Beyond Initial Attraction: Physical Attractiveness in Newlywed Marriage

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Physical appearance plays a crucial role in shaping new relationships, but does it continue to affect established relationships, such as marriage? In the current study, the authors examined how observer ratings of each spouse's facial attractiveness and the difference between those ratings were associated with (a) observations of social support behavior and (b) reports of marital satisfaction. In contrast to the robust and almost universally positive effects of levels of attractiveness on new relationships, the only association between levels of attractiveness and the outcomes of these marriages was that attractive husbands were less satisfied. Further, in contrast to the importance of matched attractiveness to new relationships, similarity in attractiveness was unrelated to spouses' satisfaction and behavior. Instead, the relative difference between partners' levels of attractiveness appeared to be most important in predicting marital behavior, such that both spouses behaved more positively in relationships in which husbands were more attractive than their husbands, but they behaved more negatively in relationships in which husbands were more attractive than their wives. These results highlight the importance of dyadic examinations of the effects of spouses' qualities on their marriages.

Keywords: physical attractiveness, marriage, evolutionary psychology, social support, gender

A thing of beauty is a joy forever; its loveliness increases; it will never pass into nothingness.

-John Keats, Endymion: Book I

Beauty is all very well at first sight; but who ever looks at it when it has been in the house for three days?

-George Bernard Shaw, Man and Superman

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Correspondence concerning this article should be addressed to James K. McNulty, Department of Psychology, University of Tennessee, 1404 Circle Drive, Knoxville, TN 37996. E-mail: jmcnulty@utk.edu Reflecting on the power of physical appearance, the poet John Keats (as cited in Bartlett & Dole, 1919/2000) and the playwright G. B. Shaw (1903) both recognized that beautiful things bring pleasure to those who behold them. They disagreed only in their judgments about the duration of this effect. To Keats, the benefits of beauty are everlasting, bringing joy to the perceiver always. To Shaw, the benefits of beauty are fleeting, destined to fade as the object becomes familiar.

Though a voluminous literature joins Keats and Shaw in affirming the power of attractiveness to bring about positive outcomes in new relationships (for review, see Langlois et al., 2000), their disagreement regarding its lasting effects remains an open question. Does physical attractiveness continue to predict outcomes in established relationships, such as marriage? Or are the benefits of attractiveness limited to formative stages of new relationships?

To address this issue, we divide the remainder of this introduction into three sections. In the first section, we examine evidence that each spouse's level of physical attractiveness may have an impact on satisfaction and behavior in marriages. In the second section, we explore the possibility that spouses' levels of attractiveness relative to each other may have an impact on their relationships. In the final section, we describe a study designed to evaluate these effects through analyses of observer-rated facial attractiveness, reports of marital satisfaction, and observations of social support behavior from a sample of newly married couples.

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Effects of Levels of Attractiveness in Established Relationships

That attractiveness accounts for processes and outcomes in new relationships is not surprising. Physical appearance is frequently the first thing people learn about one another and thus may be the only information upon which new relationship partners can base their attitudes toward the relationship. Furthermore, intimates in new relationships may supplement their incomplete knowledge of one another by relying on positive stereotypes about attractive people (e.g., Dion, Berscheid, & Walster, 1972).

However, there are also several reasons to expect that partners' levels of physical attractiveness should continue to be associated with outcomes in more established relationships, such as marriage. First, physically attractive individuals tend to be judged and treated more positively than less attractive individuals, connecting them to a wide variety of desirable rewards, such as higher levels of self-esteem, better employment, higher salaries, and better physical and mental health (for review, see Langlois et al., 2000). Such rewards should make the lives of physically attractive individuals easier, which in turn may make it easier for attractive people to maintain satisfying relationships. Second, physically attractive individuals tend to behave more positively in social interactions than less physically attractive individuals (for review, see Langlois et al., 2000). Such positive behavior may generalize to make the marital interactions of more attractive spouses and their partners proceed more positively as well.

