

Enacted Support and Well-Being: A Test of the Mediating Role of Perceived Control

Yixin Chen & Thomas Hugh Feeley

This study examined the unique effects of three forms of enacted (i.e., received) support (emotional, unpaid assistance, financial) on well-being and tested the potential mediating role of perceived control. The analysis was based on a national sample collected through the second wave of the Midlife in the United States (MIDUS) survey conducted in 2004–2006. Findings revealed emotional support exhibited a positive effect direction on well-being, while unpaid assistance and financial support both showed negative effect directions. Perceived control was found to fully mediate the relationships between all three forms of enacted support and well-being: Emotional support boosted well-being through higher perceived control, while unpaid assistance and financial support reduced well-being through lower perceived control. Findings provide evidence that effects of social resources on well-being are mediated through psychological resources.

Keywords: Emotional; Enacted Support; Financial; Interpersonal Communication; Perceived Control; Unpaid Assistance; Well-Being

Over the past three decades, much research has been done on understanding the relationship between social support and various health outcomes (Siewert, Antoniw, Kubiak, & Weber, 2011). Although researchers from varying academic disciplines

Yixin Chen is a doctoral student and Thomas Hugh Feeley is Professor and Chair in the Department of Communication at the University at Buffalo, The State University of New York. The authors thank Dr. Carol Ryff and her colleagues for conducting the Midlife in the United States (MIDUS) project, as well as the Inter-University Consortium for Political and Social Research (ICPSR) for making the data available online. The authors are also grateful to the anonymous reviewers and Editor Kim Powell for their insightful comments and suggestions. Correspondence to: Yixin Chen, 359 Baldy Hall, Department of Communication, University at Buffalo, Buffalo, NY 14260, USA. E-mail: yixinche@buffalo.edu

have all made unique contributions to the social support literature, their approaches on conceptualizing and operationalizing social support are quite different. Specifically, in the perspectives of sociology, psychology, and interpersonal communication, social support is operationalized, respectively, as social integration or embeddedness in social networks, perceived availability of support, or enacted support (i.e., support received from others) (Burlleson & MacGeorge, 2002). Of the studies reported to date, enacted support has received much less attention in the existing literature, compared to social integration and perceived availability of support (Goldsmith, 2004).

In addition to the scarcity of scholarship on enacted support, researchers have been puzzled by mixed findings in terms of the effects of enacted support on health outcomes (Goldsmith, 2004), such as well-being. Well-being is an important health outcome involving optimal experience and functioning (Ryan & Deci, 2001). Findings regarding the impact of enacted support on well-being have indicated positive effects (e.g., Boehmer, Luszczynska, & Schwarzer, 2007; Pottie, Cohen, & Ingram, 2009), negative effects (e.g., Bolger, Zuckerman, & Kessler, 2000; Revenson, Schiaffino, Majerovitz, & Gibofsky, 1991), and null effects (e.g., Kaul & Lakey, 2003; Knoll, Kienle, Bauer, Pfüller, & Luszczynska, 2007). Studies documenting negative effects of enacted support appear to present counterintuitive data indicating not all support received from others are beneficial and may, in the end, be worse than providing no support at all. It is possible that enacted support that potentially fulfills different functions actually exhibits different effects on well-being. Thus, it is important for research to differentiate the various types of support that individuals have received based upon their respective functions (e.g., emotional support versus financial support) and to examine their unique effects on important health outcomes.

Furthermore, the mixed findings in terms of the effects of enacted support on well-being suggest that some important social-psychological factors might have been left out in the previous research efforts. Social support is generally considered an important social resource that overall benefits individuals (Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001). To reveal the unique effects of enacted support on well-being, it is necessary to examine it together with an individual's psychological resources. It is possible that the effects of enacted support on well-being are explained by psychological resources, which may assist a psychological adaptation to threatening events (Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000). One important psychological resource is perceived control, which is conceptualized as an individual's belief about the amount of control he or she has over life events (Collins, Luszcz, Lawson, & Keeves, 1997). The primary goal of the current study is to test perceived control as a potential mediator between enacted support and well-being. Specifically, the current study will examine whether the relationships between different forms of enacted support and well-being are mediated via perceived control.

The lion's share of the research to date on enacted support has generally been reported from convenience samples, such as older adults (e.g., Reinhardt, Boerner, & Horowitz, 2006; Thomas, 2010) and cancer patients (e.g., Boehmer et al., 2007). The current study relies on data collected from Midlife in the United States (MIDUS; Ryff et al., 2007), a large national survey designed to investigate the role of behavioral,

psychological, and social factors in understanding age-related differences in physical and mental health. Results from these data promise to add much to what is understood about the effects of enacted support on well-being and to generalize to adults in the United States due to the MIDUS sampling frame.

Literature Review

The overview of the literature presented here first provides the conceptual and operational definitions of the two primary study variables—enacted support and well-being. Research findings around two theoretical models (i.e., main-effect model and buffering model) that explain the relationship between enacted support and well-being are then reviewed. Finally, perceived control is proposed and discussed as a mediating variable accounting for the relationship between enacted support and well-being. A theoretical model is constructed to frame the analysis plan.

