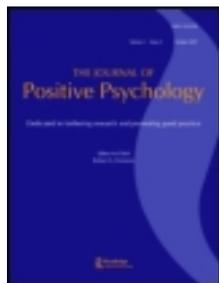


This article was downloaded by: [Katherine Bao]

On: 27 March 2013, At: 13:21

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rpos20>

Making it last: Combating hedonic adaptation in romantic relationships

Katherine Jacobs Bao^a & Sonja Lyubomirsky^a

^a Department of Psychology, University of California, Riverside, CA, USA

Version of record first published: 27 Mar 2013.

To cite this article: Katherine Jacobs Bao & Sonja Lyubomirsky (2013): Making it last: Combating hedonic adaptation in romantic relationships, *The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice*, DOI:10.1080/17439760.2013.777765

To link to this article: <http://dx.doi.org/10.1080/17439760.2013.777765>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Making it last: Combating hedonic adaptation in romantic relationships

Katherine Jacobs Bao* and Sonja Lyubomirsky

Department of Psychology, University of California, Riverside, CA, USA

(Received 16 July 2012; final version received 12 February 2013)

Is the waning of passion and satisfaction in romantic relationships inevitable, or can the honeymoon period be sustained? The Hedonic Adaptation Prevention model, which describes the mechanisms by which people adapt to positive life changes, posits that hedonic adaptation is a powerful barrier to sustained relationship well-being and suggests how to thwart it. In this paper, we apply the model to a new area of study – namely, intimate relationships. We explore the practices, habits, and activities that can increase the number of positive events and emotions in relationships, boost their variety, lower a couple's entitled aspirations, and build their appreciation – all variables that can serve to slow adaptation and increase well-being. Additionally, we discuss types of romantic relationships (e.g. long-distance relationships and unhealthy relationships) that may be relatively less susceptible to hedonic adaptation.

Keywords: happiness; well-being; romantic relationships; hedonic adaptation

The beginning of a romantic relationship is often marked by high levels of passion, joy, attraction, excitement, and novelty. With time, however, these feelings and experiences become less intense, rendering the relationship a great deal less exciting. Is it possible to maintain the initial potent feelings, or is the onset of unremarkability – or even boredom – in a relationship inevitable? In this paper, we suggest a course for future research that will be able to address and answer this fundamental question. To this end, we introduce the Hedonic Adaptation Prevention (HAP) model (Lyubomirsky, 2011; Sheldon & Lyubomirsky, 2012) as an approach to understand the mechanisms behind declines in relationship satisfaction and illuminate the process known as hedonic adaptation. Our aim is to break down the HAP model into easily testable components to provide a blueprint for future studies. Finally, we discuss types of relationships that may be relatively more resistant to adaptation.

Hedonic adaptation involves a gain or loss in happiness after the experience of a valenced stimulus or event (e.g. marriage), followed by a gradual return to baseline (e.g. to pre-marriage levels; Frederick & Loewenstein, 1999). Consistent with researchers' definitions, we conceptualize happiness (also known as subjective well-being) as a combination of high life satisfaction, frequent positive affect, and infrequent negative affect (e.g. Diener, 2000; Diener, Suh, Lucas, & Smith, 1999). Hedonic adaptation can apply to overall well-being, as well as its components, such as relationship satisfaction or specific positive emotions (e.g. love). Of course,

events in relationships will likely affect relationship satisfaction and momentary positive affect to a greater degree than overall happiness. However, we expect that both the domain-specific effect on relationship satisfaction and the general effect on well-being are worthy of being studied.¹

People have been found to adapt to a variety of both good and bad events. Longitudinal panel studies allow researchers to track participants' well-being before and after experiencing a major life event. Using such designs, researchers have found that adaptation to some major negative life events such as long-term disability (Lucas, 2007), divorce (Lucas, 2005), unemployment (Clark & Georgellis, in press; Lucas, Clark, Georgellis, & Diener, 2004), and widowhood (Lucas & Clark, 2006; Lucas, Clark, Georgellis, & Diener, 2003) is incomplete, on average. That is, even years after becoming disabled or unemployed, people appear to regain some of their pre-event life satisfaction, but never return to baseline. In sum, although longer follow-ups might uncover stronger evidence of adaptation in the negative domain, the longitudinal research on changes in well-being suggests that people do not fully recover from major negative life events. At the very least, these studies demonstrate that adaptation to adverse life changes is a slow process.

Although fewer studies have tracked people's reactions to positive events, interestingly, these studies show that adaptation in response to positive experiences is relatively rapid (Lyubomirsky, 2011). Adaptation to positive events such as being promoted to a new job (Boswell,

*Corresponding author. Email: katherine.bao@email.ucr.edu

Boudreau, & Tichy, 2005) and the birth of a child (Clark & Georgellis, in press) appears to be faster and more complete than adaptation to negative events. Parallel findings have been obtained for adaptation to romantic relationships. For example, in two large panel studies, researchers observed changes in life satisfaction in the years before and after marriage (Lucas et al., 2003; Clark & Georgellis, in press). Although people varied in their degree of adaptation, on average, they tended to experience a boost in life satisfaction in the years prior to marriage, and a gradual decline back to baseline after marriage. Mirroring these results, love has also been found to be susceptible to adaptation. Levels of both passionate and companionate love decline over time in marriages (Hatfield, Pillemer, O'Brien, Sprecher, & Le, 2008). In sum, adaptation to marriage appears to be relatively fast and complete.

Hedonic adaptation to romantic relationships may take a somewhat unusual course, in that 'cycles' of adaptation may be observed as the relationship progresses. Launching a new relationship provides a boost in overall well-being, to which the members of a couple will likely start to adapt, but they may obtain additional large boosts when they get engaged and again when they marry, become pregnant, or move into their first home. Thus, although research shows that people return to baseline (pre-marriage) levels of life satisfaction after a few years of marriage, those baselines may already be inflated (Lucas et al., 2003). Furthermore, people may adapt at different rates at different stages of relationships, and trajectories of well-being may differ for different types of well-being (e.g. life satisfaction, relationship satisfaction, love, etc.). Although the size and timing of the effects may differ, the overall trajectories are likely to be similar. For example, relationship events may affect relationship satisfaction more rapidly and more strongly than overall well-being, and relationship satisfaction may affect later overall well-being. A study of couples in Norway found that relationship satisfaction predicted later life satisfaction to a greater degree than life satisfaction predicted relationship satisfaction (Dyrdal, Roysamb, Nes, & Vittersø, 2011). For the purposes of this paper, we will address both relationship satisfaction and overall well-being, and focus on adaptation to new – rather than longstanding – relationships.

