# Emotional support potential: regulatory focus and competence predictors

Dan S. Chiaburu, Tomas G. Thundiyil and Gonzalo J. Muñoz

Dan S. Chiaburu and Tomas G. Thundiyil are based at the Department of Management, Mays Business School, Texas A&M University, College Station, Texas, USA. Gonzalo J. Muñoz is based at the Department of Psychology, Texas A&M University, College Station, Texas, USA.

#### **Abstract**

Purpose - The purpose of this paper is to explore individual and contextual predictors of emotional support potential in training.

Design/methodology/approach - Relative weight analysis was used to assess the importance of individual (trainee regulatory focus) and contextual (trainer competence) predictors of emotional support potential in training.

Findings - Individual differences in self-regulation including promotion and prevention focus explained emotional support potential to a greater extent than did trainer competence.

Research limitations/implications - For future research, further testing the current propositions can emphasize broader contextual predictors (e.g. support from trainees' social context).

Practical implications - A number of studies have indicated that social aspects of training are important; however, no one has yet examined predictors of emotional support. Consequently, understanding an individual's regulatory focus and personality can be an important way to improve emotional support potential.

Originality/value - This is the first study to examine predictors of emotional support potential in a training context and links trainee regulatory focus to this outcome.

Keywords Trainers, Training, Individual behaviour, Personality, Five factor model, Peer support, Regulatory focus, Trainer competence

Paper type Research paper

## Introduction

While trainee performance is important, the social side of training is equally consequential. Whether in work or academic contexts, trainees have social needs, engage in social relationships, and partake in a broader social environment (Baumeister and Leary, 1995; Reis et al., 2000). As established in prior work, support has positive physical and psychological implications for both receivers (Berkman, 1995) and providers (Brown et al., 2003; Cacioppo et al., 2003; Grant and Dutton, 2012; Schwartz and Sendor, 1999). Given the established importance of emotional support for individual and group-related outcomes (Jayaratne and Chess, 1984), in this paper we focus on trainees' emotional support potential and its predictors.

## Literature review

Existing research has established the existence of several forms of support, including emotional (affect-based), task-related (instrumental aid), informational, and status-enhancing (Chiaburu and Harrison, 2008; Hodson, 2001; Weiss, 1973). Emotional support is present in a multitude of theoretical models, across disciplines, and under a variety of names – such as emotional mastery (Caplan, 1974), concern (Gottlieb, 1978), love (Cobb, 1976; Foa, 1971; Hobfoll, 1988; Vaux, 1988), and emotional support itself (Cutrona, 1986; House, 1981; Hirsch, 1980). Due to the prevalence and importance of emotional

During the completion of this research Gonzalo J. Muñoz was supported by grants from the Ministry of Education of Chile through its program "MECE Educación Superior 2," and University Adolfo Ibáñez, Santiago, Chile. The authors would like to thank Brad Harris for his assistance with data collection and preliminary data analyses.

support (Cohen and Wills, 1985; Trobst, 2000; Uchino et al., 1996), it is valuable to better understand what factors encourage increased potential for emotional support. Therefore, in this study, we examine predictors of trainees' emotional support potential, i.e. the extent to which they see themselves as being sensitive to their colleagues' needs, sympathetic to their peers, and capable of investing emotionally in proximal others (Ducharme and Martin, 2000; Simmons et al., 2009).

Emotional support has been linked to important outcomes, including decreased stress (Viswesvaran et al., 1999), burnout (Halbesleben, 2006), physical strains (Schwarzer and Leppin, 1989), and increased perceptions of personal accomplishment (O'Connor and Cordova, 2010). Emotional support may also be relevant for trainees who are forming new attachments with their training partners (Bowlby, 1973). Thus, support can be seen as a "safety net", providing recipients the luxury of a fallback (Sarason et al., 1990). Finally, research has shown that success can oftentimes be attributed to individual resource availability, which can also arise through increased emotional support (O'Connor and Cordova, 2010; Viswesvaran et al., 1999).

Despite important benefits, providing support is not always possible, given resource competition (Hobfoll, 1988). When trainees need to invest energy to enhance their performance, they may have fewer resources to expend on other activities (e.g. Halbesleben et al., 2009), including supporting others. Consequently, the purpose of the present study was to further the understanding of predictors of trainees' emotional support potential. In what follows, we examine the role of individual (prevention versus promotion regulatory focus) and contextual factors (trainer competence) as predictors of emotional support potential.

