

BRIEF REPORT

The Rested Relationship: Sleep Benefits Marital Evaluations

Heather M. Maranges and James K. McNulty
Florida State University

Remaining satisfied with a relationship often requires thinking in ways that use self-regulatory resources—satisfied couples discount undesirable experiences when forming global evaluations of the relationship. Nevertheless, recent work indicates that the self-regulatory resources required to engage in these processes are limited. Although consuming new energy may be one way to replenish these limited resources, sleep is another. The current study used a daily diary study of 68 newlywed couples to examine the implications of sleep for daily marital evaluations. Every day for up to 7 days, both members of the couples reported their evaluations of their interpersonal specific experiences, global relationship satisfaction, and amount of sleep. Multilevel analysis revealed that spouses were more satisfied on days after which they had slept for a longer period of time. Furthermore, sleep also buffered husbands', but not wives', marital satisfaction against the implications of negative specific evaluations—husbands were better able to remain more globally satisfied despite negative evaluations of specific aspects of the relationship on days following more sleep. These findings suggest that sleep may offer self-regulatory benefits and should thus be incorporated into existing interpersonal models that highlight the importance of self-regulation.

Keywords: sleep, marriage, self-regulation, depletion, marital satisfaction

Remaining satisfied with a close relationship often requires making explicit, motivated social judgments that favor the relationship. For example, when faced with threatening partner or relationship qualities, people create narratives that protect positive views of the relationship (Murray & Holmes, 1994). Likewise, when faced with negative evaluations of specific experiences that cannot be ignored, people make attributions that minimize the implications of those evaluations for relationship satisfaction (McNulty & Karney, 2001). Even personal distress (Neff & Karney, 2004, 2009) can disrupt relationship evaluations, and thus people sometimes discount such distress when evaluating their relationship (Tesser & Beach, 1998).

Nevertheless, making such explicit motivated judgments requires self-regulation (Bélanger, Kruglanski, Chen, & Orehek, 2014; Fazio & Olson, 2014; McNulty & Olson, 2015). Specifically, McNulty and Olson (2015) recently argued that drawing motivated conclusions, such as the conclusion that one is in a satisfying relationship, requires the cognitive resources necessary to override any automatic judgments to the contrary, whether those judgments involve simple perceptions or more complex evaluations. Indeed, although McNulty and Karney (2001) found that people who made external attributions for their partners' behavior

tended to remain satisfied in the face of more negative evaluations, making external attributions requires self-regulatory effort (Gilbert, Krull, & Pelham, 1988). Furthermore, although Tesser and Beach (1998) found that people were able to discount their negative experiences when evaluating their relationship under conditions of low stress, they explicitly predicted and found that people were unable to discount such experiences under conditions of higher stress. The authors argued that high stress depletes people of the self-regulatory resources necessary to discount the influence of negative experiences on social judgments.

Such conclusions are consistent with a growing body of research indicating that self-regulatory resources appear to be limited (Baumeister, Vohs, & Tice, 2007; Hagger, Wood, Stiff, & Chatzisarantis, 2010). The strength model of self-control posits that self-control ability resembles a muscle: Self-control requires energy and, with intense use, this energy can be reduced such that one is unable or unwilling to further expend self-control in the short term. Although one way to increase self-regulatory resources is by consuming new energy, such as glucose (see Gailliot et al., 2007), a second way is through sleep. Sleep is a homeostatic resting period during which neural activity is reorganized (Hobson, 2005) and brain glycogen, which can be broken down into glucose, is resynthesized (Benington & Heller, 1995). Consistent with the idea that such reorganization may replenish self-regulatory energy, sleep deprivation appears to decrease glucose metabolism (Spiegel, Leproult, & Van Cauter, 1999). As a result, functioning of the prefrontal cortex (Durmer & Dinges, 2005), which has been implicated in self-control (Heatherton & Wagner, 2011), is impaired. Indeed, even partial sleep deprivation can have deleterious effects on processes that constitute or require self-control (Barnes, Schau-

This article was published Online First July 4, 2016.

Heather M. Maranges and James K. McNulty, Department of Psychology, Florida State University.

Correspondence concerning this article should be addressed to James K. McNulty, Department of Psychology, Florida State University, 1107 West Call Street, Tallahassee, FL 32304. E-mail: mcnulty@psy.fsu.edu

broeck, Huth, & Ghumman, 2011; Christian & Ellis, 2011; Ghumman & Barnes, 2013; Nilsson et al., 2005). For example, amount of sleep predicts performance on a paradigmatic self-control measure and in refraining from unethical behavior (Barnes et al., 2011).