Hedonic Adaptation Prevention (HAP) Model

If people ultimately 'get used to' everything positive that happens in their lives, then how can they ever become happier and stay happier? An individual who desires to increase his or her happiness would do well to put effort into thwarting adaptation. In romantic relationships, combating adaptation is especially important, because research suggests that relationship boredom can be toxic. In one study, boredom predicted lowered relationship satisfaction nine years later, even when controlling for initial relationship satisfaction (Tsapelas, Aron, & Orbuch, 2009). In an

investigation from the mid-1980s, boredom was one of the most frequently given reasons for divorce (Gigy & Kelly, 1992). That is, individuals who have fully adapted to their relationship – and hence experience boredom – are less satisfied with their relationship and more likely to end it. We argue that one of the best ways to stave off boredom in romantic relationships may be to use strategies to slow or stop hedonic adaptation. The HAP model (Lyubomirsky, 2011; Sheldon & Lyubomirsky, 2012; see Figure 1) suggests several potentially fruitful strategies.

According to the HAP model, adaptation to positive life changes unfolds via two paths – through decreases in positive emotions and through increases in aspirations. When someone experiences a positive change, such as beginning a new intimate relationship, that change will generate a stream of positive events, which, in turn, will trigger increases in positive emotions (see bottom path in Figure 1). For example, as two individuals begin a new romance, they may experience multiple new positive events (e.g. sharing their dreams, going out on thrilling dates, and meeting new people) and thus more positive emotions (e.g. excitement, energy, affection), which lead to boosts in happiness. However, over time, these positive events and positive emotions will likely become less frequent, so they experience fewer and smaller boosts in happiness, and thus begin to adapt. In this way, positive events and positive emotions serve as mediators of the adaptation process.

Notably – and often regrettably – after individuals experience a positive life change and the positive events that it incurs, the process of adaptation is proposed to cause a rise in their aspiration levels (see top path of Figure 1). In other words, over time, the positive events become expected and predictable, and the individual begins to yearn for something new, different, and exciting. We argue that aspirations mediate the process by which people adapt to new life changes (like relationships), whereby higher aspirations lower well-being. For

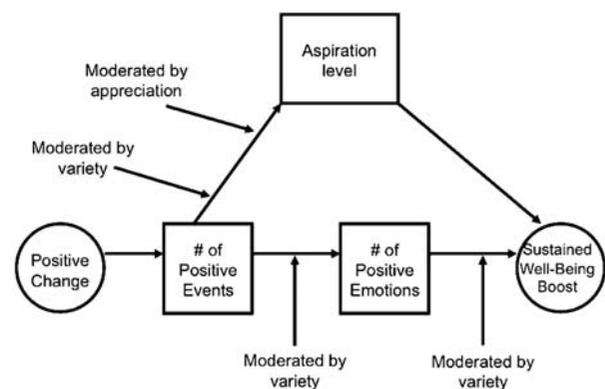


Figure 1. HAP model adapted from 'The challenge of staying happier: Testing the HAP model' by Sheldon and Lyubomirsky (2012), *Personality and Social Psychology Bulletin*, 38, 670–680.

example, a couple who takes up the habit of going out every Friday night may start to expect those weekly dates, such that each subsequent night out is likely to produce less of a gain in well-being than the previous one. Indeed, they may begin to feel that to maintain their relationship satisfaction, they need to ‘up the ante’ – for example, doing something more exciting on the weekends, seeing each other more during the week, or boosting their levels of commitment. As a result, this hypothetical couple’s higher aspirations mean that the status quo may not make them as happy as it once did.

According to the HAP model, both paths underlying the course of hedonic adaptation are also hypothesized to be moderated by two key variables – variety and appreciation. This hypothesis has two important implications. First, the more varied the positive events an individual accrues, the longer he/she should take to adapt to him/her. For example, if a couple engages in a different activity each time they connect, they will likely adapt to their new relationship less quickly than those who have the same routine. Second, the more a person appreciates a positive change in his/her circumstances, whether the change is a new relationship, a new car, or a new job, the less rapidly he/she should adapt. Appreciation is defined as ‘recognition and enjoyment of the good qualities of someone or something’ (Oxford Dictionaries Online, 2012). Appreciation may slow adaptation by guarding against social comparisons and increasing aspirations (Layard, 2005). To illustrate, if an individual appreciates his/her time with his/her partner and his/her relationship in general, he/she will be less likely to take his/her closeness, shared humor, and romantic outings for granted, and these occasions will continue to make him/her happy. In sum, an analysis of the HAP model suggests that to forestall adaptation, one should strive as hard as possible to strengthen one’s appreciation of positive life changes and to inject more variety into one’s experiences.

In the first simultaneous test of all the paths posited by the HAP model, study participants described a positive life change (e.g. a new relationship, a change in jobs, or a new hobby) they had made in the previous six weeks (Sheldon & Lyubomirsky, 2012). Still noticing and experiencing the positive life change for six weeks later predicted more positive emotions and higher aspirations (i.e. wanting even more) for the positive change. Furthermore, higher aspirations predicted lower well-being, and more positive emotions predicted higher well-being 6 weeks later. In all, support was found for the two mediators of the HAP model.

The Sheldon and Lyubomirsky (2012) study also found support for all but one of the moderating paths. Appreciation and variety both moderated the path between positive events and aspirations, such that higher appreciation for the positive change and more variability in the experiences resulting from the change predicted a weaker relationship between positive events and aspirations. Variety also moderated the relationship between

positive emotions and later well-being, such that more diverse experiences predicted a stronger effect of positive emotions on well-being. Variety did not, however, moderate the relationship between positive events and positive emotions.