## Regulatory focus: individual determinants of emotional support potential

Regulatory focus theory suggests that individuals use different strategies to accomplish a desired outcome. On one hand, individuals may strive to use promotion strategies, which are characterized by reward achievement and focus on potential end state gains. On the other hand, individuals may use prevention strategies, which focus on avoiding punishment and on loss or non-loss scenarios (Higgins, 1997, 2005).

Promotion orientation is generally predictive of commitment and social exchanges (Gorman et al., 2011). At the same time, promotion-oriented trainees may be excessively focused on their own personal accomplishments and efforts to get ahead (Wallace and Chen, 2006), and allocate fewer resources (i.e. less attention) to support others. Therefore, utilizing resources for self-interests may diminish resources that can be focused on helping others.

Conversely, because of their prevention orientation (e.g. avoiding losses), it is possible for prevention-oriented trainees to focus to a greater extent (than promotion-oriented) on their peers, who could represent an additional resource to draw from as needed (based on reciprocation, turn taking, or "pay-it-forward" forms of social exchange; Ekeh, 1974; Gouldner, 1960; Thibaut and Kelley, 1959). Additionally, from an emotional reactions standpoint, promotion is associated with dejection while prevention is associated with agitation (Brockner and Higgins, 2001). The latter dimension (worry, anxiety) has an increased likelihood to orient the person toward others due to attachment anxiety (Noftle and Shaver, 2006) or to interpersonal dependency (Pincus and Gurtman, 1995). Put another way, prevention oriented trainees may look to other trainees to "make sure they are doing things correctly". In sum, we propose that prevention-oriented individuals are more insecure, tend to rely more on peers and, by extension, provide the potential for higher emotional support.

# Trainer competence: environmental cues of emotional support potential

Context-based cues can also influence emotional support potential. One such cue is trainer competence, which refers to the perceived knowledge a trainer has in the given content area. It could be extrapolated that when trainers are perceived as competent, trainees need to dedicate fewer resources (cognitive, emotional, physical) toward learning (Hobfoll, 1988).

Not surprisingly, as a result, trainer competence has been linked to increased performance (Justis et al., 1978). Also, research suggests that one of the most important environmental concerns arises with trainer competence (Kindred and Mohammed, 2005). When trainers are capable, organized, and do their work as expected, trainees can utilize fewer resources in fulfilling tasks. Ultimately, this increased resource availability provides trainees with more resources, increasing their emotional support potential. We thus expect that perceptions of trainer competence will lead to higher potential for emotional support.

## Method

## **Participants**

To test the hypotheses, we used an initial sample of 454 undergraduate students from a large Southwestern US university enrolled in an introductory business course. Our analyses are based on a subset of 205 students with complete data for the variables of interest for the present study, which were collected at several points in time. For each measure, participants responded using a seven-point Likert scale (1 = strongly agree; 7 = strongly disagree), except for regulatory focus, which asked about frequency (rather than extent of agreement). Internal reliability estimates for each scale are presented in Table I.

#### Procedure

Respondents completed questionnaires several times throughout the learning period (semester). Data on FFM traits and regulatory focus were collected early, at separate times; data concerning regulatory focus and trainer competence were collected near the end of the course.

To test the predictions we used a hierarchical regression approach using the FFM traits as controls. In addition, we conducted a relative weight analysis (Johnson, 2000; Tonidandel and LeBreton, 2011) to determine the relative importance of the study variables for predicting emotional support potential. The purpose of relative weight analysis is to assess the extent to which each predictor contributes toward explaining variance in the criterion by considering both its unique contribution and its contribution when combined with other predictors. An advantage of relative weight analysis is that it allows researchers to assess the importance of each predictor in a regression model even if predictors are correlated. To accomplish this purpose, relative weight analysis transforms the original predictor set into a new set of orthogonal variables, later used in conjunction with the original variable set to estimate simultaneously the individual and combined effect of each predictor (see Tonidandel and LeBreton, 2011). This generates two indicators:

- 1. raw relative weights; and
- 2. relative weight percentages.