Sleep could thus help provide individuals the self-regulatory resources required to engage in the cognitive processes necessary to remain satisfied with their relationships in the face of negative experiences. Most research on the impact of sleep on relationships has focused on how one partner's sleep disorder, such as sleep apnea, negatively affects the other partner's sleep (for review, see Troxel, Robles, Hall, & Buysse, 2007). The few studies that have examined the role of sleep in nondisordered populations have focused on specific behavioral processes that are related to sleep, such as intimate partner violence (Rauer & El-Sheikh, 2012) and conflict (Gordon & Chen, 2014; Hasler & Troxel, 2010), leaving questions about the evaluative implications of sleep. We are aware of only two studies that have examined the role of sleep in relationship evaluations. In addition to reporting that sleep was bidirectionally associated with daily interactions, Hasler and Troxel (2010) reported that several indicators of sleep quality were associated with global relationship satisfaction. Additionally, Inzana, Costello, and Montgomery-Downs (2011) reported that average sleep quality across 1 week predicted relationship satisfaction at the end of the week for new parents. Nevertheless, although some studies of sleep in relationships have used within-person designs (e.g., Gordon & Chen, 2014), the studies that have examined the association between sleep and relationship satisfaction have used between-person designs, allowing between-person confounds, such as spouses' or children's personality, to potentially explain the association between sleep and satisfaction. Furthermore, neither of these studies examined how sleep might interact with cognitive processes that may require self-regulation, such as the ability to discount negative sentiments when making global evaluations.

Study Overview

We used a 7-day diary study of newlywed couples to address the role of sleep in promoting positive relationship evaluations. Every night for up to 7 nights, both members of 68 couples reported the number of hours they had slept during the previous 24-hr period, as well as their evaluations of their specific experiences that day and their global relationship satisfaction that day. We predicted that spouses' sleep would be positively associated with their global relationship satisfaction. Furthermore, given the self-regulatory resources provided by sleep, we also expected sleep to moderate the implications of spouses' evaluations of their specific experiences for their global evaluations of the relationship. Even spouses in the most satisfying relationships occasionally admit being less satisfied with specific aspects of their relationships; one factor that differentiates happy and unhappy spouses is the ability to discount such negative sentiments when making global evaluations of the relationship (McNulty & Karney, 2001; McNulty, O'Mara, & Karney, 2008; Neff & Karney, 2004, 2009). As suggested by theories of self-regulation, person perception, and relationships (Bélanger et al., 2014; Gilbert et al., 1988; Martin, Seta, & Crelia, 1990; McNulty & Olson, 2015; Tesser & Beach, 1998), such discounting requires sufficient self-regulatory resources.

Method

Participants

Participants were the 68 newlywed couples who completed a daily diary associated with a broader longitudinal study of 72 newlywed couples in northern Ohio. The broader sample was recruited using two methods. The first was to place advertisements in community newspapers and bridal shops offering payment to couples willing to participate in a study of newlyweds. The second was to send invitations to eligible couples who had completed marriage license applications in counties near study locations. All couples were screened for eligibility in an initial telephone interview. Inclusion required that (a) this was the first marriage for each partner, (b) the couple had been married less than 6 months, (c) each partner was at least 18 years of age, (d) and each partner spoke English and had completed at least 10 years of education (to ensure comprehension of the questionnaires). The final sample size was determined by ceasing enrollment after 1 year. A post hoc power analysis indicated that the power to detect the effects of sleep was .78, and the power to detect the interactive effects of sleep was .75.

On average, husbands were 24.9 years old ($SD = 4.3$) and had completed 14.2 years ($SD = 2.5$) of education. Seventy-four percent were employed full-time and 12% were full-time students. The median income group membership reported by husbands was \$15,001–\$20,000 per year. Ninety percent of husbands who reported race were Caucasian. Wives averaged 24.0 years ($SD = 5.1$) of age and had completed 14.7 years ($SD = 2.3$) of education. Forty-nine percent were employed full-time and 28% were full-time students. The median income group membership reported by wives was \$10,001–\$15,001 per year. Ninety-six percent of wives who reported race were Caucasian. Fourteen couples had children.