Overall, the results of this first test provide compelling support for the HAP model’s predictions. However, this study did not target particular life events – like relationships – allowing participants to choose relatively minor events, and it was fairly short-term. Future studies should test the HAP model using long-term longitudinal designs, in a variety of domains, and in response to major positive life changes, such as starting a romantic relationship. In the following section, we identify ways the model could be tested in the domain of romantic relationships by bringing to bear what we know about the mediators and moderators of hedonic adaptation to relationships in particular. Of course, applying a model drawn from one literature to another can be fraught with difficulties, but that is precisely why research on adaptation to relationships is needed. In the next section, we propose strategies that could be tested experimentally by incorporating them into interventions to improve well-being and to arrest adaptation.

Ways to combat hedonic adaptation

Experience more positive events and feel more positive emotions

We suggest that the first way a person could mitigate his/her experience of adaptation in a relationship is by applying what researchers have learned about one set of mediators of the process – namely, positive events and positive emotions (see bottom path of Figure 1). Obvious as this may seem, the more positive events and emotions one experiences, the more slowly one adapts. Thus, we argue that intentionally increasing their number may decrease one’s rate of adaptation. Research has shown that the ratio of positive to negative emotions experienced is critical for well-being. One study found that flourishing people – that is, those experiencing optimal levels of positive mental health – reported an average positive to negative emotion ratio of 2.9 (Fredrickson & Losada, 2005). Positivity ratios of below 2.9, by contrast, were indicative of non-flourishing individuals. These findings suggest that, to experience optimal levels of well-being, people should experience about three positive emotions for every one negative emotion.

A high ratio of positive to negative emotions could be beneficial in the specific domain of relationships as well. In a study of college roommates, more positive emotions predicted higher perceived relationship closeness, which, in turn, predicted greater complexity of understanding of the roommate (Vaugh & Fredrickson, 2006; see Aron, Aron, Tudor, & Nelson, 1991, for research on closeness in romantic relationships). Further-

more, people who reported a high (vs. low) ratio of positive to negative emotions increased more in relationship closeness over time and grew to have a more complex understanding of their roommate. The implication of this finding – which likely applies to romantic relationships as well – is that high levels of positive emotion and high positivity ratios are beneficial for feeling close to one's relationship partner and for having a deeper understanding of one's partner, which should improve relationship satisfaction. Within the intimate relationship literature, researchers have also studied the role of similar positivity ratios, examining ratios of social interactions instead of emotions. Better romantic relationship stability was found to be associated with experiencing five positive interactions for every one negative interaction (Gottman & Silver, 1999).

Taken together, the research on positivity ratios suggests that increasing the number of positive emotions and experiences relative to negative ones may improve overall well-being and relationship quality. Relationship partners could conceivably find ways to increase the amount of positive emotions in their lives by trying, finding, or creating new (and varied) positive experiences or by augmenting the positivity already present in the relationship. For example, if a husband already regularly laughs at his wife's dry humor, he could try encouraging and appreciating her wit even more, and if a wife enjoys surprising her partner with his favorite microbrew or DVD, she could plan to do it even more often. Research suggests, however, that merely increasing the number of positive events and emotions may not be enough. Decreasing negative affect and unpleasant experiences is also important. For example, negative interactions with spouses or close friends have been found to increase depression to a greater degree than positive interactions were found to decrease it (Schuster, Kessler, & Aseltine, 1990). This is consistent with research suggesting that 'bad is stronger than good' – that is, the effects of negative events are more intense and longer-lasting than the effects of positive events (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). These findings imply that if one tends to nitpick and complain, trying to be less critical may be more helpful for the relationship than planning more frequent leisurely diversions.

Another potential approach to increasing the number of positive experiences in one's relationship is through partner affirmation.² Studies have demonstrated that people can help their relationship partners approach their ideal selves through a process known as the Michelangelo phenomenon (Rusbult, Finkel, & Kumashiro, 2009; Rusbult & Van Lange, 2003). That is, members of a couple help shape each other by encouraging goal pursuit and affirming their partners' actions and ideals, which allows their partners to better achieve their ideal selves. Assisting a partner in achieving his/her ideal self – that is, supporting his goals and aspirations – is beneficial not only for him/her, but also for the relationship itself.

Perceived partner affirmation is strongly related to the quality and the stability of the relationship (Drigotas, Rusbult, Wieselquist, & Whitton, 1999). As an illustration of this process, a young lawyer who dreams of being poised, self-confident, and successful in her job may in reality be timid and unsure. If her husband affirms her goal to be more self-possessed and encourages her to pursue a promotion, this may not only allow her to inch closer to her ideal self, but also may strengthen her marriage as she feels truly understood and supported. In this way, as theory suggests, partner affirmation may serve as a protective factor in relationships. Future studies could test whether increasing the amount of positive emotions experienced and decreasing the amount of negative emotions through strategies such as partner affirmation are successful in slowing adaptation to relationships.

Variety is the spice of relationships

Increasing the amount of variety in a relationship could be another fruitful way to slow adaptation. Some evidence in other areas suggests that variety can arrest adaptation. For example, in the negative domain, a survey of people living near a highway showed that people experienced difficulty adapting to the variable noise produced by highway traffic (Weinstein, 1982). In the positive domain, people who were asked to make a dynamic change in their lives that involved variety (e.g. joining a new club) became happier over time than those asked to make a static change (e.g. purchasing an item that sits in their garage; Sheldon & Lyubomirsky, 2009). Additionally, in the same experiment, those who reported having more variety in their lives after making either type of change (as even purportedly static purchases can lead to variable experiences) reported larger increases in well-being. If these results also generalize to relationships, they would suggest that increasing variety in a relationship may help increase well-being and decelerate adaptation. As an example, researchers could encourage couples to put effort into trying new restaurants or bars (instead of sticking to the same pedestrian ones), inviting new acquaintances on double-dates, or embarking on a new fitness regimen together. Although more research on variety is needed, we believe the extant evidence suggests that infusing variety into their relationship could possibly allow couples to avoid the pain of adaptation and remain satisfied for longer.