Enacted Support

Studies of social support in the last three decades have included interdisciplinary efforts from sociology, psychology, and communication. Communication scholars (e.g., Burleson, Albrecht, Goldsmith, & Sarason, 1994) contend that studying social support from an interpersonal communication perspective can enhance the theoretical development of this area of research. In terms of the interpersonal communication perspective, social support is understood as enacted support—actions or communicative behaviors that others perform when offering support to an individual (Goldsmith, 2004). Because of the difficulties in observing support provisions in real-world settings, enacted support is often operationalized as *perceived* received support (hereafter shortened as received support), more formally, individuals' perceptions of the amount of supportive behavior they received from others in the recent past (Burleson & MacGeorge, 2002).

Different supportive behaviors may aim at fulfilling different functions. Thus, enacted support can be further categorized into different types of received support, such as received emotional support and received instrumental support (e.g., assistance and monetary support), based on its specific function (House, 1981). The current study relies on the available measurements from the MIDUS survey (Ryff et al., 2007) and operationalizes enacted support as received support in three specific forms: emotional support, unpaid assistance, and financial support.

Well-Being

Much attention has been devoted to studying the negative aspects of health outcomes, such as distress, depression, and disorder (Diener, 2003). The past decade has witnessed a scholarly inquiry movement leading to positive psychology, “the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions” (Gable & Haidt, 2005, p. 103).

According to the perspective of positive psychology, developing human strength is as important as combatting problems (Diener, 2003; Seligman & Csikszentmihalyi, 2000). Advocates of positive psychology argue that more studies should be done on positive subjective experience and desirable health outcomes, such as well-being (Seligman & Csikszentmihalyi, 2000).

Research on well-being has originated from two perspectives: the hedonic view and the eudaimonic view. The hedonic view is concerned with happiness and defines well-being as “pleasure attainment and pain avoidance” (Ryan & Deci, 2001, p. 141); the eudaimonic view is concerned with “meaning and self-realization” and defines well-being as “the degree to which a person is fully functioning” (Ryan & Deci, 2001, p. 141). Some scholars argue that the eudaimonic view relies on a definition of well-being given by experts, while the hedonic view allows ordinary people to tell what makes their lives good (e.g., Diener, Sapyta, & Suh, 1998). Thus, the current study uses the hedonic definition of well-being and operationalizes it as subjective well-being (Diener & Lucas, 1999). Subjective well-being is defined as individuals’ self-evaluation of their life and is an essential element of positive psychological health (Diener et al., 1998).

Enacted Support and Well-Being

The relationship between social support and well-being is often explained by either the main-effect model or the buffering model (S. Cohen & Wills, 1985). The main-effect model claims that social support produces a direct and beneficial effect on well-being independent of stressors, while the buffering model contends that social support protects individuals by buffering the negative effects of stressors, and the effect of social support on well-being is dependent on one’s level of stress (S. Cohen & Wills, 1985). In terms of the relationship between enacted support and well-being, empirical findings have not conclusively supported either the main-effect model or the buffering effect model. Earlier studies (e.g., Dunkel-Schetter & Bennett, 1990; Wethington & Kessler, 1986) found no significant buffering effects of actual received support. Some recent studies examining the effects of received support on well-being found support for the main-effect model (e.g., Boehmer et al., 2007; Pottie et al., 2009). For example, Boehmer et al. found that, among a sample of cancer patients in Germany, emotional well-being after surgery was elevated by initial received support. Pottie et al. found greater levels of daily positive mood as a function of greater received emotional and instrumental support in a sample of parents of autistic children.

However, findings from some other studies are not completely in line with the main-effect model. For instance, Reinhardt et al. (2006) found that receiving affective support (e.g., intimate interaction) caused a positive effect on well-being, while receiving instrumental support (e.g., material aid) produced a negative effect on well-being, suggesting that different functional components of received support may have different and even opposite main effects on well-being. Knoll et al. (2007) found that greater received instrumental and emotional support was not

associated with changes in well-being in couples undergoing in-vitro fertilization. Existing studies suggest that it may not be appropriate to treat enacted support as a single combined measure, and it is necessary to examine different functional components of enacted support separately. In addition, the inconsistency of findings from these studies indicate some other factors may have been left out of the analysis, and a mechanism of indirect (i.e., mediated) effect may explain the relationship between enacted support and well-being.

Perceived Control as a Mediator Between Enacted Support and Well-Being

Perceived control is defined as individuals' perceptions of the amount of control they have over situations in their lives (Collins et al., 1997). Individuals with high perceived control believe that their lives are mainly determined by internal forces (i.e., their own behavior and actions; Levenson, 1974). By contrast, those with low perceived control believe that events are largely controlled by external forces (i.e., powerful others, fate, or chance; Levenson, 1974). A sense of control over one's own life is found to be an important link to health (Ross, Mirowsky, & Goldsteen, 1990). Higher levels of perceived control are associated with lower distress (Ross & Van Willigen, 1997), lower depression (Mirowsky & Ross, 1990), and lower anxiety (Moser et al., 2007); lower levels of perceived control are associated with higher depression and lower life satisfaction (Wardle et al., 2004).