Procedure

As part of the broader study, couples completed a packet of questionnaires at home and attended a 3-hr laboratory session. The packet included a consent form approved by the university institutional review board. After completing their session, couples were paid \$60. Before leaving the lab, both partners were provided with seven stamped and addressed envelopes. Each envelope contained a one-page questionnaire that included items designed to assess relationship experiences and relationship satisfaction on the current day, as well as the number of hours each partner had slept over the past 24 hr. Couples were instructed to separately complete one survey each night for the 7 nights following the session, seal the survey in the stamped envelope, and mail the envelope the following day. Couples were paid \$25 for completing all 14 diaries, or \$1.50 per diary if they failed to return all pages. Four couples did not complete any diaries, leaving the final sample of 68 couples.

Measures

Sleep. Every day for the 7 days of the diary, spouses were asked to report the number of hours they had slept during the prior 24-hr period by responding to the following question: "How many hours of sleep did you get in the past 24 hours?" Wives ($M = 7.83$,

$SD = 1.96$) slept marginally more hours than husbands ($M = 7.49$, $SD = 1.88$), $t(67) = 1.67$, $p = .099$.

Relationship satisfaction. Also every day, spouses were asked to report their marital satisfaction using a modified version of the Kansas Marital Satisfaction Scale (KMS; Schumm et al., 1986). As in other research (e.g., McNulty & Karney, 2001), this version required spouses to answer the three KMS questions with respect to their daily satisfaction (“How satisfied were you with your partner today?” “How satisfied were you with your relationship today?” “How satisfied were you with your marriage today?”) on a scale from 1 (*not at all satisfied*) to 7 (*extremely satisfied*). Items were averaged each day to form daily marital satisfaction scores (Level 1 reliability was .87 for husbands and .86 for wives). Husbands ($M = 19.26$, $SD = 2.70$) and wives ($M = 19.11$, $SD = 2.62$) were equally satisfied, $t(67) = -0.65$, $p = .521$.

Relationship experiences. Every day, spouses were also asked to evaluate their specific experiences with their partner. As in other research (McNulty & Karney, 2001), spouses reported their satisfaction with their experiences in nine domains (sex, chores, support, amount of time spent together, conflict resolution, conversations, affection, partner mood, and partner dependability) on a scale from 1 (*not at all satisfied*) to 7 (*extremely satisfied*). The items were averaged each day to form spouses’ daily specific experiences evaluation scores (Level 1 reliability was .75 for husbands and .73 for wives). Husbands ($M = 5.90$, $SD = 1.05$) and wives ($M = 5.82$, $SD = 0.95$) evaluated their experiences as similarly positive, $t(67) = -0.89$, $p = .375$.

Results

Primary Analyses

Spouses completed an average of 6.0 ($SD = 1.87$) of the 7 diaries; 71% of spouses completed all 7 days. We first tested the prediction that spouses’ own sleep durations would be positively associated with their own marital satisfaction in a two-level multilevel model that nested repeated reports within individuals and accounted for the nonindependence of partners’ data by estimating parameters separately but simultaneously for husbands and wives (see Bolger & Laurenceau, 2013) using the HLM 7.01 computer program. The multiple reports of sleep and satisfaction allowed us to examine the association between sleep and satisfaction at both the between- and within-person level. That is, we were able to simultaneously examine whether spouses who slept more hours than other spouses in the sample were more satisfied with their marriages on average (between-person) as well as whether the extent to which spouses who slept more than their own average level of sleep on a particular day were more satisfied with their marriage that day (within-person). To address both possibilities, we regressed spouses’ own daily relationship satisfaction scores onto person-centered reports of sleep in the first level of the model, with day of the diary as a covariate, and included the mean level of spouses’ sleep on the intercept in the second level of the model with random effects.

Results are reported in Table 1. As can be seen there, among both husbands and wives, spouses’ own sleep durations were significantly positively associated with their own marital satisfaction at the within-person level but not at the between-person level. That is, spouses were more satisfied with their marriages on days

Table 1
Associations Between Daily Marital Satisfaction and Sleep

Variable	<i>b</i>	<i>SE</i>	<i>p</i>	<i>df</i>	95% CI	Effect size <i>r</i>
Intercept						
Husbands	19.15	.33	<.001	66	18.49, 19.80	—
Wives	19.27	.24	<.001	66	18.79, 19.75	—
Day of diary						
Husbands	.11 [†]	.06	.075	67	-.01, .22	.22
Wives	.03	.06	.578	67	-.09, .16	.07
Mean daily sleep						
Husbands	.11	.09	.239	66	-.07, .29	.14
Wives	.05	.10	.605	66	-.15, .25	.06
Daily sleep						
Husbands	.10*	.04	.023	67	.01, .18	.27
Wives	.11*	.04	.017	67	.02, .20	.29