One approach to infusing relationships with variety is for couples to engage in new and exciting activities together. In two correlational studies, Aron and his colleagues found that participating in novel and exciting activities is associated with higher relationship satisfaction (Aron, Norman, Aron, McKenna, & Heyman, 2000, Studies 1 & 2). Moreover, in experimental studies, they found that couples assigned to participate in novel and

arousing activities experienced increases in relationship satisfaction and passionate love (Studies 3 & 4). According to self-expansion theory, people have a desire to grow and extend the self (Aron & Aron, 1986). Relationships allow people to incorporate aspects of their partner within their own sense of self, which causes them to feel more positive toward the relationship. By doing exciting activities together (e.g. rock climbing, dancing, or sharing secrets), relationship partners begin to associate the resulting feelings from such activities with the relationship itself, thus feeling more warmth and enthusiasm about their bond (Aron et al., 1991). Consequently, trying new and exciting activities together provides a way for couples to increase their well-being and possibly arrest – or at least retard – adaptation. This process could be tested empirically using an intervention framework.

Activities that are particularly exciting may have the added benefit of increasing attraction between relationship partners. Research suggests that people can mistake surges in adrenaline for sexual attraction (i.e. misattribute their arousal; Dutton & Aron, 1974). In a classic study, immediately after crossing an unstable, shaky bridge, males included more sexual imagery in stories they told an attractive female research assistant than males who had crossed a more stable and less scary bridge. Interestingly, the men in the unstable bridge group were significantly more likely to later call the attractive assistant (who had provided her phone number, supposedly in case they had any questions about the study). Thus, activities characterized by excitement, tension, or apprehension – for example, sky diving or roller coaster riding – are likely to enhance physical and sexual attraction. However, even less arousing activities like hiking, watching cliffhangers, or playing tennis together may boost attraction if the arousal is misattributed to the partner rather than the activity.

Maintain reasonable aspirations

According to the HAP model, as people experience more positive events and emotions (e.g. they plan vacations; they feel anticipation, tenderness, and joy), their aspirations increase (Lyubomirsky, 2011; Sheldon & Lyubomirsky, 2012). For example, they feel a lot less happy when vacations end or when their feelings become less intense. Thereby, they often necessitate even more exciting events or more powerful emotions to maintain their happiness. Not surprisingly, the escalation of aspirations causes well-being levels to decline (Sheldon & Lyubomirsky, 2012). This finding indicates that as aspirations continue to climb higher and higher, it becomes difficult to achieve them, and people require more and more just to maintain the same level of happiness. Applying this reasoning to romantic relationships, couples might benefit from remaining mindful of their aspirations about the relationship and their partner, and trying to avoid ever-increasing aspirations. As a case in

point, if a husband occasionally surprises his wife with romantic gestures, such as buying her chocolates or giving her a massage, the wife may begin to feel entitled to those gestures. To continue to be as happy as she was before, she may start to desire more spontaneous kind acts from her husband. At that point, her aspirations have become damaging to her well-being. If she were able to identify those aspirations explicitly (e.g. 'I expect my husband to treat me at least once a week'), then she may be able to work on changing them or at least stop them from continuing to grow.

Aspirations that involve elements of entitlement or deservingness may be particularly detrimental to well-being (e.g. Hickman, Watson, & Morris, 1996). For example, participants' feelings that they deserve more from a relationship than they are currently obtaining or their belief that they will not be satisfied until things get a whole lot better lead to more unhappiness (Sheldon & Lyubomirsky, 2012). For example, a person who spends a few hours per week with his partner may start to feel he deserves even more of her time, requiring more time together to maintain his same level of happiness. His feelings of entitlement may drive his expectations to heights that cannot be maintained, and cause him to no longer appreciate what he does have. As a result, his well-being would likely suffer.

It is worth noting that in some circumstances, aspirations can promote, rather than hinder, both well-being and relationship success. For example, having higher expectations about one's romantic partner has been found to be associated with higher quality relationships (Baum, Epstein, Rankin, & Burnett, 1996; Fletcher, Simpson, & Thomas, 2000). However, this relation holds only when the aspirations are met, when they are not inordinately high, and when relationship partners have positive relationship skills (McNulty & Karney, 2004). Thus, having high aspirations may be beneficial for those with good relationship skills and realistic aspirations, but detrimental otherwise. Future research could test whether couples might benefit from efforts aimed at decreasing unrealistic or escalating aspirations and affirming realistic ones.

Cultivate appreciation

Appreciation draws an individual's attention back to the positive change in her life (e.g. getting married or promoted), allowing her to continue to experience that positive change and the events and emotions that accompany it. Increased appreciation can slow adaptation by decreasing aspirations (Lyubomirsky, 2011; Sheldon & Lyubomirsky, 2012). For example, when a person tries to appreciate and call to mind the goodness that her marriage brought into her life, she will not feel that she needs even more goodness in order to stay happy. Sheldon and Lyubomirsky (2012) found that higher appreciation for a positive change predicted a weaker

relationship between positive events and aspirations. Thus, higher levels of appreciation may dampen the detrimental effect of aspirations on well-being. Similarly, in the study where participants made changes to either their circumstances or their activities, those who reported remaining aware of their changes experienced more positive moods than those who did not remain aware of their changes (Sheldon & Lyubomirsky, 2009). Finally, people prompted to savor their past or present have been found to show higher well-being than those not instructed to savor (Bryant, Smart, & King, 2005; Seligman, Rashid, & Parks, 2006).

Appreciation may be especially critical for thwarting adaptation in romantic relationships. When a person no longer attends to and appreciates his partner, he will essentially stop garnering any positivity or benefiting from having a partner, which is the very definition of adaptation (cf. Kahneman & Thaler, 2006). In contrast, by fostering appreciation towards the relationship and the partner, and by savoring the positive events experienced in the relationship, the person may be able to slow the course of adaptation. For example, if a man reaches a point at which he is no longer cognizant of how his girlfriend adds to the quality of his life and takes her for granted, then he likely will no longer receive any 'boost' from being in that relationship, and thus return to baseline levels of well-being. If he endeavored to savor his time spent with his girlfriend and try to appreciate her, he might become more satisfied with the relationship and happier with his life overall. Research suggests that people who appreciate their partners and feel appreciated in return are more committed to their relationship, are more likely to remain in it, and are rated by outside observers as more responsive and committed (Gordon, Impett, Kogan, Oveis, & Keltner, 2012). Thus, appreciation may strengthen relationships and allow people to maintain the swell in happiness provided by a new romance.