Scale	Cronbach's $\alpha$	Number of items	Source	
Extraversion	0.83	10	Goldberg (1992)	
Agreeableness	0.84	10	Goldberg (1992)	
Conscientiousness	0.85	10	Goldberg (1992)	
Emotional stability <sup>a</sup>	0.73	7	Goldberg (1992)	
Openness to experience	0.75	10	Goldberg (1992)	
Trainer competence	0.89	3	Sitzmann (2008)	
Promotion focus	0.86	6	Wallace and Chen (2005)	
Prevention focus	0.90	6	Wallace and Chen (2005)	
Emotional support potential	0.95	3	Shirom (1989)	

Notes: n = 205; athe initial Cronbach's  $\alpha$  of emotional stability was 0.60; The reliability estimate reported in this table was obtained after removing three of the ten items from the original scale

"Emotional support has been linked to important outcomes, including decreased stress, physical strains, and increased perceptions of personal accomplishment."

> Raw relative weights sum to the model's squared multiple correlation (R2) and may be interpreted as a measure of relative effect size. Relative weights can also be expressed as percentages of the variance explained by the specified predictor by dividing each predictor's relative weight by  $R^2$  and multiplying by 100. Thus, relative weight percentages reflect the proportioned contribution of each predictor to the criterion variance explained by the model.

#### Measures

Predictors. We measured regulatory focus using a modified version of Wallace, Chen, and Kanfer's work-specific regulatory focus measure (Wallace and Chen, 2006). The items measuring the two dimensions of promotion focus and prevention focus were adapted for a learning situation. Specifically, participants were asked about their experiences and activities while doing classwork (i.e. how frequently they thought and acted in certain ways). An example of a promotion focus item is "Getting my work done no matter what", whereas an example of a prevention focus item is "Completing the tasks correctly". We assessed trainer competence with Sitzman's (2008) three-item measure. Examples of items include: "The instructor explained things clearly" and "The instructor was prepared for every class".

Outcome: emotional support potential. A measure of emotional support potential was obtained by reverse-scoring the emotional exhaustion subscale from the Shirom-Melamed burnout measure (Shirom, 1989; Simmons et al., 2009). This measure is comprised of three items, such as: "I feel I am unable to be sensitive to the needs of my peers".

Control variables. We control for participants' personality traits based on the FFM. Of the FFM traits, we were primarily interested to control for agreeableness, which can co-vary with our outcome construct; yet for completeness we controlled for all the FFM traits. We measured FFM personality traits using Goldberg's (1992) Big Five markers. For this measure, participants rate the extent to which specific adjectives are descriptive of themselves (e.g. "extraverted"). Whereas extraversion, agreeableness, conscientiousness, and openness to experience were assessed with 10 items each, emotional stability was assessed using only seven items (see Table I). The decision to drop items from the emotional stability measure was based on the results of a psychometric analysis which indicated that the internal reliability estimate for the deven-item version (Cronbach's  $\alpha = 0.73$ ) was superior to the initial ten-item measure (Cronbach's  $\alpha = 0.60$ ).

## Results

Table I presents the sources of scales, the number of items, and the estimated reliabilities based on Cronbach's a. Table II presents the results of the multiple regression and relative weight analyses. In Step 1 we entered the FFM traits. The results from Step 1 demonstrated that agreeableness was positively related to emotional support potential ( $\beta = 0.34$ , p < 0.001) and accounted for most of the variance explained by the FFM traits (RW percentage = 69.7 percent).

The results from Step 2 show the extent to which promotion and prevention focus and trainer competence explained incremental variance in emotional support potential after controlling for the FFM traits. Promotion focus was negatively associated with emotional support potential ( $\beta = -0.46$ ,  $\rho < 0.001$ ), and prevention focus was positively associated with emotional support potential ( $\beta = 0.40$ , p < 0.001). Although trainer competence was not Table II

Hierarchical regression analyses predicting emotional support potential by trainer competence and regulatory focus after controlling for five-factor model and course satisfaction

	Step 1			Step 2		
	β	RW	%RW	β	RW	%RW
Extraversion	-0.03	0.001	1.1	-0.07	.001	0.7
Agreeableness	0.34***	0.092	69.7	0.28**	0.080	34.0
Conscientiousness	0.09	0.029	22.2	0.10	0.029	12.5
Emotional Stability	-0.01	0.002	1.2	-0.01	0.002	0.6
Openness to Experience	-0.04	0.008	5.8	0.00	0.009	3.6
Trainer competence				0.07	0.012	5.0
Promotion focus				-0.46***	0.050	21.4
Prevention focus				0.40***	0.051	21.9
Total $R(R^2)$	0.363 (0.132)			0.483 (0.233)		
$\Delta R^2_{ m PRO-F+PRE-F}$	(=::=)			0.099***		