Note. The 95% CI = 95% confidence interval of *b*. Effect size $r = \frac{\sqrt{t^2}}{\sqrt{t^2 + df}}$.
[†] $p < .10$. * $p < .05$.

that they slept more than they tended to sleep on average that week. However, controlling for that association, spouses were not more satisfied with their marriages to the extent that they slept more than the average spouse in the sample. This effect remained significant controlling for whether the couple had children (for husbands, $t(67) = 2.36$, $p = .021$; for wives, $t(67) = 2.46$, $p = .016$) and was not moderated by having children (for husbands, $t(66) = -0.27$, $p = .785$; for wives, $t(66) = 0.89$, $p = .379$).

Moderation Analyses

Not surprisingly, a model examining only the association between specific evaluations and global satisfaction indicated that spouses were less satisfied on days when they evaluated their experiences more negatively (for husbands, $b = 1.33$, $SE = 0.15$, $t(67) = 8.65$, $p < .001$, $r = .83$; for wives, $b = 1.68$, $SE = 0.19$, $t(67) = 8.90$, $p < .001$, $r = .78$). Nevertheless, this association varied significantly across husbands, $variance = 1.48$, $\chi^2(59) = 225.35$, $p < .001$, and wives, $variance = 1.48$, $\chi^2(59) = 197.69$, $p < .001$, indicating that some people were better able to remain globally satisfied despite evaluating their specific experiences more negatively. We tested whether sleep accounted for such differences by regressing spouses’ daily relationship satisfaction scores onto person-centered reports of daily specific evaluations, person-centered reports of daily sleep, and their interaction in the first level of the model, controlling day of the diary, and included the mean sleep duration, mean specific evaluations, and their interaction on the second-level intercept.

Results appear in Table 2. As can be seen, daily sleep moderated the effects of daily specific evaluations for husbands but not wives, although a direct test indicated no sex difference in the magnitude of this effect, $\chi^2(1) = 1.08$, $p = .299$. Breaking down the interaction revealed that sleep weakened the extent to which negative evaluations of specific relationship experiences were linked to lower levels of global relationship satisfaction (on days after husbands slept 1 SD less than their own mean, $b = 1.70$, $SE = 0.20$, $t(67) = 8.70$, $p < .001$; on days after husbands slept 1 SD more than their mean, $b = 1.32$, $SE = 0.19$, $t(67) = 7.11$, $p < .001$). Furthermore, the interactive effect remained significant con-

Table 2
Interactive Effects of Daily Sleep and Daily Specific Evaluations on Daily Marital Satisfaction

Variable	<i>b</i>	<i>SE</i>	<i>p</i>	<i>df</i>	95% CI	Effect size <i>r</i>
Intercept						
Husbands	19.21***	.17	<.001	64	18.87, 19.54	—
Wives	19.14***	.21	<.001	64	18.71, 19.57	—
Day of diary						
Husbands	.03	.03	.321	67	-.03, .08	.12
Wives	.01	.03	.692	67	-.05, .08	.05
Mean daily sleep (MDS)						
Husbands	-.04	.10	.314	64	-.23, .16	.05
Wives	.03	.07	.465	64	-.11, .17	.05
Daily sleep (DS)						
Husbands	.02	.03	.553	67	-.04, .08	.07
Wives	-.03	.04	.380	67	-.10, .04	.11
Mean daily evaluation (MDE)						
Husbands	1.86***	.15	<.001	64	1.55, 2.17	.84
Wives	.99***	.16	<.001	64	.68, 1.31	.62
Daily evaluation (DE)						
Husbands	1.51***	.17	<.001	67	1.17, 1.85	.74
Wives	1.73***	.19	<.001	67	1.35, 2.11	.74
MDS × MDE						
Husbands	.02	.21	.177	64	-.24, .28	.02
Wives	-.01	.25	.697	64	-.21, .19	.02
DS × DE						
Husbands	-.13*	.06	.033	67	-.26, -.01	.26
Wives	-.02	.08	.816	67	-.19, .15	.03

Note. The 95% CI = 95% confidence interval of *b*. Effect size $r = \sqrt{\frac{f^2}{f^2 + df}}$.
 * $p < .05$. *** $p < .001$.

trolling for whether the couple had children, $t(67) = -2.08$, $p = .041$, and was not moderated by having children, $t(66) = -0.36$, $p = .722$. Between-person sleep durations did not moderate the effects of between-person differences in specific impressions on marital satisfaction for either husbands or wives.