Perceived control and social support are often considered together as important social-psychological resources predicting well-being (e.g., Pinquart & Fröhlich, 2009; Yuan, 2007). Previous studies involving perceived control, social support, and well-being have found a significantly positive association between each of these three constructs. For example, Schulz and Decker (1985) found that, among middle-aged and elderly individuals with spinal-cord injuries, high levels of received social support and high levels of perceived control predicted high levels of well-being. Ingledeew, Hardy, and Cooper (1997) found that self-control and perceived availability of social support were both significantly and positively related to life satisfaction in a sample of British psychiatric workers. Ferguson and Goodwin's (2010) study indicated that perception of control had a significant and positive association with perceived availability of support and with well-being in a sample of older adults in Australia. In addition, studies have reported that perceived control explained more variance in well-being than did perceived availability of support (e.g., Ferreira & Sherman, 2006; Ross & Van Willigen, 1997).

Some reviews have proposed a mediational model, wherein the relationship between social support and well-being is mediated by perceived control. Wills and Shinar (2000) suggested that a particular priority for social support research was to explore the mediating mechanism of support intervention, and that enhanced self-esteem, efficacy, and mastery (a subscale of perceived control) were all possible mediators. Jacelon (2007) contended perceived control mediated the relationship between social support and well-being, though she did not specify how social support should be measured.

To date, only a few studies have tested the proposed mediational model, and social support in these studies was measured by perceived availability of support (e.g., Smith et al., 2000; Thompson & Prottas, 2006). For instance, Smith et al. found the effect of perceived availability of emotional support on well-being was mediated by perceived primary control, conceptualized as the general sense of having control over events in one's life. Their study did not explore instrumental support (e.g., assistance or financial support), which is also an important form of social support (House, 1981). Thompson and Prottas reported that perceived control mediated most of the effect of perceived availability of organizational support (e.g., family benefits, supervisor support, and coworker support) on employees' well-being. In sum, a close inspection of the existing literature found that the mediational effect of enacted support via perceived control still remains largely unknown.

The current study represents the first attempt to explore the potential mediating role of perceived control between enacted support and well-being using a national sample. The effects of enacted support on well-being are hypothesized to be due to the association between enacted support and perceived control. As stated above, enacted support was operationalized as three forms of received support including received emotional support, received unpaid assistance, and received financial support, and well-being was operationalized as subjective well-being. Thus, the following three hypotheses are posed reflecting the operational definitions of study variables:

- H₁: Perceived control mediates the relationship between received emotional support and subjective well-being.
- H₂: Perceived control mediates the relationship between received unpaid assistance and subjective well-being.
- H₃: Perceived control mediates the relationship between received financial support and subjective well-being.

A hypothesized theoretical model illustrating the relationships among study variables is shown in Figure 1.

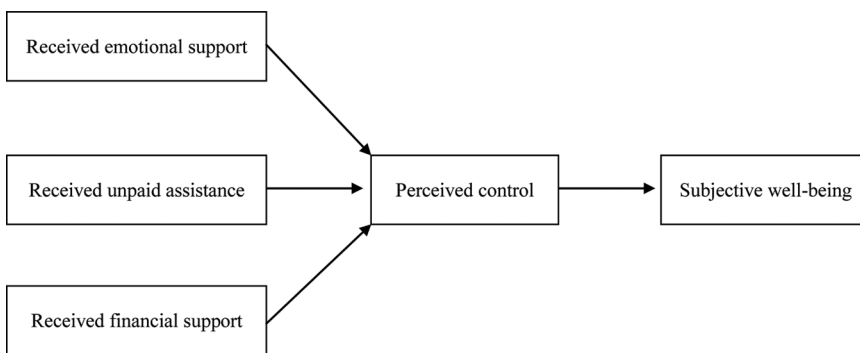


Figure 1 Hypothesized theoretical model illustrating the relationships among study variables.

Method

Sample

Participants were drawn from the second wave of the Midlife in the United States (MIDUS) survey conducted in the years 2004, 2005, and 2006. MIDUS is a national survey designed to investigate the role of behavioral, psychological, and social factors in understanding age-related differences in physical and mental health (Ryff et al., 2007). MIDUS was based on a nationally representative random-digit-dial (RDD) sample of noninstitutionalized, English-speaking adults, selected from working telephone banks in the coterminous United States. The second wave of MIDUS represented a follow-up of the first survey (conducted in 1995–1996). Only data from the second wave were presented in this analysis. Of the total 4,963 MIDUS second-wave respondents from the 48 contiguous states, 931 (18.76%) only completed a phone interview, which lasted about 30 minutes and asked questions regarding health, demographics, and life satisfaction; 4,032 (81.24%) completed two extensive self-administered questionnaires (55 pages in length) in addition to the phone interview. The present study's analysis was based on the 4,032 participants who completed both the phone interview and the self-administered questionnaire.