Gratitude – which involves the belief that one has acquired a positive outcome that came from an external source (Emmons & McCullough, 2003) – is a core element of appreciation. To fully appreciate being married, for example, one must feel grateful for one's spouse. One way to cultivate appreciation may be to borrow from research involving gratitude interventions, which typically instruct participants to express gratitude by counting their blessings, writing appreciation letters, or sharing their thankfulness with loved ones. Participating in gratitude interventions has been shown to increase people's well-being (for reviews, see Lambert, Graham, & Fincham, 2009; Layous & Lyubomirsky, in press; Wood, Froh, & Geraghty, 2010). Furthermore, the expression of gratitude is associated with higher relationship satisfaction (Schramm, Marshall, Harris, & Lee, 2005), greater perceived communal strength (Lambert, Clark, Durtschi, Fincham, & Graham, 2010), greater willingness to express relationship concerns (Lambert & Fincham, 2011), strengthened relationships (Algoe,

Gable, & Maisel, 2010; Algoe, Haidt, & Gable, 2008), and higher marital satisfaction (Gordon, Arnette, & Smith, 2011). These findings offer persuasive evidence that voicing appreciation for one's partner may be associated with higher relationship stability and well-being, thus allowing people to maintain those initial boosts in well-being triggered at the beginning of the relationship. In the future, researchers would do well to use gratitude and appreciation interventions to test the role of appreciation as a direct moderator of hedonic adaptation in romantic relationships.

One activity that could enhance appreciation involves mentally subtracting positive events. In one study, participants instructed to contemplate what life would be like without a particular positive event reported higher well-being than those not instructed to mentally subtract (Koo, Algoe, Wilson, & Gilbert, 2008). In particular, participants who imagined their lives if they had never met their romantic partner reported higher relationship satisfaction than those who did not mentally subtract their relationship. Presumably, spending time considering or writing about life without her partner could slow adaptation by keeping the individual from taking her relationship for granted, which would result in increased well-being. This work suggests that if couples took a moment now and then to consider what their life would be like without their partners in it, they would feel more grateful for their partners, and consequently more satisfied with their relationships. In this way, gratitude could potentially help them remain satisfied for longer.

Relationships that naturally combat adaptation

Some types of relationships may be naturally more resistant to adaptation than others. In the next section, we speculate about the relevance of certain characteristics of relationships to the mediators and moderators of hedonic adaptation. Due to the dearth of research on adaptation in these types of relationships, we presently can only hypothesize about these potential connections. However, we hope these hypotheses can be tested in future research examining the association between relationship characteristics and the speed of adaptation.

Long-distance relationships

Long-distance relationships are likely to contain elements of high variety and high levels of appreciation (e.g. Sahlstein, 2004). A long-distance couple may experience variety in their forms of communication (e.g. seeing each other in person vs. talking via phone or Skype), and what they do when they spend time together (e.g. they may entertain each other in unfamiliar and exciting ways due to their limited time together). People in long-distance relationships often want to make their time together memorable, so they try novel and varied activities (Rhodes, 2002; Sahlstein, 2004). Their time

apart – involving a naturalistically induced ‘mental subtraction’ – may also prompt them to appreciate each other and their relationship more frequently than couples who live together. They may be preoccupied with thoughts about their partner during the periods just before and just after seeing each other in person, because the visit allows them to anticipate the reunion and then to relive and savor their experiences afterwards (Sahlstein, 2004). Novelty is an important part of what makes long-distance relationships thrive, and the loss of novelty and variety has been found to be associated with relationship dissolution when the relationship changes from long-distance to proximal (Aron et al., 2000; Stafford, Merolla, & Castle, 2006). This suggests that efforts to inject more novelty and variety into a relationship may help improve relationship quality.

Research also points to the importance of breaks for resetting adaptation. In one study, participants who experienced a short break while receiving a massage or listening to a pleasant song rated the experience as more pleasant than those who were uninterrupted during the massage or song (Nelson & Meyvis, 2008). The researchers argued that the participants’ enjoyment of the activity was enhanced because the interruption helped to ‘reset’ their feelings of pleasantness and allowed them to savor the restarting of the experience. While listening to a song, a person’s enjoyment of the song typically declines with time. However, after a short break, his/her enjoyment will increase to a level higher than immediately prior to the break. Similarly, commercials have been shown to increase the pleasure derived from a television show, by interrupting adaptation (Nelson, Meyvis, & Galak, 2009). Although these studies did not explore breaks in interpersonal relationships per se, we believe their findings are likely to generalize to romantic relationships. Accordingly, long-distance relationships may be relatively more resistant to adaptation because of the natural pauses that such relationships demand. These findings suggest that the periods the couple spends apart may help to reset adaptation and intensify the positive emotions and experiences they have when they are together.

Furthermore, even couples who are not in long-distance relationships could potentially benefit from ‘breaks.’ Short periods of time away from each other (e.g. taking business trips or going out with friends separately) could help boost happiness and relationship satisfaction. The relationship partners may savor the thought of seeing each other again and appreciate their time together more. Thus, time apart may help reset adaptation.

Arranged marriages

Love and relationship satisfaction in arranged marriages may follow a different course than in love-match mar-

riages, especially for arranged marriages of relatively unacquainted couples. A study of Indian couples found that romantic love in love-match marriages started out high and decreased over time as the couple adapted; in arranged marriages, however, romantic love was initially low, but gradually increased over time (Gupta & Singh, 1982). It is unclear whether the adaptation process in arranged marriages is simply delayed, due to the delay in the marital partners getting to know each other, or whether some element of arranged marriages is protective against adaptation, such as lower aspiration or higher appreciation. Little research has explored changes in love and relationship satisfaction over time in arranged marriages. One cross-sectional study of Chinese married couples found that marital satisfaction was lower in arranged marriages than in love-match marriages (Xiaohe & Whyte, 1990), while another cross-sectional study of love-match marriages in the USA and arranged marriages in India found no differences between the samples in overall satisfaction or love (Myers, Madathil, & Tingle, 2005). The conflicting findings may be due to different samples or different study designs (cross-sectional vs. longitudinal), but until more research is conducted, the relation between marriage type and degree of adaptation remains unclear.