Discussion

Remaining satisfied with a close intimate relationship often requires self-regulation (Buck & Neff, 2012; Vohs, Finkenauer, & Baumeister, 2011), and self-regulatory resources appear to be functionally limited (Hagger et al., 2010). Nevertheless, sleep is one way to replenish these resources (Wright, 2010), which suggests sleep may offer self-regulatory benefits to relationships. Indeed, the present diary study demonstrated that spouses' sleep was positively associated with marital satisfaction. Spouses were more satisfied with their marriages on days after which they slept more than usual. Furthermore, sleep buffered husbands against the implications of their negative evaluations of specific experiences; on days after husbands slept longer, negative evaluations of specific qualities of the relationship were less strongly associated with negative evaluations of the relationship.

Several strengths of the current study enhance our confidence in the results reported here. First, the daily diary design allowed us to demonstrate the effects of sleep at the within-person level, helping to ensure that they were not spurious due to the numerous between-person differences associated with sleep and relationship evaluations. Second, participants were young, married couples who reported on their actual, rather than hypothetical, daily experiences and relationships and for whom such experiences and

evaluations ultimately matter. Indeed, marital satisfaction is strongly related to numerous important measures of well-being, such as major depression (Whisman & Bruce, 1999), life satisfaction (Heller, Watson, & Ilies, 2006), and physical health (Robles, Slatcher, Trombello, & McGinn, 2014).

Nevertheless, several factors limit the conclusions that can be drawn from these findings until they can be replicated and extended. First, the couples examined were primarily White. Although there are no theoretical reasons to believe that the association between sleep and marital satisfaction should differ among non-White couples, generalizations to other samples should be made with caution. Second, lack of variability in age and marital duration limits the ability to generalize our results to other samples. Future research may benefit by examining the relationship among sleep, self-regulation, and marital satisfaction in other samples. For example, evidence suggests daily self-control use strengthens regulatory abilities over time (Muraven, Baumeister, & Tice, 1999), and thus the effects of sleep may be less pronounced among older couples. Third, although subjective measures of sleep duration correlate strongly with objective measures (e.g., Armitage, Trivedi, Hoffmann, & Rush, 1997), objective measures of sleep quality would provide more rigorous tests of the association between sleep and marital satisfaction.

These limitations notwithstanding, our findings have important theoretical implications. First, the current findings underscore sleep as an important, although understudied, factor that affects marital satisfaction. Up to one third of married or cohabiting adults report that sleep problems burden their relationship (National Sleep Foundation, 2009), and the current effects confirm that sleep

deficits are linked to relationship evaluations. Current theoretical perspectives, especially those involving self-regulation, may benefit from incorporating the effects of sleep. For example, the effects of sleep are likely to be especially detrimental when self-regulatory resources are particularly necessary, such as during stressful experiences (Karney & Bradbury, 1995) or when automatic impulses are relatively negative (see McNulty & Olson, 2015). Indeed, as noted earlier, prior work indicates that total amount of sleep predicts relationship satisfaction during the postpartum period (Insana et al., 2011), a time when stress levels are particularly high (Horowitz & Damato, 1999).

Second, these findings also have implications for dyadic coping models. Although self-control is important for numerous academic, occupational, and health-oriented goals that predict well-being (Tangney, Baumeister, & Boone, 2004), people frequently rely on romantic partners for assistance with these goals (Fitzsimons, Finkel, & vanDellen, 2015). These findings highlight the importance of sleep to such dyadic processes. That is, just as sleep is associated with relationship satisfaction through processes of self-regulation, sleep may also be associated with other goals through reduced self-regulatory energy in both partners. Future research may benefit from considering this nuance in the link between sleep and other outcomes.