Nevertheless, evidence for the lasting effects of physical appearance on intimate relationships has been limited in several ways. First, the majority of research in this area has focused on the role of attractiveness in the early stages of relationship formation rather than established relationships, such as marriage. Second, the majority of the few exceptions to this trend have focused on associations between relationship outcomes and partner-reported attractiveness (e.g., Sangrador & Yela, 2000), where results may be affected by processes of sentiment override (cf. Weiss, 1980). Finally, although several studies have obtained associations between observer ratings of physical attractiveness and selfreported satisfaction, their results have been inconsistent. In one study, Murstein and Christy (1976) failed to find any relationship between objective ratings of physical attractiveness and marital satisfaction. A second study of elderly couples (mean age was 75.1 years for men and 73.5 years for women) did obtain a significant positive association between objective ratings of partners' physical attractiveness and self-reported satisfaction (Peterson & Miller, 1980). Yet, given that physical attractiveness in elderly couples may be highly correlated with factors-such as health, vigor, or disposition, any of which could have accounted for the effects observed in that study-and given that neither study of married couples examined associations between attractiveness and behavior, the role of attractiveness in predicting satisfaction and behavior in established relationships remains unclear.

To address the role of levels of attractiveness in estab-

lished relationships more rigorously, in the current study we obtained observer ratings of physical attractiveness, observer ratings of behavior, and self-reports of satisfaction from a sample of recently married couples. If the effects of levels of attractiveness are enduring, previous research suggests that spouses should (a) be more satisfied to the extent that their partners are more attractive, (b) be more satisfied to the extent that they themselves are more attractive (because the satisfaction of one partner positively predicts the satisfaction of the other partner; e.g., Karney & Bradbury, 1997), (c) behave more positively to the extent that they themselves are more attractive, and (d) behave more positively to the extent that their partners are more attractive (because the behavior of one partner positively predicts the behavior of the other partner; e.g., McNulty & Karney, 2002).

A Dyadic Perspective: Relative Levels of Attractiveness

An implicit assumption of almost all research on physical attractiveness in relationships is that the effects of one partner's attractiveness are independent of the other partner's attractiveness. In more established relationships, such as marriage, however, there is reason to expect that the impact of each spouse's attractiveness may depend on how they compare with one another, rather than how they compare with some absolute standard of beauty. Specifically, given associations between attractiveness and concrete rewards, such as social approval and access to alternative partners (e.g., Langlois et al., 2000), physical attractiveness may operate like other resources, such that discrepancies in partners' levels of attractiveness may predict satisfaction and behavior (e.g., Thibaut & Kelley, 1959; Walster, Berscheid, & Walster, 1973).

Yet, competing predictions can be made regarding how discrepancies in attractiveness should predict the outcomes of established relationships. Consistent with theories noting the importance of similarity and equity (Byrne, 1961; Walster et al., 1973), it may be that any discrepancies between partners' levels of attractiveness increase risks for couples, regardless of which partner is more attractive. Indeed, a robust literature indicates that people tend to choose mates that "match" their own levels of attractiveness (for review, see Takeuchi, 2006). Equity and similarity theories predict that comparability in attractiveness should be associated with greater levels of satisfaction, whereas dissimilarity in attractiveness should be associated with lower levels of satisfaction. Likewise, the more and better alternatives likely to be available to more attractive partners may lead them to feel less dependent on their relationships (e.g., Thibaut & Kelley, 1959) and thus feel freer to engage in negative behaviors that could harm the relationship (e.g., Frye, McNulty, & Karney, in press). Further, given that the behavior of one partner predicts the behavior of the other partner (e.g., McNulty & Karney, 2002), less attractive partners may respond more negatively in return. In other words, predictions derived from similarity and equity theories suggest that when couples are mismatched on attractiveness, both partners should be less satisfied and behave less positively.

Alternatively, evolutionary perspectives and normative resource theories suggest that the gender of the more attractive partner should play an important role in determining the effects of disparities in attractiveness. Normative resource theories (e.g., Rodman, 1967) suggest that disparities in rewards are particularly likely to lead to problems when partners feel underbenefited with respect to an important reward. Evolutionary perspectives (e.g., Buss, 1989) note that the physical attractiveness of long-term mates is more important to men than to women. Accordingly, disparities in attractiveness may matter most to husbands, such that husbands who are more attractive than their wives may be less satisfied and behave more negatively because they are underbenefited with respect to an important resource, whereas husbands who are less attractive than their wives may be more satisfied and behave less negatively because they are overbenefited with respect to an important resource. Because physical attractiveness is less important to wives, in contrast, relative attractiveness may only affect them through its effect on husbands. That is, because the satisfaction and behavior of husbands' should positively predict the satisfaction and behavior of wives, less attractive wives' may be less satisfied and behave more negatively in response to their more attractive husbands, whereas more attractive wives should be more satisfied and behave less negatively in response to their less attractive husbands. Conventional wisdom is in line with this prediction: Participants asked to predict the relationship outcomes of couples mismatched on attractiveness predicted that relationships in which the man was more attractive than the woman would be less satisfying than relationships in which the woman was more attractive than the man (Garcia & Khersonsky, 1996).