Unhealthy relationships

Abusive relationships

Certain types of unhealthy relationships may be relatively less prone to adaptation. Although people may adapt to unhealthy relationships with consistently low levels of satisfaction, those in troubled or abusive relationships may experience high amounts of variety of *negative* events and emotions, thus slowing adaptation. Although thus far we have only discussed adaptation to positive events and emotions, evidence suggests that variety of negative experiences can also impede adaptation. For example, researchers have found that people enjoy experiences with negative interruptions, such as irritating commercials or jarring noises, more than those same experiences without interruptions (Nelson & Meyvis, 2008; Nelson et al., 2009). If unhealthy relationships were negative all of the time, few people would remain in them. However, variations in their ups and downs may cause people to experience intense happiness during the good times, which are sporadically (and often unpredictably) ‘interrupted’ in the form of abuse, conflict, or temporary break-ups, and thus not adapt as quickly as they would to healthier relationships that lack such ‘interruptions.’ Research suggests that one reason women often do not leave abusive relationships is due to those relationships’ cyclical nature (Walker, 1979). In this case, failure to adapt to a troubled or abusive relationship – or rather to its infrequent ups or heightened passions – is undesirable, because, instead of amplifying happiness, it

causes people to stay in the relationship longer, and be subjected to more pain, heartache, or abuse.

Fast-paced relationships

Fast-paced romances are another type of relationship in which the lack of adaptation may be detrimental in the long-run. Fast-moving relationships entail high levels of positive emotions, positive events, and variety early in the relationship, all of which work to thwart adaptation. For example, couples who spend all of their time together, share all their hopes and dreams with each other, and who quickly become physically intimate are going to experience a large number of fun activities and positive emotions (e.g. the excitement of meeting one's partner's friends and family, the joy of disclosing one's secrets and learning the same from one's partner, or the passion of starting a physical relationship with a new partner). Thus, people in fast-paced relationships may adapt less quickly than those in other relationships due to the sheer intensity and number of emotions and experiences.

According to the rate of change in intimacy model, quick gains in intimacy create high levels of passion (Baumeister & Bratslavsky, 1999). Thus, rushing intimacy in a relationship can produce high levels of positive emotions. However, these types of relationships are often quite unstable. One study of married couples found that people who began the study with high levels of love also ended with relatively high rates of divorce (Huston, Niehuis, & Smith, 2001). High levels of passion may slow adaptation early in the relationship, but such intensity cannot be sustained (Huston, McHale, & Crouter, 1986). Furthermore, when adaptation does begin, it may accelerate more rapidly than in less passionate relationships, such as when an individual suddenly gains a clear-eyed view of her partner's failings or gets burnt out on the torrent of intimacy and activity. Research on satiation suggests that people satiate (or adapt) to a lesser degree when they consume more slowly (Galak, Kruger, & Loewenstein, 2011). Thus, couples in slower-moving relationships might adapt less overall, compared to those in faster-paced relationships, who may avoid adaptation at first, but eventually adapt to an ever-greater degree, leaving their relationship more vulnerable to dissolution.

Creating new positive changes

Another way that people naturally combat adaptation is simply by restarting the whole adaptation process. According to the HAP model, adaptation begins after a person makes a positive change (Lyubomirsky, 2011; Sheldon & Lyubomirsky, 2012). Creating new positive relationship changes, such as becoming engaged, getting married, moving across country together, and having children, may help forestall adaptation by restarting the

adaptation process, or at least creating another sizable boost in well-being. For example, after a couple dates for a few years, they likely start to adapt to the relationship. By moving in together, they obtain a boost in happiness and thus experience a higher level of well-being at which to adapt. As they adapt to cohabitation, marriage provides another boost. Research on relationships supports this notion. One study found that people who entered into higher levels of commitment in their relationship experienced subsequent increases in well-being (Dush & Amato, 2005). Thus, natural relationship progression of intensifying levels of commitment may help to slow adaptation, and thus keep the relationship partners satisfied for longer.

This process, however, is difficult (although not impossible) to sustain. At some point, commitment levels hit a ceiling and can no longer increase. Of course, some will be tempted to reset the adaptation process altogether by swapping their relationship for a newer and more exciting one – a solution that ultimately may be fruitless, as these individuals are likely to face the same adaptation-relevant obstacles in due time, when their novel partner ceases to be novel. Alternatively, we propose that couples keep creating positive changes within their own relationship. For example, a couple who is married can move to a new city, travel to exotic destinations, remodel their home together, or try a fast-paced dance class. A couple with children will encounter a variety of positive experiences with their children as they grow up, and will eventually have an empty nest that comes with its own new set of challenges and joys. In fact, empty-nest parents report improved marital quality (Gorchoff, John, & Helson, 2008; White & Edwards, 1990). Thus, long after the honeymoon period fades away, people can continue to create new positive changes in their lives.

Conclusion

Hedonic adaptation is arguably one of the largest barriers to sustainable happiness in intimate relationships. If people adapt to every positive change associated with having and maintaining a relationship, how can they ever become happier? Although hedonic adaptation is itself the obstacle, it fortunately also offers the key to overcoming it. Future research addressing the moderators and mediators posited by the HAP model (Lyubomirsky, 2011; Sheldon & Lyubomirsky, 2012) may provide insight into potential ways of thwarting adaptation to positive life circumstances and changes. Practices, habits, and activities that increase the number of positive events and emotions in a relationship, boost its variety, lower entitled aspirations, and build appreciation may be used to slow adaptation and increase well-being. This approach may make it possible for couples to maintain the sparks and bliss of a young relationship well into their golden years.

Notes

1. For an illustration of how small effect sizes can be meaningful and important, see Rosenthal and Rosnow (2008), chapter 11.
2. The relationship literature provides a wealth of ideas for improving relationships, such as capitalizing (Gable & Reis, 2010; Gable, Reis, Impett, & Asher, 2004) and support-giving (e.g. Simpson, Rholes, & Nelligan, 1992; Simpson, Rholes, Oriña, & Grich, 2002). Describing this literature is beyond the scope of this paper; accordingly, we will focus on a subset of examples that best illustrate ways to thwart adaptation.