The results also suggest some potential practical implications that may also be elucidated with future research. For example, in addition to sleep, self-control can be strengthened with rest (Tyler & Burns, 2009), by taking responsibility for one's actions (Muraen, Gagné, & Rosman, 2008), and by keeping in mind one's dearly held values (Schmeichel & Vohs, 2009). Accordingly, future research may benefit from examining the extent to which these factors contribute to relationship satisfaction. To be sure, though, sleep is one strong biological source of self-regulatory resources (Wright, 2010). Future research may benefit by examining the implications of various forms of sleep therapy for relationship interventions.

Finally, the current research suggests a potential sex difference that may benefit from further research. The fact that husbands' but not wives' sleep moderated the effects of specific evaluations on global satisfaction was unpredicted, and a follow-up test indicated that this sex difference was not quite significant. Nevertheless, subsequent research may benefit by further exploring and investigating possible reasons for this potential difference. One possibility is that men and women are differentially motivated to discount their negative specific interpersonal experiences when making interpersonal evaluations. If so, women may prioritize their limited self-regulatory resources to this end, even after limited sleep. Indeed, research indicates that, when sufficiently motivated, people can override the effects of moderate self-regulatory depletion by drawing on reserved resources (Vohs, Baumeister, & Schmeichel, 2012). Future research may benefit by testing whether this process explains why women's sleep provided them with evaluative benefits generally but not by buffering their satisfaction against negative evaluations of specific aspects of the relationship.

References

Armitage, R., Trivedi, M., Hoffmann, R., & Rush, A. J. (1997). Relationship between objective and subjective sleep measures in depressed patients and healthy controls. *Depression and Anxiety*, 5, 97–102. [http://dx.doi.org/10.1002/\(SICI\)1520-6394\(1997\)5:2<97::AID-DA6>3.0.CO;2-2](http://dx.doi.org/10.1002/(SICI)1520-6394(1997)5:2<97::AID-DA6>3.0.CO;2-2)

- Barnes, C. M., Schaubroeck, J., Huth, M., & Ghumman, S. (2011). Lack of sleep and unethical conduct. *Organizational Behavior and Human Decision Processes*, 115, 169–180. <http://dx.doi.org/10.1016/j.obhdp.2011.01.009>
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16, 351–355. <http://dx.doi.org/10.1111/j.1467-8721.2007.00534.x>
- Bélanger, J. J., Kruglanski, A. W., Chen, X., & Orehek, E. (2014). Bending perception to desire: Effects of task demands, motivation, and cognitive resources. *Motivation and Emotion*, 38, 802–814. <http://dx.doi.org/10.1007/s11031-014-9436-z>
- Benington, J. H., & Heller, H. C. (1995). Restoration of brain energy metabolism as the function of sleep. *Progress in Neurobiology*, 45, 347–360. [http://dx.doi.org/10.1016/0301-0082\(94\)00057-0](http://dx.doi.org/10.1016/0301-0082(94)00057-0)
- Bolger, N., & Laurenceau, J. P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research*. New York, NY: Guilford.
- Buck, A. A., & Neff, L. A. (2012). Stress spillover in early marriage: The role of self-regulatory depletion. *Journal of Family Psychology*, 26, 698–708. <http://dx.doi.org/10.1037/a0029260>
- Christian, M. S., & Ellis, A. P. (2011). Examining the effects of sleep deprivation on workplace deviance: A self-regulatory perspective. *Academy of Management Journal*, 54, 913–934. <http://dx.doi.org/10.5465/amj.2010.0179>
- Durmer, J. S., & Dinges, D. F. (2005). Neurocognitive consequences of sleep deprivation. *Seminars in Neurology*, 25, 117–129. <http://dx.doi.org/10.1055/s-2005-867080>
- Fazio, R. H., & Olson, M. A. (2014). The MODE model: Attitude-behavior processes as a function of motivation and opportunity. *Dual process theories of the social mind*, 155–171.
- Fitzsimons, G. M., Finkel, E. J., & vanDellen, M. R. (2015). Transactive goal dynamics. *Psychological Review*, 122, 648–673. <http://dx.doi.org/10.1037/a0039654>
- Gailliot, M. T., Baumeister, R. F., DeWall, C. N., Maner, J. K., Plant, E. A., Tice, D. M., . . . Schmeichel, B. J. (2007). Self-control relies on glucose as a limited energy source: Willpower is more than a metaphor. *Journal of Personality and Social Psychology*, 92, 325–336. <http://dx.doi.org/10.1037/0022-3514.92.2.325>
- Ghumman, S., & Barnes, C. M. (2013). Sleep and prejudice: A resource recovery approach. *Journal of Applied Social Psychology*, 43, E166–E178. <http://dx.doi.org/10.1111/jasp.12045>
- Gilbert, D. T., Krull, D. S., & Pelham, B. W. (1988). Of thoughts unspoken: Social inference and the self-regulation of behavior. *Journal of Personality and Social Psychology*, 55, 685–694. <http://dx.doi.org/10.1037/0022-3514.55.5.685>
- Gordon, A. M., & Chen, S. (2014). The role of sleep in interpersonal conflict: Do sleepless nights mean worse fights? *Social Psychological and Personality Science*, 5, 168–175. <http://dx.doi.org/10.1177/1948550613488952>
- Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. (2010). Ego depletion and the strength model of self-control: A meta-analysis. *Psychological Bulletin*, 136, 495–525. <http://dx.doi.org/10.1037/a0019486>
- Hasler, B. P., & Troxel, W. M. (2010). Couples' nighttime sleep efficiency and concordance: Evidence for bidirectional associations with daytime relationship functioning. *Psychosomatic Medicine*, 72, 794–801. <http://dx.doi.org/10.1097/PSY.0b013e3181ecd08a>
- Heatherington, T. F., & Wagner, D. D. (2011). Cognitive neuroscience of self-regulation failure. *Trends in Cognitive Sciences*, 15, 132–139. <http://dx.doi.org/10.1016/j.tics.2010.12.005>
- Heller, D., Watson, D., & Ilies, R. (2006). The dynamic process of life satisfaction. *Journal of Personality*, 74, 1421–1450. <http://dx.doi.org/10.1111/j.1467-6494.2006.00415.x>