Study Overview

The aim of the current study was to examine the impact of absolute and relative levels of physical attractiveness on the relationship satisfaction and support behavior of newlywed couples. The support context is an appropriate one in which to examine the effects of attractiveness on behavior for several reasons. First, recent evidence highlights the importance of supportive behaviors in accounting for marital outcomes (e.g., Kearns & Leonard, 2004). Second, work within an interdependence tradition has pointed to support behavior as an important consequence of quality of alternatives (e.g., Weiselquist, Rusbult, Foster, & Agnew, 1999)one of the reasons attractiveness may predict behavior in this context. Newlyweds are an appropriate sample within which to examine the lasting effects of physical attractiveness for several reasons as well. First, by virtue of the fact that all couples had recently married, these were clearly ongoing, committed relationships, in contrast to the hypothetical or new relationships examined in much of the previous literature on attractiveness. Second, because all couples were first-married newlyweds, they were relatively homogeneous in age and relationship duration, limiting

potential confounds between these variables and the variables of interest to this study.

Method

Participants

All participants were assessed within the first 6 months of both partners' first marriage. As part of a broader study of marital development, we solicited couples from the community using two methods. The first was to place advertisements in community newspapers and bridal shops, offering up to \$300 to couples willing to participate in a study of newlyweds. The second was to send letters of invitation to couples that had completed marriage license applications. Couples responding to either method of solicitation were screened in a telephone interview to determine whether (a) this was the first marriage for each partner, (b) the couple had been married less than 3 months, (c) neither partner had children (for other aims of the study), (d) each partner was at least 18 years of age and wives were less than 35 years of age (to allow that all couples were capable of conceiving children for other aims of the study), (e) each partner spoke English and had completed at least 10 years of education (to ensure comprehension of the questionnaires), and (f) the couple had no immediate plans to move away from the area.

The 82 eligible couples that arrived for their scheduled interview comprised the current sample. Although all couples were examined within the first 6 months of their marriage, the average length of the relationship prior to marriage was 45.3 months (SD = 29.9), suggesting that these were indeed established relationships. Husbands were on average 25.1 years of age (SD = 3.3) and had received 16.3 years of education (SD = 2.4). Of the husbands, 40% were employed full time, and 54% were full-time students. Wives were on average 23.7 years of age (SD = 2.8) and had received 16.3 years of education (SD = 1.2). Of the wives, 39% were employed full time, and 50% were full-time students. Perhaps because of the large number of students in the sample, the average combined income of couples was less than \$20,000 per year. Slightly over 70% of the sample was Christian (over 45% were Protestant), and 83% of the husbands and 89% of the wives were White.¹

Procedure

Couples meeting eligibility requirements were scheduled to attend a 3-hr laboratory session. Before the session, they were mailed a packet of questionnaires to complete at home and bring with them to their appointment. This packet included a letter of informed consent approved by the local institutional review board, self-report measures of demo-

¹ The following reports also describe data from this sample: Frye and Karney, 2002, 2004, 2006; Karney, Kreitz, and Sweeney, 2004; McNulty and Karney, 2001, 2002, 2004; Neff and Karney, 2002, 2003, 2004, 2005; Vogel and Karney, 2002. However, this is the only article to address physical attractiveness as a predictor of relationship outcomes.

graphics and marital satisfaction, and a letter instructing spouses to complete all questionnaires independently of one another. As part of a subsequent laboratory session, spouses participated in a set of interactions designed to assess how spouses behaved when offering and soliciting social support. Each spouse identified a personal problem, or something about themselves they wanted to change, and then engaged in a 10-min videotaped discussion about each partner's topic. The order of these two interactions was determined by a coin flip. After completing their interactions, couples were paid \$50 for participating in this phase of the study.