Notes Dependent variable: emotional support potential; n = 205; RW, raw relative weights; %RW, percentages of relative weights (calculated by dividing individual relative weights by their sum and multiplying by 100); R, multiple correlations;  $\Delta R^2$ , incremental change in R<sup>2</sup>; relative weights (Johnson, 2000) add up to R<sup>2</sup> and relative weights in percentage form add up to 100 per cent of the explained variance; standardized regression coefficients are reported; \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

> statistically significant, it was positively related to emotional support potential ( $\beta = 0.07$ , p > 0.05). Thus, two of the three hypotheses were supported.

> As previously mentioned, the purpose of relative weight analysis is to assess the contribution of each predictor to the regression model by itself and in combination with the other predictors in the model. Results from the relative weight analysis demonstrated that promotion and prevention focus predicted more than 40 percent of the variance of emotional support potential explained by the model; in contrast, trainer competence explained only 4.9 percent. Thus, promotion and prevention focus were more important than trainer competence for predicting emotional support potential. Results from this analysis also indicated that agreeableness played an important role in the prediction of emotional support potential (RW percentage = 34.0 percent). In addition, we assessed the extent to which regulatory focus explain incremental variance relative to all other predictors in the model; we found that the incremental variance explained by regulatory focus was statistically significant ( $\Delta R^2 = 0.099$ , p < 0.001). In sum, as indicated by the relative weights and the hierarchical regression analyses, our results demonstrated that regulatory focus is a better predictor of emotional support potential than trainer competence.

# Discussion

Aristotle (328 BCE) is credited with saying "Man is a social animal". Therefore, it is not surprising that individuals share a need to feel socially connected in their everyday life (Bowlby, 1973; Cacioppo et al., 2003). Despite the importance of social connection and the benefits of increased social support, it seems difficult to fulfill those needs in a social landscape where social actors eschew interpersonal relations (Keyes, 1973; Lasch, 1978; Packard, 1972; Slater, 1976; Weiss, 1973), which can be even more problematic in a group training setting (Leonardi, 2007, 2009). To examine this premise, our study investigated both individual (promotion and prevention orientation) and contextual predictors (trainer competence) of emotional support potential in trainees.

As predicted, promotion orientation was negatively related to emotional support potential, and prevention orientation and trainer competence were positively related to emotional support potential. However, it is important to note that trainer competence displayed only a weak effect size and was not statistically significant. The model explained almost one quarter of the proportion of variance of emotional support potential ( $R^2 = 0.233$ ), which suggests other important predictors still need to be identified. Additionally, promotion and

"When trainers are capable, organized, and do their work as expected, trainees can utilize fewer resources in fulfilling tasks."

> prevention orientation emerged as robust predictors of emotional support potential, as they comprised almost 43 percent of the variance explained in the overall model. Likewise, agreeableness was an important predictor.

> A surprising finding from this study is that the individual predictors were stronger than the contextual predictor. Although the insignificant result for trainer competence could have been due to the small sample size, it is worth considering the idea that trainer competence (focused narrowly on a specific course) plays a smaller role than we initially expected in influencing the potential for trainees to provide emotional support. This may indicate that our contextual predictor could have been broader (e.g. hindrance, role overload), as we detail below.

> Even though our expectations were aligned with our results regarding the positive relationship for prevention focus and the negative relationship for promotion focus, this paper provides a new light for prevention regulatory focus. In a number of prior studies, promotion focus is associated with a number of positive outcomes, including openness to change (Liberman et al., 1999) and behavior aimed at achieving success (Santos and García, 2011). At the same time, prevention regulatory focus seems to be associated with less desirable outcomes. Our results, positioning prevention focus in a more favorable light, are nevertheless consistent with theory suggesting that prevention regulatory could be associated with maintenance (rather than change-oriented) citizenship behaviors, and thus be indicative of care and support toward others (Dewett and DeNisi, 2007). Our findings should encourage future work to uncover whether the association between prevention orientation and emotional support potential is due to a trainee's worry (Brockner and Higgins, 2001), anxiety (Noftle and Shaver, 2006) and interpersonal dependency (Pincus and Gurtman, 1995), or to more positive factors (e.g. prosocial behavior).