- Hobson, J. A. (2005). Sleep is of the brain, by the brain and for the brain. *Nature*, *437*, 1254–1256. <http://dx.doi.org/10.1038/nature04283>
- Horowitz, J. A., & Damato, E. G. (1999). Mother's perceptions of postpartum stress and satisfaction. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *28*, 595–605. <http://dx.doi.org/10.1111/j.1552-6909.1999.tb02168.x>
- Insana, S. P., Costello, C. R., & Montgomery-Downs, H. E. (2011). Perception of partner sleep and mood: Postpartum couples' relationship satisfaction. *Journal of Sex & Marital Therapy*, *37*, 428–440. <http://dx.doi.org/10.1080/0092623X.2011.607053>
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin*, *118*, 3–34. <http://dx.doi.org/10.1037/0033-2909.118.1.3>
- Martin, L. L., Seta, J., & Crelia, R. A. (1990). Assimilation and contrast as a function of people's willingness and ability to expend effort in forming impressions. *Journal of Personality and Social Psychology*, *59*, 27–37. <http://dx.doi.org/10.1037/0022-3514.59.1.27>
- McNulty, J. K. (2008). Neuroticism and interpersonal negativity: The independent contributions of perceptions and behaviors. *Personality and Social Psychology Bulletin*, *34*, 1439–1450. <http://dx.doi.org/10.1177/0146167208322558>
- McNulty, J. K., & Karney, B. R. (2001). Attributions in marriage: Integrating specific and global evaluations of a relationship. *Personality and Social Psychology Bulletin*, *27*, 943–955. <http://dx.doi.org/10.1177/0146167201278003>
- McNulty, J. K., & Olson, M. A. (2015). Integrating automatic processes into theories of relationships. *Current Opinion in Psychology*, *1*, 107–112. <http://dx.doi.org/10.1016/j.copsyc.2014.11.013>
- McNulty, J. K., O'Mara, E. M., & Karney, B. R. (2008). Benevolent cognitions as a strategy of relationship maintenance: "don't sweat the small stuff" . . . But it is not all small stuff. *Journal of personality and social psychology*, *94*, 631–646. <http://dx.doi.org/10.1177/10.1037/0022-3514.94.4.631>
- Muraven, M., Baumeister, R. F., & Tice, D. M. (1999). Longitudinal improvement of self-regulation through practice: Building self-control strength through repeated exercise. *The Journal of Social Psychology*, *139*, 446–457. <http://dx.doi.org/10.1080/00224549909598404>
- Muraven, M., Gagné, M., & Rosman, H. (2008). Helpful self-control: Autonomy support, vitality, and depletion. *Journal of Experimental Social Psychology*, *44*, 573–585. <http://dx.doi.org/10.1016/j.jesp.2007.10.008>
- Murray, S. L., & Holmes, J. G. (1994). Storytelling in close relationships: The construction of confidence. *Personality and Social Psychology Bulletin*, *20*, 650–663. <http://dx.doi.org/10.1177/0146167294206004>
- National Sleep Foundation. (2009). *Sleep in America poll*. Washington, DC: Author.
- Neff, L. A., & Karney, B. R. (2004). How does context affect intimate relationships? Linking external stress and cognitive processes within marriage. *Personality and Social Psychology Bulletin*, *30*, 134–148. <http://dx.doi.org/10.1177/0146167203255984>
- Neff, L. A., & Karney, B. R. (2009). Stress and reactivity to daily relationship experiences: How stress hinders adaptive processes in marriage. *Journal of Personality and Social Psychology*, *97*, 435–450. <http://dx.doi.org/10.1037/a0015663>