Materials

Marital satisfaction. We assessed global marital satisfaction using the Quality Marriage Index (Norton, 1983), a six-item scale asking spouses to report the extent to which they agree or disagree with general statements about their marriage (e.g., "We have a good marriage" and "My relationship with my partner makes me happy"). Five items ask spouses to respond according to a 7-point scale, whereas one item asks spouses to respond according to a 10-point scale, yielding scores from 6 to 45. High scores reflect greater satisfaction with the relationship. Internal consistency of this measure was high ($\alpha = .94$ for husbands, and $\alpha = .94$ for wives).

Marital interaction behavior. Trained raters coded videotaped discussions of support topics using the Social Support Interaction Coding System (Pasch, Bradbury, & Sullivan, 1997). The Social Support Interaction Coding System assigns six possible codes to support providers-positive emotional, positive instrumental, positive other, negative, neutral, or off-task-and four possible codes to support seekers-positive, negative, neutral, or off-task. One index of social support behavior was developed for each spouse by taking the following steps. First, the number of times each code was assigned to each spouse was divided by the total number of speaking turns for that spouse, thus controlling for different frequencies of speaking turns across spouses. Second, with respect to support providers, because there were relatively low proportions of the positive emotional (.06) and positive instrumental (.09) codes, we combined the proportions of all three positive codes for each spouse to come up with an index of overall positivity. Third, we created an index of net positivity for each spouse by subtracting the proportion of negative codes from the proportion of positive codes during each discussion (rs ranged from -.38 to -.61). Finally, because our predictions did not distinguish between each discussion (for husbands, r =.54; for wives, r = .36), we collapsed across the two discussions to create one index of net positive behavior for each spouse. Thus, scores could range from -1.0, indicating every speaking turn was negative, to +1.0, indicating that every speaking turn was positive. Intraclass correlation coefficients (ICCs) indicated adequate interrater reliability for the codes analyzed in the current study (for provider behaviors, positive emotional ICC = .83, positive instrumental ICC = .88, positive other ICC = .64, negative

ICC = .86; for solicitor behaviors, positive ICC = .66, negative ICC = .89).

Physical attractiveness. Six trained research assistants rated the facial attractiveness of each spouse from the videotapes on a scale ranging from 1 to 10, in which higher ratings indicated more attractive faces. To maximize the objectivity of these ratings, (a) coders rated the first neutral still frame from within the first 60 s of partners' first interaction, (b) coders rated each spouse independently by covering the face of one spouse at a time and rating all the husbands first and all the wives second, (c) and none of the coders who rated attractiveness also coded support interactions. Consistent with findings that people within and across cultures show very high levels of agreement about who is attractive (Langlois et al., 2000), the reliability of our coders was quite high (coefficient $\alpha = .90$ for ratings of husbands, and coefficient $\alpha = .93$ for wives). To assess levels of attractiveness, we computed the mean attractiveness rating across raters.

Results

Descriptive Statistics

As would be expected in newlyweds, both husbands and wives reported relatively high levels of marital satisfaction (for husbands, M = 42.1, SD = 4.0; for wives, M = 42.1, SD = 5.3), and observers rated both husbands and wives as exchanging more positive than negative behaviors during their social support interactions (for husbands, M = 0.20, SD = 0.24; for wives, M = 0.24, SD = 0.21). Also, mean ratings of husbands' and wives' facial attractiveness were very close to the midpoint of the attractiveness scale, with variability across spouses (for husbands, M = 4.5, SD = 1.0; for wives, M = 4.3, SD = 1.2).

With respect to correlations among dependent variables, consistent with prior research on newlyweds (e.g., Karney & Bradbury, 1997), spouses' behaviors shortly after marriage were unrelated to their marital satisfaction (for husbands, r = .08; for wives, r = .03). Also, as expected, observations of behavior were positively correlated for husbands and wives (r = .58). With respect to correlations among the independent variables, not surprisingly, ratings of husbands' and wives' attractiveness were correlated with each other (r = .24). In sum, all variables performed as expected.

Are Absolute Levels of Physical Attractiveness Associated With Outcomes in Established Relationships?

In the first set of analyses, we examined whether spouses' absolute levels of physical attractiveness were related to their marital outcomes. If so, prior research on new relationships suggests that both spouses should behave more positively and be more satisfied with their marriages to the extent that they or their spouses are more attractive. To examine this possibility, we estimated regression models (separately for husbands and wives) in which each potential outcome (satisfaction or behavior) was regressed onto each spouse's and each partner's absolute level of attractiveness.