Participants' ages ranged from 30 to 84 years ($M = 56.25$, $SD = 12.39$) and 1,800 (44.64%) were male. A total of 33.1% of participants had a high school diploma or less education, 20.9% had some college education, 7.8% had an associate's degree (graduated from a two-year college), and 38.1% had a bachelor's degree or higher education. The majority of participants were married (70.91%) and they were mostly White (91.5%).

Measures

Among the study questions included in MIDUS, five measures were isolated in the present study: (a) received emotional support, (b) received unpaid assistance, (c) received financial support, (d) perceived control, and (e) subjective well-being. Demographics were also included.

Total emotional support

Total emotional support received from others was measured by asking, "On average, about how many hours per month do you receive informal emotional support (such as getting comfort, having someone listen to you, or getting advice) from each of the following people?" Sample items of this six-item measure include "from your spouse or partner" and "from your parents or the people who raised you." Total emotional support was computed by the sum of six items.

Total unpaid assistance

Total unpaid assistance received from others was measured by asking, "On average, about how many hours per month do you or any family member living with you

receive any unpaid assistance (such as help around the house, transportation, or childcare) from each of the following sources?" Sample items of this eight-item measure include "from your parents or the people who raised you" and "from your in-laws." Total unpaid assistance was calculated by the sum of eight items.

Total financial support

Total financial support received from others was measured by asking, "On average, about how many dollars per month do you or your family members living with you receive from each of the following sources? If you receive food, clothing, or other goods, include their dollar value." Sample items of this seven-item measure include "from your parents or the people who raised you" and "from your in-laws." Total financial support was computed by the sum of seven items.

Perceived control

Perceived control was assessed with a 12-item construct. This measure of perceived control over one's life was calculated by averaging scores on two subscales from the MIDUS sense-of-control scale, namely personal mastery (e.g., "I can do just about anything I really set my mind to") and perceived constraints (e.g., "I have little control over the things that happen to me") (Lachman & Agrigoroaei, 2010; Lachman & Prenda, 2004). The scores range from 1 (strongly agree) to 7 (strongly disagree). Items were recoded so that a higher value indicates higher sense of control. Cronbach's alpha was .868 (95% CI = .862–.874) for this measure.

Subjective Well-Being

Subjective well-being was operationalized as life satisfaction, which was assessed by five items asking respondents to rate their health, work, relationship with spouse/partner, relationship with children, and life overall (Fleeson, 2004; Prenda & Lachman, 2001). A sample item was presented as follows: Using a scale from 0 to 10 where 0 means "the worst possible marriage or close relationship" and 10 means "the best possible marriage or close relationship," how would you rate your marriage or close relationship these days?

Each item was coded from 0 (the worst possible) to 10 (the best possible). The scores for relationship with spouse/partner and relationship with children were averaged to create one "item." Then, this score was used along with the remaining three items to calculate an overall mean score for the measurement of life satisfaction. Higher scores reflect higher levels of overall life satisfaction. Cronbach's alpha was .66 (95% CI = .64–.68) for this measure.

Analysis Plan

Total emotional support, total unpaid assistance, and total financial support showed substantial positive skew; hence, they were log-transformed to achieve normal

distributions,¹ an assumption of multiple regression (J. Cohen, Cohen, West, & Aiken, 2003). Two hierarchical multiple regressions were run to test research hypotheses. The first hierarchical regression examined the separate effects of received support and perceived control on life satisfaction. Model 1 included demographic control variables. The subsequent regression models (Model 2 and Model 3) only included statistically significant demographic factors ($p < .05$) found from Model 1. Model 2 added three independent variables: total emotional support, total unpaid assistance, and total financial support, while Model 3 added perceived control.

The second hierarchical regression examined the relationships between three forms of received support as the independent variables and perceived control as the dependent variable. As in the first set of regressions, Model 1 included demographic control variables and Model 2 only included significant demographic factors found from Model 1. Model 2 added total emotional support, total unpaid assistance, and total financial support. The purpose of the second hierarchical regression was to establish the relationship between each of the three independent variables (received emotional support, received unpaid assistance, and received financial support) and the mediator (perceived control) as outlined in the theoretical model (Figure 1).

To test the hypotheses (H_1 , H_2 , and H_3) that perceived control mediates the relationship between each form of received support and subjective well-being, the present study used Baron and Kenny's (1986) analytical framework prescribing four criteria for mediation. The first criterion is to establish significant relationships between the predictors (three forms of received support) and the outcome variable (subjective well-being). The second criterion is to establish significant relationships between the predictors and the mediator (perceived control). The third criterion is

Table 1 Hierarchical Regression of Predictors on Life Satisfaction

	Outcome variable = life satisfaction					
	Model 1		Model 2		Model 3	
	β	p	β	p	β	p
Age	0.089	.000	0.108	.000	0.108	.000
Gender	0.033	.034	0.017	.342	0.044	.008
Education	0.114	.000	0.102	.000	0.048	.004
Marital Status	-0.171	.000	-0.150	.000	-0.124	.000
Race	-0.000	.975				
Total Emotional Support			0.058	.002	0.030	.091
Total Unpaid Assistance			-0.051	.006	-0.023	.181
Total Financial Support			-0.061	.001	-0.020	.233
Perceived Control					0.375	.000
Total Adjusted R square	.042**		.049**		.182**	
Change of Adjusted R square	.042**		.007**		.133**	