References

- Algoe, S. B., Gable, S. L., & Maisel, N. C. (2010). It's the little things: Everyday gratitude as a booster shot for romantic relationships. *Personal Relationships, 17*, 217–233.
- Algoe, S. B., Haidt, J., & Gable, S. L. (2008). Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion, 8*, 425–429.
- Appreciation. (2012). *Oxford Dictionaries Online*. Oxford University Press. Retrieved November 14, 2012, from <http://oxforddictionaries.com/definition/english/appreciation>
- Aron, A., & Aron, E. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. New York, NY: Hemisphere.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including the other in the self. *Journal of Personality and Social Psychology, 60*, 241–253.
- Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples' shared participation in novel and arousing activities and experienced relationship quality. *Journal of Personality and Social Psychology, 78*, 273–284.
- Baucom, D. H., Epstein, N., Rankin, L. A., & Burnett, C. K. (1996). Assessing relationship standards: The inventory of specific relationship standards. *Journal of Family Psychology, 10*, 72–88.
- Baumeister, R. F., & Bratslavsky, E. (1999). Passion, intimacy, and time: Passionate love as a function of change in intimacy. *Personality and Social Psychology Review, 3*, 49–67.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology, 5*, 323–370.
- Boswell, W. R., Boudreau, J. W., & Tichy, J. (2005). The relationship between employee job change and job satisfaction: The honeymoon-hangover effect. *Journal of Applied Psychology, 90*, 882–892.
- Bryant, F. B., Smart, C. M., & King, S. P. (2005). Using the past to enhance the present: Boosting happiness through positive reminiscence. *Journal of Happiness Studies, 6*, 227–260.
- Clark, A. E., & Georgellis, Y. (in press). Back to baseline in Britain: Adaptation in the British Household Panel Survey. *Economica*.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*, 34–43.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*, 276–302.
- Drigotas, S. M., Rusbult, C. E., Wieselquist, J., & Whitton, S. (1999). Close partner as sculptor of the ideal self: Behavioral affirmation and the Michelangelo phenomenon. *Journal of Personality and Social Psychology, 77*, 293–323.
- Dush, C. M. K., & Amato, P. R. (2005). Consequences of relationship status and quality for subjective well-being. *Journal of Social and Personal Relationships, 22*, 607–627.
- Dutton, D. G., & Aron, A. P. (1974). Some evidence for heightened sexual attraction under conditions of high anxiety. *Journal of Personality and Social Psychology, 30*, 510–517.
- Dyrdal, G. M., Røysamb, E., Nes, R. B., & Vittersø, J. (2011). Can a happy relationship predict a happy life? A population-based study of maternal well-being during the life transition of pregnancy, infancy, and toddlerhood. *Journal of Happiness Studies, 12*, 947–962.
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology, 84*, 377–389.
- Fletcher, G. J., Simpson, J. A., & Thomas, G. (2000). Ideals, perceptions, and evaluations in early relationship development. *Journal of Personality and Social Psychology, 79*, 933–940.
- Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 302–329). New York, NY: Russell Sage Foundation.
- Fredrickson, B. L., & Losada, M. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist, 60*, 678–686.
- Gable, S. L., & Reis, H. T. (2010). Good news! Capitalizing on positive events in an interpersonal context. *Advances in Experimental Social Psychology, 42*, 195–257.
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology, 87*, 228–245.
- Galak, J., Kruger, J., & Loewenstein, G. (2011). Is variety the spice of life? It all depends on the rate of consumption. *Judgment and Decision Making, 6*, 230–238.
- Gigy, L., & Kelly, J. (1992). Reasons for divorce: Perspectives of divorcing men and women. *Journal of Divorce and Remarriage, 18*, 169–187.
- Gorchoff, S. M., John, O. P., & Helson, R. (2008). Contextualizing change in marital satisfaction during middle age: An 18-year longitudinal study. *Psychological Science, 19*, 1194–1200.
- Gordon, C. L., Arnette, R. A., & Smith, R. E. (2011). Have you thanked your spouse today? Felt and expressed gratitude among married couples. *Personality and Individual Differences, 50*, 339–343.
- Gordon, A. M., Impett, E. A., Kogan, A., Oveis, C., & Keltner, D. (2012). To have and to hold: Gratitude promotes relationship maintenance in intimate bonds. *Journal of Personality and Social Psychology, 103*, 257–274.
- Gottman, J. M., & Silver, N. (1999). *The seven principles for making marriage work*. New York, NY: Three Rivers Press.