Results of these analyses are presented in Table 1. As the table reveals, absolute levels of attractiveness were associated with both satisfaction and behavior-but not always in the direction suggested by studies of new relationships. With respect to behavior, consistent with findings from studies of new relationships, more attractive wives tended to behave more positively during their supportive interactions with their husbands. However, in contrast to studies of new relationships, more attractive husbands tended to behave more negatively during such discussions. Moreover, neither husbands' nor wives' supportive behavior was significantly associated with their partners' attractiveness. Likewise, in contrast with findings from studies on associations between attractiveness and satisfaction in new relationships, husbands' and wives' levels of marital satisfaction appeared to be unaffected by their partners' level of attractiveness. In fact, the only association that emerged with respect to absolute levels of attractiveness and satisfaction was that more attractive husbands tended to be less satisfied with their marriages. Taken together, these findings provide little support for the hypothesis that higher levels of attractiveness benefit marriage.

Are Differences Between Spouses' Levels of Physical Attractiveness Associated With Outcomes of Established Relationships?

In the second set of analyses, we examined whether differences in spouses' levels of attractiveness were associated with their marital outcomes. Evolutionary perspectives and normative resource theories suggest that the directional difference in spouses' attractiveness, that is, the *signed difference score* formed by subtracting wives' attractiveness from husbands' attractiveness, should negatively predict outcomes, such that outcomes should be more negative when husbands are more attractive than their wives but more positive when wives are more attractive than their husbands. Alternatively, equity and similarity theories suggest that any differences in spouses' attractiveness, that is, *absolute values of the difference score* formed by subtracting wives' attractiveness from husbands' attractiveness, should negatively predict satisfaction and behavior, such

Table 1Associations Between Physical Attractiveness andSatisfaction/Support Behavior in Marriage

	Husbands		Wives		
Variable	Satisfaction	Support behavior	Satisfaction	Support behavior	
Own attractiveness	27*	31**	08	.26*	
Partner's attractiveness	02	.16	13	14	

Note. Effect size *r* reported.

* p < .05, two-tailed. p < .01, two-tailed.

that husbands and wives should be less satisfied and behave more negatively when they are dissimilar in their levels of attractiveness but be more satisfied and behave more positively when they are matched in their levels of attractiveness.

Though such difference score correlations make sense conceptually, analyses estimating associations between difference scores and outcomes can lead to invalid conclusions statistically (e.g., Griffin, Murray, & Gonzalez, 1999). As an alternative to difference score correlations, Edwards (1994) has recommended using polynomial regression equations that regress outcomes onto various forms of the two components of a difference score. To evaluate the effect of the signed difference score, Edwards has recommended regressing the outcome of interest onto each component of the difference score simultaneously. In terms of the current hypotheses, if the signed difference between husbands' and wives' attractiveness accounts for satisfaction and behavior, regressing those outcomes onto both spouse's attractiveness will reveal that husbands' and wives' attractiveness have equal but opposite significant effects on those outcomes. To examine the effect of the absolute value of the difference score, Edwards has recommended regressing the outcome of interest onto (a) both components of the difference score, (b) a dummy code indicating whether the difference is positive or negative, and (c) interactions between that dummy code and each component of the difference score. In terms of the current predictions, if the absolute value of the difference between husbands' and wives' attractiveness accounts for satisfaction and behavior, such an analysis will reveal not only that husbands' and wives' levels of attractiveness have equal but opposite effects on each outcome but also that interactions between each spouse's attractiveness and the direction of the difference have equal but opposite effects on each outcome and that the dummy code indicating the direction of the difference accounts for no additional variance in each outcome. Accordingly, we estimated these two regression models (separately for husbands and wives). Further, because discrepancies in attractiveness may be confounded with education and income (in that intimates who are less attractive than their partners may be offering more of these resources in return), in each analysis we controlled for the following four variables: (a) years of husbands' education, (b) years of wives' education, (c) husbands' income, and (d) wives' income.