** $p < .01$.

Table 2 Hierarchical Regression of Predictors on Perceived Control

	Outcome variable = perceived control			
	Model 1		Model 2	
	β	p	β	p
Age	-0.026	.097		
Gender	-0.053	.001	-0.073	.000
Education	0.163	.000	0.146	.000
Marital Status	-0.094	.000	-0.069	.000
Race	-0.033	.036	-0.021	.225
Total Emotional Support			0.076	.000
Total Unpaid Assistance			-0.073	.000
Total Financial Support			-0.110	.000
Total Adjusted R Square	.036**		.057**	
Change of Adjusted R square	.036**		.021**	

** $p < .01$.

to show that the mediator affects the outcome variable, controlling for the predictors. The fourth criterion distinguishes two degrees of mediation: A complete mediation is found if the effect of a predictors the outcome variable controlling for the mediator is zero; a partial mediation is supported if such an effect is still significant but smaller than the effect when the outcome variable is only regressed on the predictors. In the present study, the first criterion was examined by Model 2 of Table 1, the second criterion by Model 2 of Table 2, and the third and fourth criteria by Model 3 of Table 1.

Results

Descriptive statistics of study factors and a zero-order correlation matrix were provided in Table 3. Results of the two hierarchical regressions are provided in Tables 1 and 2. The hypotheses (H1, H2, and H3) that perceived control mediates the relationship between each form of received support and subjective well-being were tested by examining the four criteria of the analytical framework for mediation. Table 1 shows that all three models were significant in predicting life satisfaction. Model 1 of Table 1 found that age, gender, education, and marital status were all significant predictors. Race was nonsignificant and was removed from subsequent regression analyses. Model 2 of Table 1 found that, after controlling for demographics, total emotional support had a significant and positive association with life satisfaction ($\beta = 0.058$, $p < .01$), total unpaid assistance had a significant but negative association with life satisfaction ($\beta = -0.051$, $p < .01$), and total financial support had a significant but negative association with life satisfaction ($\beta = -0.061$, $p < .01$). Therefore, the first criterion for mediation was met.

Table 3 Descriptive Statistics of Major Constructs and Correlation Matrix of All Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age			—	-.02	-.144*	.079**	-.037*	-.065**	-.072**	.053**	-.055**	.058**
2. Gender				—	-.112**	.135**	.00	.061**	.02	-.052**	-.082**	-.01
3. Education					—	-.02	-.01	-.076**	-.058**	.02	.175**	.102**
4. Marital Status						—	.059**	-.099**	.02	-.01	-.110**	-.163**
5. Race							—	.01	.01	.033*	-.037*	-.01
6. Total Emotional Support (hrs/mo)	47.00	122.39						—	.243**	.00	.02	.03
7. Total Unpaid Assistance (hrs/mo)	8.18	32.19							—	.03	-.044**	-.058**
8. Total Financial Support (\$/Mo)	63.05	663.75								—	.00	-.01
9. Perceived Control	5.53	1.00									—	.387**
10. Life Satisfaction	7.67	1.46										—

* $p < .05$. ** $p < .01$.

Table 2 shows that both models were significant in predicting perceived control. Model 1 of Table 2 shows that gender, education, marital status, and race were all significant predictors; age was nonsignificant and was removed from the subsequent regression analysis (Model 2 of Table 2). Model 2 of Table 2 found that, after controlling for demographics, total emotional support had a significant and positive association with perceived control ($\beta = 0.076$, $p < .001$), total unpaid assistance had a significant but negative association with perceived control ($\beta = -0.073$, $p < .001$), and total financial support had a significant but negative association with perceived control ($\beta = -0.110$, $p < .001$). Therefore, the second criterion for mediation was satisfied.

Model 3 of Table 1 found that, after controlling for demographics and three forms of received support, perceived control showed a significant and positive association with life satisfaction ($\beta = .375$, $p < .001$). Thus, the third criterion for mediation was met. Model 3 of Table 1 also found that after controlling for demographics and perceived control, none of the predictors (total emotional support, total unpaid assistance, and total financial support) was significantly associated with life satisfaction. Therefore, the fourth criterion for mediation was fulfilled. In sum, a complete mediation was found between each of the three forms of received support and subjective well-being, and all three hypotheses were supported.

Discussion

This study examined the separate effects of three forms of enacted support on well-being and tested the mediating role of perceived control using secondary data analysis based on a national sample collected through the MIDUS survey conducted in 2004–2006. Study factors explained approximately 14% of the variance in well-being, the primary outcome variable. The amount of variance explained might increase if more factors (e.g., self-esteem or personality traits) were added into the model.

The present findings indicate not all forms of enacted support are beneficial to well-being, operationalized as subjective well-being and measured by the life satisfaction scale. Specifically, only the effect direction of received emotional support on subjective well-being was positive, while the effect directions of received unpaid assistance and received financial support were both negative. The present findings are inconsistent with results from previous studies indicating a positive relationship between received social support and well-being (e.g., Boehmer et al., 2007; Pottie et al., 2009). Although the effect directions of different forms of enacted support are in line with Reinhardt et al.'s (2006) study, which reported a positive effect of affective support and a negative effect of instrumental support on well-being, the effects of different forms of enacted support in the current study were smaller and became nonsignificant when perceived control was entered into the model.