- Gupta, U., & Singh, P. (1982). An exploratory study of love and liking and type of marriages. *Indian Journal of Applied Psychology, 19*, 92–97.
- Hatfield, E., Pillemer, J. T., O'Brien, M. U., Sprecher, S., & Le, Y. L. (2008). The endurance of love: Passionate and companionate love in newlywed and long-term marriages. *Interpersonal, an International Journal of Personal Relationships, 2*, 35–64.
- Hickman, S. E., Watson, P. J., & Morris, R. J. (1996). Optimism, pessimism, and the complexity of narcissism. *Personality and Individual Differences, 20*, 521–525.
- Huston, T. L., McHale, S. M., & Crouter, A. C. (1986). When the honeymoon's over: Changes in the marriage relationship over the first year. In R. Gilmour & S. Duck (Eds.), *The emerging field of personal relationships* (pp. 109–132). Hillsdale, NJ: Erlbaum.
- Huston, T. L., Niehuis, S., & Smith, S. E. (2001). The early marital roots of conjugal distress and divorce. *Current Directions in Psychological Science, 10*, 116–119.
- Kahneman, D., & Thaler, R. H. (2006). Anomalies: Utility maximization and experienced utility. *Journal of Economic Perspectives, 20*, 221–234.
- Koo, M., Algoe, S. B., Wilson, T. D., & Gilbert, D. T. (2008). It's a wonderful life: Mentally subtracting positive events improves people's affective states, contrary to their affective forecasts. *Journal of Personality and Social Psychology, 95*, 1217–1224.
- Lambert, N. M., Clark, M., Durtschi, J., Fincham, F. D., & Graham, S. (2010). Benefits of expressing gratitude: Expressing gratitude to a partner changes the expresser's view of the relationship. *Psychological Science, 21*, 574–580.
- Lambert, N. M., & Fincham, F. D. (2011). Expressing gratitude to a partner leads to more relationship maintenance behavior. *Emotion, 11*, 52–60.
- Lambert, N. L., Graham, S., & Fincham, F. D. (2009). A prototype analysis of gratitude: Varieties of gratitude experiences. *Personality and Social Psychology Bulletin, 35*, 1193–1207.
- Layard, R. (2005). *Happiness: Lessons from a new science*. New York, NY: Penguin Press.
- Layous, K., & Lyubomirsky, S. (in press). The how, who, what, when, and why of happiness: Mechanisms underlying the success of positive interventions. In J. Gruber & J. Moskowitz (Eds.), *The light and dark side of positive emotions*. New York, NY: Oxford University Press.
- Lucas, R. E. (2005). Time does not heal all wounds: A longitudinal study of reaction and adaptation to divorce. *Psychological Science, 16*, 945–950.
- Lucas, R. E. (2007). Long-term disability is associated with lasting changes in subjective well-being: Evidence from two nationally representative longitudinal studies. *Journal of Personality and Social Psychology, 92*, 717–730.
- Lucas, R. E., & Clark, A. E. (2006). Do people really adapt to marriage? *Journal of Happiness Studies, 7*, 405–426.
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). Re-examining adaptation and the setpoint model of happiness: Reactions to changes in marital status. *Journal of Personality and Social Psychology, 84*, 527–539.
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment alters the set point for life satisfaction. *Psychological Science, 15*, 8–13.
- Lyubomirsky, S. (2011). Hedonic adaptation to positive and negative experiences. In S. Folkman (Ed.), *Oxford handbook of stress, health, and coping* (pp. 200–224). New York, NY: Oxford University Press.
- McNulty, J. K., & Karney, B. R. (2004). Positive expectations in the early years of marriage: Should couples expect the best or brace for the worst? *Journal of Personality and Social Psychology, 86*, 729–743.
- Myers, J. E., Madathil, J., & Tingle, L. R. (2005). Marriage satisfaction and wellness in India and the United States: A preliminary comparison of arranged marriages and marriages of choice. *Journal of Counseling & Development, 83*, 183–190.
- Nelson, L. D., & Meyvis, T. (2008). Interrupted consumption: Disrupting adaptation to hedonic experiences. *Journal of Marketing Research, 45*, 654–664.
- Nelson, L. D., Meyvis, T., & Galak, J. (2009). Enhancing the television viewing experience through commercial interruptions. *Journal of Consumer Research, 36*, 160–172.
- Rhodes, A. R. (2002). Long-distance relationships in dual-career commuter couples: A review of counseling issues. *The Family Journal, 10*, 398–404.
- Rosenthal, R., & Rosnow, R. L. (2008). *Essentials of behavioral research*. New York, NY: McGraw Hill.
- Rusbult, C. E., Finkel, E. J., & Kumashiro, M. (2009). The Michelangelo phenomenon. *Current Directions in Psychological Science, 18*, 305–309.
- Rusbult, C. E., & Van Lange, P. A. M. (2003). Interdependence, interaction, and relationships. *Annual Review of Psychology, 54*, 351–375.
- Sahlstein, E. M. (2004). Relating at a distance: Negotiating being together and being apart in long-distance relationships. *Journal of Social and Personal Relationships, 21*, 689–710.
- Schramm, D. G., Marshall, J. P., Harris, V. W., & Lee, T. R. (2005). After "I do": The newlywed transition. *Marriage and Family Review, 38*, 45–67.
- Schuster, T. L., Kessler, R. C., & Aseltine, R. H. Jr. (1990). Positive interactions, negative interactions, and depressed mood. *American Journal of Community Psychology, 18*, 423–438.
- Seligman, M. E. P., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist, 62*, 774–788.
- Sheldon, K. M., & Lyubomirsky, S. (2009). Change your actions, not your circumstances: An experimental test of the sustainable happiness model. In B. Radcliff & A. K. Dutt (Eds.), *Happiness, economics, and politics* (pp. 324–342). New York, NY: Edward Elgar.
- Sheldon, K. M., & Lyubomirsky, S. (2012). The challenge of staying happier: Testing the hedonic adaptation prevention (HAP) model. *Personality and Social Psychology Bulletin, 38*, 670–680.
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology, 62*, 434–446.
- Simpson, J. A., Rholes, W. S., Oriña, M. M., & Grich, J. (2002). Working models of attachment, support giving, and support seeking in a stressful situation. *Personality and Social Psychology Bulletin, 28*, 598–608.
- Stafford, L., Merolla, A. J., & Castle, J. D. (2006). When long-distance dating partners become geographically close. *Journal of Social and Personal Relationships, 23*, 901–919.

- Tsapelas, I., Aron, A., & Orbuch, T. (2009). Marital boredom now, predicts less satisfaction nine years later. *Psychological Science, 20*, 543–545.
- Walker, L. E. (1979). *The battered woman*. New York, NY: Harper & Row.
- Waugh, C. E., & Fredrickson, B. L. (2006). Nice to know you: Positive emotions, self-other overlap, and complex understanding in the formation of a new relationship. *Journal of Positive Psychology, 1*, 93–106.
- Weinstein, N. D. (1982). Community noise problems: Evidence against adaptation. *Journal of Environmental Psychology, 2*, 87–97.
- White, L., & Edwards, J. N. (1990). Emptying the nest and parental well-being: An analysis of national panel data. *American Sociological Review, 55*, 235–242.
- Wood, A. M., Froh, J. J., & Geraghty, A. W. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review, 30*, 890–905.
- Xiaohe, X., & Whyte, M. K. (1990). Love matches and arranged marriages: A Chinese replication. *Journal of Marriage and the Family, 52*, 709–722.