Results of these analyses are presented in Table 2. Consistent with the predictions derived from evolutionary and normative resource theories, the signed difference between spouses' levels of attractiveness, not the absolute value of that difference, accounted for observations of both spouses' behavior. Specifically, the polynomial regressions testing the effect of the signed difference between husbands' and wives' attractiveness on each spouse's behavior produced results consistent with the difference score interpretation, as husbands' attractiveness negatively predicted each spouse's behavior, wives' attractiveness positively predicted each spouse's behavior, and the difference between these two effects did not reach significance (for husbands' behavior, t =

Table 2

Results of Polynomial Regression to Evaluate Associations Between Differences in Physical Attractiveness and Satisfaction/Support Behavior in Marriage

Variable	Husbands' attractiveness	Wives' attractiveness	Dummy code: Direction of difference	Husbands' Attractiveness × Direction	Wives' Attractiveness × Difference	Hypothesis supported?
		E	Behavior			
Husbands' behavior						
Relative attractiveness	35^{**}	.24*				Yes
Matched attractiveness	14	.06	.01	18	.14	No
Wives' behavior		**				
Relative attractiveness	21^{*}	.32				Yes
Matched attractiveness	27^{*}	.26*	17	.11	.00	No
		Sa	tisfaction			
Husbands' satisfaction						
Relative attractiveness	.25*	.07				No
Matched attractiveness	25^{*}	.15	.02	.14	15	No
Wives' satisfaction						
Relative attractiveness	13	05				No
Matched attractiveness	.06	18	.02	05	.08	No

Note. Effect size *r* reported.

* p < .05, one-tailed. *** p < .05, one-tailed.

0.8, p > .10; for wives' behavior, t = 0.8, p > .10). In contrast, the polynomial regressions testing the effect of the absolute difference between husbands' and wives' attractiveness on each spouse's behavior failed to produce results consistent with the difference score interpretation, as interactions between each spouse's attractiveness and the dummy code of the direction of the difference in spouses' levels of attractiveness did predict either spouse's behavior. Discrepancies in attractiveness did not account for either spouse's overall levels of satisfaction with the marriage.

Given that the polynomial regressions indicated an association between the signed difference score and behavior, we regressed each spouse's behavior onto that signed difference score (formed by subtracting wives' attractiveness from husbands' attractiveness) to clearly interpret that association. The signed difference score was negatively associated with both spouses' behavior (for husbands' behavior, t = -3.3, p < .01; for wives' behavior, t = -3.1, p < .01), indicating that both husbands and wives behaved more negatively to the extent that husbands were more attractive than wives, but more positively to the extent that wives were more attractive than husbands. Notably, these difference score correlations can only be interpreted because they were supported by the more rigorous polynomial regressions described in the previous paragraph.

Do Differences in Partners' Physical Attractiveness or Absolute Levels of Attractiveness Best Account for Social Support Behavior?

Finally, given that own attractiveness and relative attractiveness were both associated with each spouse's behavior, a final set of analyses was conducted to determine which factor accounted for behavior best. Specifically, regression models were estimated (separately for husbands and wives) in which behavior was regressed onto own attractiveness and the signed difference between husbands' and wives' attractiveness simultaneously. Results indicate that relative attractiveness was a better predictor of behavior, as relative attractiveness remained significantly associated with husbands' behavior (t = -2.3, p < .05) and marginally associated with wives' behavior (t = -1.9, p = .06), whereas own attractiveness was no longer significantly associated with the behavior of either spouse (for husbands' behavior, t = -1.3, p = .05; for wives' behavior, t = 0.3, p > .05).

Discussion

Summary of Results

Prior studies of physical attractiveness in new and hypothetical relationships suggest that physical attractiveness should be associated with more positive outcomes in marriage. Results of the current study offer inconsistent support for this prediction. Although more attractive wives behaved more constructively during social support interactions with their husbands, more attractive husbands behaved less constructively and were less satisfied with their marriages. Associations between relative attractiveness and marital behavior, however, were consistent with predictions derived from evolutionary and normative resource theories. Specifically, both spouses tended to behave more positively when wives were more attractive than their husbands and more negatively when husbands were more attractive than their wives. Subsequent analyses revealed that these associations accounted for associations between own attractiveness and own behavior. Notably, absolute values of the difference between husbands' and wives' attractiveness were unrelated

to behavior or satisfaction. In sum, these results suggest that it is less relevant to the satisfaction and behavior of married couples that spouses be attractive on an absolute scale or similarly attractive to each other as it is that wives be more attractive than their husbands.