The finding that receiving emotional support showed a positive effect direction on well-being suggests receipt of emotional support is important for individuals to maintain subjective well-being. Human beings need to have a sense of belonging

and acceptance, whether it comes from a spouse/partner, family members, friends, or coworkers. Maslow (1943) in his seminal paper, *A Theory of Human Motivation*, identified love/belonging as the third layer of human need after physiological and safety needs. Receiving emotional support satisfies the human need of love/belonging by “expression of encouragement, appreciation, reassurance, respect, and confidence” (Burlison, 2003, p. 552). Higher levels of received emotional support may make participants feel that they are loved and cared for, thus bolstering a sense of acceptance and a greater life satisfaction.

Receiving unpaid assistance and receiving financial support both showed a negative effect direction on subjective well-being. The more unpaid assistance or financial support participants had received the lower life satisfaction they were expected to experience. One reason may be that the unpaid assistance and the financial support provided to participants did not necessarily match their needs, thus such support attempts failed to promote well-being. The tenet of the matching model is that social support offered must match the needs of recipients in order to generate beneficial effects (Lakey & Cohen, 2000). A second explanation is that receipt of unpaid assistance and financial support may impair an individual’s self-esteem. In other words, receiving these two forms of support may foster a feeling of incompetence and leaning on others, thus casting doubt on independence and self-reliance. A third explanation can be found from social exchange theory (Thibault & Kelley, 1952), which posits that individuals evaluate their costs and benefits and try to maintain a balance in their social interaction processes. Support recipients may develop an uncomfortable feeling as to the imbalance of social exchange, if they sense that they have constantly been offered assistance and financial aid.

The present finding that not all forms of enacted support showed positive effect directions on well-being has two implications. First, theoretically, it suggests that enacted support should not be considered as a single combined measure, when researchers try to develop a model examining the effects of enacted support on well-being. It is necessary to categorize enacted support according to different fulfilled functions, as different functional components of enacted support may have very different effects on individuals’ well-being, such as the opposite effect directions indicated by the current study. Second, in practice (e.g., social support intervention), it cautions support providers to be attentive to the overall interests and benefits of support receivers. Although unpaid assistance or financial support attempting to help individuals in need may embrace the spirits of goodness and kindness, they may exert an unexpected damaging effect on individuals’ well-being rather than the desired beneficial effect.

Results from the present study suggest that perceived control served as a mediator between each different forms of enacted support and well-being. In other words, despite different effects (e.g., opposite effect directions) from different functional components of enacted support on well-being, such effects were all mediated by perceived control. Perhaps the more emotional support participants had received, the more they felt that they were loved, cared for, and appreciated; thus, they cultivated a greater sense of control of their life situation, which, in turn, led

to a higher level of well-being. It is also plausible that the more unpaid assistance or financial support individuals had received, the more they felt that they were incompetent and out of control of their life events, which, in turn, generated a lower level of well-being. This finding suggests that the main-effect model (i.e., social support directly affects well-being) or the buffering model (i.e., social support buffers stress) (S. Cohen & Wills, 1985) may not be appropriate for observing the unique effects of enacted support on well-being. The current data indicate the functioning of enacted support on well-being is not a direct effect nor is the presence of a high level of stress necessary. This research highlights the importance of examining enacted support together with psychological resources such as perceived control to fully understand their unique effects on well-being. It might also prompt more social support researchers to explore other potential mediators between enacted support and well-being.

Several limitations of this study should be noted. First, this study did not consider the quality of each type of enacted support but only included measurement of the quantity of each type of enacted support. Second, although this study categorized enacted support to emotional support, unpaid assistance, and financial support, some other forms of enacted support (e.g., informational support or esteem support) may also need to be included in the theoretical model to obtain a full view of the impact of different functional components of enacted support. Third, despite the use of a national sample, the majority of participants in this study were White, which may limit the generalizability of the results of this study. Fourth, although the reliability of life satisfaction measure (Cronbach's $\alpha = .66$) is still considered acceptable, a higher reliability would be more desirable. However, deleting any of the items in the life satisfaction measure would reduce the reliability of this measure. Finally, the causal relationships among enacted support, perceived control, and well-being should be interpreted with caution due to the cross-sectional nature of this study. Although theoretically well-being is treated as the outcome variable, the present study cannot rule out an alternative explanation based on the opposite causal direction; that is, individuals with higher well-being may tend to have a higher sense of control of their life, and such higher perceived control may in turn lead to seeking more emotional support and seeking less unpaid assistance and financial support. However, the present study did rule out another alternative explanation that perceived control affects enacted support, which, in turn, affects well-being. Results from the first hierarchical regression showed that perceived control accounted for much more of the variance in well-being than did enacted support, thus the mediating role of enacted support between perceived control and well-being can be ruled out.