- Nilsson, J. P., Söderström, M., Karlsson, A. U., Lekander, M., Åkerstedt, T., Lindroth, N. E., & Axelsson, J. (2005). Less effective executive functioning after one night's sleep deprivation. *Journal of Sleep Research*, *14*, 1–6. <http://dx.doi.org/10.1111/j.1365-2869.2005.00442.x>
- Rauer, A. J., & El-Sheikh, M. (2012). Reciprocal pathways between intimate partner violence and sleep in men and women. *Journal of Family Psychology*, *26*, 470–477. <http://dx.doi.org/10.1037/a0027828>
- Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin*, *140*, 140–187. <http://dx.doi.org/10.1037/a0031859>
- Schmeichel, B. J., & Vohs, K. (2009). Self-affirmation and self-control: Affirming core values counteracts ego depletion. *Journal of Personality and Social Psychology*, *96*, 770–782. <http://dx.doi.org/10.1037/a0014635>
- Schumm, W. R., Paff-Bergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., Meens, L. D., & Bugaighis, M. A. (1986). Concurrent and discriminant validity of the Kansas Marital Satisfaction Scale. *Journal of Marriage and the Family*, *48*, 381–387. <http://dx.doi.org/10.2307/352405>
- Spiegel, K., Leproult, R., & Van Cauter, E. (1999). Impact of sleep debt on metabolic and endocrine function. *Lancet*, *354*, 1435–1439. [http://dx.doi.org/10.1016/S0140-6736\(99\)01376-8](http://dx.doi.org/10.1016/S0140-6736(99)01376-8)
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, *72*, 271–324. <http://dx.doi.org/10.1111/j.0022-3506.2004.00263.x>
- Tesser, A., & Beach, S. R. (1998). Life events, relationship quality, and depression: An investigation of judgment discontinuity in vivo. *Journal of Personality and Social Psychology*, *74*, 36–52. <http://dx.doi.org/10.1037/0022-3514.74.1.36>
- Troxel, W. M., Robles, T. F., Hall, M., & Buysse, D. J. (2007). Marital quality and the marital bed: Examining the covariation between relationship quality and sleep. *Sleep Medicine Reviews*, *11*, 389–404. <http://dx.doi.org/10.1016/j.smrv.2007.05.002>
- Tyler, J. M., & Burns, K. C. (2009). Triggering conservation of the self's regulatory resources. *Basic and Applied Social Psychology*, *31*, 255–266. <http://dx.doi.org/10.1080/01973530903058490>
- Vohs, K. D., Baumeister, R. F., & Schmeichel, B. J. (2012). Motivation, personal beliefs, and limited resources all contribute to self-control. *Journal of Experimental Social Psychology*, *48*, 943–947. <http://dx.doi.org/10.1016/j.jesp.2012.03.002>
- Vohs, K. D., Finkenauer, C., & Baumeister, R. F. (2011). The sum of friends' and lovers' self-control scores predicts relationship quality. *Social Psychological and Personality Science*, *2*, 138–145. <http://dx.doi.org/10.1177/1948550610385710>
- Whisman, M. A., & Bruce, M. L. (1999). Marital dissatisfaction and incidence of major depressive episode in a community sample. *Journal of Abnormal Psychology*, *108*, 674–678. <http://dx.doi.org/10.1037/0021-843X.108.4.674>
- Wright, R. A. (2010). Sleep consistency as a mechanism for improving inhibitory system strength. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *26*, 198–199. <http://dx.doi.org/10.1002/smi.1302>

Received October 21, 2015

Revision received June 5, 2016

Accepted June 6, 2016 ■