Implications for Theory and Research

These findings have several implications for research and theory on close relationships. First, they highlight the importance of both evolutionary and normative resource theories in understanding marital processes. Evolutionary perspectives can help explain why men's attractiveness, in both an absolute and relative sense, appeared to be more detrimental than beneficial to marriage: Attractive men have available to them more short-term mating opportunities (e.g., extramarital affairs; Gangestad & Thornhill, 1997), which may make them less satisfied and less committed to maintain the marital relationship through their behavior. Likewise, both evolutionary and normative resource theories can help explain why similarity in attractiveness did not emerge as important to these marriages. It may be that wives are not adversely affected by being more attractive than their husbands because attractiveness is less important to women in long-term mating situations (e.g., Buss, 1989), and equity only matters in terms of important resources (e.g., Rodman, 1967). Consistent with similarity predictions, however, similarity in attractiveness may be important to new relationships, as attractiveness is important to women in short-term mating situations (e.g., Li & Kenrick, 2006). Interestingly, perhaps similarity in attractiveness would emerge as important even to established relationships at times when women's short-term matching strategies are more salient (e.g., during ovulation; cf. Gangestad, Simpson, Cousins, Garver-Apgar, & Christensen, 2004). Future research may benefit by examining this possibility.

Second, the fact that absolute levels of attractiveness appear to matter in the formative stages of relationships, whereas relative attractiveness mattered more in these marriages, highlights the importance of adopting a dyadic perspective to understand how spouses' qualities are likely to affect established relationships, such as marriage. It may be that a variety of qualities that matter in terms of their absolute levels in the beginning of the relationship begin to matter in more relative terms as the relationship deepens and develops. Consistent with this possibility, although research on mate selection demonstrates the importance of absolute education levels to mate choices (Perusse, 1994), research on the effects of education in ongoing relationships demonstrates that couples experience enhanced communication and reduced conflict when wives are more similar to husbands in education, regardless of the mean level of education of the couple (Harrell, 1990). Likewise, though absolute levels of partner's income are associated with relationship choices (e.g., Kenrick, Sundie, Nicastle, & Stone, 2001), relative income has been shown to be related to marital outcomes (e.g., Rogers & DeBoer, 2001). Taken together, this growing body of research suggests that findings from studies of new relationships may not always

provide the best insights into the processes that characterize more established relationships, such as marriage.

Strengths and Limitations

Our confidence in the current findings is enhanced by several strengths in the study's method and design. First, in contrast to prior studies that have relied exclusively on self-reports of attractiveness and behavior, the current study drew from independent observer ratings of attractiveness and behavior, limiting the possibility that the associations observed here stem from shared method variance. Second, in contrast to prior studies that have relied on newly formed or hypothetical relationships, participants in this study were all married couples for whom the processes and outcomes being measured were real and consequential. Third, because all spouses were newlyweds, these results are unlikely to be the product of unmeasured differences in marital duration.

Despite these strengths, the current study is nevertheless limited in several ways that should qualify interpretations of these results. First, whereas the relative homogeneity of this sample enhances our confidence in the pattern of associations, this lack of variability (particularly the large proportion of married college students) may have been responsible for some of the null results obtained here (e.g., associations between relative attractiveness and satisfaction). Future research may benefit by obtaining larger samples that vary more widely in attractiveness. Second, although the measure of attractiveness used here helped to isolate potential effects of facial attractiveness, overlooked variability in other indicators of attractiveness (e.g., hip-to-waist ratio) may contribute similarly or differently to the results here. Future research may benefit by examining the role of other facets of physical attractiveness in marriage. Third, the cross-sectional nature of our design also limited our ability to examine interesting predictions regarding the changing role that attractiveness may play in these marriages over time, such as the idea that similarity in attractiveness may emerge as important even in established relationships during times when women's short-term matching strategies are salient. Finally, all of the data examined here are correlational and, thus, are unable to support strong causal conclusions. Though we were able to control some variables that could have been responsible for the associations observed here (education and income), other potential third variables remained uncontrolled.

Conclusion

Which author was more accurate in his description of physical attractiveness: Keats (as cited in Bartlett & Dole, 1919/2000), who suggested that the effects of beauty should be enduring, or Shaw (1903), who expected the effects of physical appearance to fade with time and experience? Consistent with Keats' view, these data indicate that the attractiveness that first draws people together continues to influence relationships even after marriage. However, as a relationship deepens and develops, the way physical appearance affects the relationship appears to change. Whereas the attractiveness of two individuals may have independent effects on their relationship when they first meet, the relationship between their levels of attractiveness may have the greater impact on the relationship as partners grow interdependent. Thus, the nature of the relationship between two individuals may moderate the way their individual qualities affect dyadic processes.

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