Notwithstanding the above limitations, this study contributes to the social support and interpersonal communication literature by justifying the multidimensional character of enacted support and calling attention to the possible negative effects of some functional components of enacted support. Another contribution of this study is providing evidence that social resources (e.g., enacted support) have indirect effects on well-being with such effects mediated through psychological resources (e.g.,

perceived control). A third contribution of this study is addressing the intensity of received support by using number of hours to measure emotional support and unpaid assistance and by using amount of money to assess financial support. Using such concrete measures (e.g., number of hours) could better capture the intensity of social support, which was recommended by Thomas (2010) for additional investigation.

In conclusion, this study underscores that enacted support should be examined based on different functional components and sheds light on the mediating role of perceived control between enacted support and well-being. Findings from this study suggest social support interventions should devote more energy on providing emotional support, while being cautious when attempting to provide unpaid assistance and financial support to individuals in need of support. Future research might want to explore the quality of each type of enacted support with the addition of more forms of enacted support than those tested in this study, to use a national sample with diversified ethnicities, and to conduct a longitudinal study to validate the causal relationships among enacted support, perceived control, and well-being.

Note

- [1] The skewness values for the transformed emotional support, unpaid assistance, and financial support are -0.09 , 1.22 , and 2.80 , respectively. The kurtosis values for the transformed emotional support, unpaid assistance, and financial support are 0.08 , 0.61 , and 6.84 , respectively.

References

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Boehmer, S., Luszczynska, A., & Schwarzer, R. (2007). Coping and quality of life after tumor surgery: Personal and social resources promote different domains of quality of life. *Anxiety, Stress & Coping*, *20*, 61–75. doi: 10.1080/10615800701195439
- Bolger, N., Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology*, *79*, 953–961.
- Burleson, B. R. (2003). Emotional support skills. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 551–594). Mahwah, NJ: Erlbaum.
- Burleson, B. R., Albrecht, T. L., Goldsmith, D. J., & Sarason, I. G. (1994). The communication of social support. In B. R. Burleson, T. L. Albrecht & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. xi–xxx). Thousand Oaks, CA: Sage.
- Burleson, B. R., & MacGeorge, E. L. (2002). Supportive communication. In M. L. Knapp & J. A. Daly (Eds.), *Handbook of interpersonal communication* (3rd ed., pp. 374–424). Thousand Oaks, CA: Sage.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310–357. doi: 10.1037/0033-2909.98.2.310

- Collins, K., Luszcz, M., Lawson, M., & Keeves, J. (1997). Everyday problem solving in elderly women: Contributions of residence, perceived control, and age. *The Gerontologist*, 37, 293–302.
- Diener, E. (2003). What is positive about positive psychology: The curmudgeon and Pollyanna. *Psychological Inquiry*, 14, 115–120.
- Diener, E., & Lucas, R. (1999). Personality, and subjective well-being. In D. Kahneman, E. Diener & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 213–229). New York, NY: Russell Sage Foundation.
- Diener, E., Sapyta, J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry*, 9, 33–37.
- Dunkel-Schetter, C., & Bennett, T. L. (1990). Differentiating the cognitive and behavioral aspects of social support. In I. G. Sarason, B. R. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 267–296). New York, NY: Wiley.
- Ferguson, S. J., & Goodwin, A. D. (2010). Optimism and well-being in older adults: The mediating role of social support and perceived control. *The International Journal of Aging & Human Development*, 71, 43–68. doi: 10.2190/AG.71.1.c
- Ferreira, V. M., & Sherman, A. M. (2006). Understanding associations of control beliefs, social relations, and well-being in older adults with osteoarthritis. *The International Journal of Aging & Human Development*, 62, 255–274. doi: 10.2190/0kmv-ru7x-caqm-0rra
- Fleeson, W. (2004). The quality of American life at the end of the century. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife* (pp. 252–272). Chicago, IL: University of Chicago Press.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9, 103–110.
- Goldsmith, D. J. (2004). *Communicating social support*. Cambridge, UK: Cambridge University Press.
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.
- Ingledeu, D. K., Hardy, L., & Cooper, C. L. (1997). Do resources bolster coping and does coping buffer stress?: An organizational study with longitudinal aspect and control for negative affectivity. *Journal of Occupational Health Psychology*, 2, 118–133. doi: 10.1037/1076-8998.2.2.118
- Jacelon, C. S. (2007). Theoretical perspectives of perceived control in older adults: A selective review of the literature. *Journal of Advanced Nursing*, 59, 1–10. doi: 10.1111/j.1365-2648.2007.04320.x
- Kaul, M., & Lakey, B. (2003). Where is the support in perceived support?: The role of generic relationship satisfaction and enacted support in perceived support's relation to low distress. *Journal of Social & Clinical Psychology*, 22, 59–78.
- Knoll, N., Kienle, R., Bauer, K., Pfüller, B., & Luszczynska, A. (2007). Affect and enacted support in couples undergoing in-vitro fertilization: When providing is better than receiving. *Social Science & Medicine*, 64, 1789–1801. doi: 10.1016/j.socscimed.2007.01.004
- Lachman, M. E., & Agrigoroaei, S. (2010). Promoting functional health in midlife and old age: Long-term protective effects of control beliefs, social support, and physical exercise. *PLoS One*, 5, e13297–e13297. doi: 10.1371/journal.pone.0013297
- Lachman, M. E., & Prenda, K. M. (2004). The adaptive value of feeling in control during midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of wellbeing at midlife* (pp. 320–349). Chicago, IL: University of Chicago Press.
- Lakey, B., & Cohen, S. (2000). Social support theory and measurement. In S. Cohen, L. Underwood, & B. Gottlieb (Eds.), *Social support measurement and intervention*. New York, NY: Oxford University Press.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment*, 38, 377–383.
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50, 370–396.

