceive a threat to her relationship when talking to someone who is similarly moderately intelligent, but not when talking to someone else who is extremely intelligent or unintelligent. Given that committed individuals tend to devalue alternatives only when they are threatening (Lydon et al., 1999), and given that the extent to which an alternative is threatening should depend on the attractiveness of both individuals, one's own level of desirability in each domain may further determine when people devalue others.

The idea that committed individuals may devalue others who are similarly desirable as themselves may also explain why I found that highly committed individuals devalued low, but not high, status individuals. In particular, this study relied on samples of workers from MTurk and undergraduate students at a highly affordable university, and both of these populations tend to have lower income than the median in the United States (Buchanan & Aisch, 2017; Difalla et al., 2018). Therefore, it is likely that the majority of participants in this study have relatively low financial resources. If committed individuals truly devalue people who are most similar to them

in regard to the qualities they possess, it would suggest that a relatively low-status sample would devalue low, not high, status individuals. Future research would benefit by examining this possibility.

### **Conclusion**

People in romantic relationships are constantly being exposed to individuals who may threaten the longevity of their current relationship. This study examined how individuals in romantic relationships evaluate physical attractiveness, intelligence, friendliness, status/resources in alternative relationship partners who vary in these four qualities. This study created and validated dating profile stimuli to examine how individuals rate strangers and found that individuals who are highly committed to their current romantic partner tended to evaluate individuals of low status as less desirable than objectively warranted.

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APPENDIX A: COMMITMENT QUESTIONNAIRE

I am committed to maintaining my relationship with my partner.

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	

I want our relationship to last for a very long time.

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	

I feel very attached to our relationship – very strongly linked to my partner.

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	

It is likely that I will date someone other than my partner within the next year.

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	

I would not feel very upset if our relationship were to end in the near future.

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	

I want our relationship to last forever.

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	

I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now).

1	2	3	4	5	6	7	8
Do not agree at all			Somewhat agree			Agree completely	





This person is intelligent.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

This person is physically attractive.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

## APPENDIX C: SCREENER QUESTIONS

- What is your age? \_\_\_\_\_
  
- Are you currently in a romantic relationship?
  - Yes
  - No
  
- In months, how long have you been in your current romantic relationship?
  - \_\_\_\_\_ months
  
- Does your current romantic partner present or identify as
  - Male
  - Female
  - Neither

## APPENDIX D: DEMOGRAPHIC QUESTIONNAIRE

- How do you describe yourself?
  - Male
  - Female
  - Transgender Male
  - Transgender Female
  - Do not identify as male, female, or transgender
  - Prefer not to say
  
- What is your race/ethnicity?
  - Asian
  - American Indian/Alaska Native
  - Black/African American
  - Hispanic or Latino/a
  - Native Hawaiian/Other Pacific Islander
  - White/Caucasian
  - Another ethnicity
  - Two or more ethnicities
  
- What is your sexual orientation?
  - Straight/Heterosexual
  - Lesbian/Gay/Homosexual
  - Bisexual
  - Other
  - Do not know/Do not wish to respond
  
- What is your religious affiliation?
  - Christian-Protestant
  - Christian-Catholic
  - Jewish
  - Buddhist
  - Muslim
  - Hindu
  - None
  - Agnostic
  - Atheist
  - Other