- Mirowsky, J., & Ross, C. E. (1990). Control or defense?: Depression and the sense of control over good and bad outcomes. *Journal of Health and Social Behavior*, *31*, 71–86.
- Moser, D. K., Riegel, B., McKinley, S., Doering, L. V., An, K., & Sheahan, S. (2007). Impact of anxiety and perceived control on in-hospital complications after acute myocardial infarction. *Psychosomatic Medicine*, *69*, 10–16.
- Pinquart, M., & Fröhlich, C. (2009). Psychosocial resources and subjective well-being of cancer patients. *Psychology & Health*, *24*, 407–421. doi: 10.1080/08870440701717009
- Pottie, C. G., Cohen, J., & Ingram, K. M. (2009). Parenting a child with autism: Contextual factors associated with enhanced daily parental mood. *Journal of Pediatric Psychology*, *34*, 419–429. doi: 10.1093/jpepsy/jsn094
- Prenda, K. M., & Lachman, M. E. (2001). Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology and Aging*, *16*, 206–216.
- Reinhardt, J. P., Boerner, K., & Horowitz, A. (2006). Good to have but not to use: Differential impact of perceived and received support on well-being. *Journal of Social and Personal Relationships*, *23*, 117–129. doi: 10.1177/0265407506060182
- Revenson, T. A., Schiaffino, K. M., Majerovitz, S. D., & Gibofsky, A. (1991). Social support as a double-edged sword: The relation of positive and problematic support to depression among rheumatoid arthritis patients. *Social Science & Medicine*, *33*, 807–813.
- Ross, C. E., Mirowsky, J., & Goldsteen, K. (1990). The impact of the family on health: The decade in review. *Journal of Marriage & Family*, *52*, 1059–1078.
- Ross, C. E., & Van Willigen, M. (1997). Education and the subjective quality of life. *Journal of Health and Social Behavior*, *38*, 275–297. doi: 10.2307/2955371
- Ryan, R., & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*, 141–166.
- Ryff, C., Almeida, D. M., Ayanian, J. S., Carr, D. S., Cleary, P. D., Coe, C., . . . Williams, D. (2007). Midlife Development in the United States (MIDUS II), 2004–2006 [Computer file]. ICPSR04652-v1. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor].
- Schulz, R., & Decker, S. (1985). Long-term adjustment to physical disability: The role of social support, perceived control, and self-blame. *Journal of Personality and Social Psychology*, *48*, 1162–1172. doi: 10.1037/0022-3514.48.5.1162
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*, 5–14. doi: 10.1037/0003-066x.55.1.5
- Siewert, K., Antoniw, K., Kubiak, T., & Weber, H. (2011). The more the better?: The relationship between mismatches in social support and subjective well-being in daily life. *Journal of Health Psychology*, *16*, 621–631.
- Smith, G. C., Kohn, S. J., Savage-Stevens, S. E., Finch, J. J., Ingate, R., & Lim, Y.-O. (2000). The effects of interpersonal and personal agency on perceived control and psychological well-being in adulthood. *The Gerontologist*, *40*, 458–468.
- Steverink, N., Westerhof, G. J., Bode, C., & Dittmann-Kohli, F. (2001). The personal experience of aging, individual resources, and subjective well-being. *Journal of Gerontology: Psychological Sciences*, *56B*, 364–373.
- Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions, and health. *American Psychologist*, *55*, 99–109.
- Thibault, J. W., & Kelley, H. H. (1952). *The social psychology of groups*. New York, NY: John Wiley & Sons.
- Thomas, P. A. (2010). Is it better to give or to receive?: Social support and the well-being of older adults. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *65B*, 351–357. doi: 10.1093/geronb/gbp113

- Thompson, C. A., & Prottas, D. J. (2006). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology, 11*, 100–118. doi: 10.1037/1076-8998.10.4.100
- Wardle, J., Steptoe, A., Guliš, G., Sartory, G., Sèk, H., Todorova, I., . . . Ziarko, M. (2004). Depression, perceived control, and life satisfaction in university students from Central-Eastern and Western Europe. *International Journal of Behavioral Medicine, 11*, 27–36.
- Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social Behavior, 27*, 78–89.
- Wills, T. A., & Shinar, O. (2000). Measuring perceived and received social support. In S. Cohen, L. G. Underwood & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 86–135). New York, NY: Oxford University Press.
- Yuan, A. S. V. (2007). Perceived age discrimination and mental health. *Social Forces, 86*, 291–311.