## Limitations

This study has some limitations, including the data being collected from one source (Podsakoff et al., 2012), and without establishing cause-and-effect connections. Future research can use quasi-experimental or experimental designs. For instance, using a within-subject design one may assess the extent to which course difficulty or course workload affect emotional support potential over time, and test whether this relationship is moderated by regulatory focus.

Second, we focused on emotional support potential as an outcome. This could be expanded to examine other forms of support including task-, information-, and esteem-related forms of support. Further, a variety of trainee stressors (e.g. course difficulty and workload, work-family conflict) can be included as predictors for a better-specified model. Finally, an assumption underlying our model is that if trainees have the potential for emotional support, they will be more likely to provide it. However, other factors such as emotional support skills or motivation may be necessary (Burleson, 2003), and can be examined in the future. We outline other directions for future research below.

#### Future research

Even though neuroticism was not positively correlated with emotional support potential, a prevention focus - associated with anxiety (Brockner and Higgins, 2001) - was a strong positive predictor. In HEXACO models of personality, dependency (a facet of emotionality) is

defined as the "need for emotional support from others" (Lee and Ashton, 2004, p. 334). It is thus worth examining the extent to which specific facets of neuroticism, or forms of dependency (love, exploitable, or submissive; Pincus and Gurtman, 1995), explain the relationship with emotional support potential better than prevention focus.

Despite suggestions of its importance as a contextual factor in training, trainer competence was not a significant predictor of emotional support potential. However, it seems important to consider whether other contextual factors lead to emotional support potential. For example, a broader contextual factor (i.e. outside the training setting) could arise with the immediate or more distal social context. For example, when there is more uncertainty on the utility of a new technology, trainees may be more interested in getting feedback and emotional support from others (Leonardi, 2007, 2009).

In addition to examining predictors, future research can also focus on outcomes. Emotional support potential may decrease negative consequences. As Baker (1999) demonstrated, increased social support can decrease alienation, which ultimately can lead to decreased risk for training failure. In addition to decreased alienation, it may be worthwhile to understand whether or not emotional support potential can lead to increased performance. Although colleagues may seek emotional support when being trained with a new technology, if the people they seek support do not understand the technology, it may lead to a training failure (e.g. Leonardi, 2009). As a result, this study and future research on the topic of emotional support potential can serve as a launching point to better understand the importance of social relationships in a training context.

# References

Baker, J.A. (1999), "Teacher-student interaction in urban at-risk classrooms: differential behavior, relationship quality, and student satisfaction with school", The Elementary School Journal, Vol. 100 No. 1, pp. 57-70.

Baumeister, R.F. and Leary, M.R. (1995), "The need to belong: desire for interpersonal attachments as a fundamental human motivation", Psychological Bulletin Volume, Vol. 117, pp. 497-529.

Berkman, L.F. (1995), "The role of social relations in health promotion", Psychosomatic Medicine, Vol. 57, pp. 245-254.

Bowlby, J. (1973), "Affectionate bonds: their nature and origin", in Weiss, R.S. (Ed.), Loneliness: The Experience of Emotional and Social Isolation, MIT Press, Cambridge, MA, pp. 38-52.

Brockner, J. and Higgins, T.E. (2001), "Regulatory focus theory: Implications for the study of emotions at work", Organizational Behavior and Human Decision Processes, Vol. 86, pp. 35-66.

Brown, S.L., Nesse, R.M., Vinokur, A.D. and Smith, D.M. (2003), "Providing social support may be more beneficial than receiving it: results from a prospective study of mortality", Psychological Science, Vol. 14, pp. 320-327.

Burleson, B.R. (2003), "Emotional support skills", in Burleson, J. (Ed.), Handbook of Communication and Social Interaction Skills, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 551-594.

Cacioppo, J.T., Hawkley, L.C. and Bernston, G.G. (2003), "The anatomy of loneliness", Current Directions in Psychological Science, Vol. 12, pp. 71-74.

Caplan, G. (1974), Support Systems and Community Mental Health: Lectures on Concept Development, Behavioral Publications, New York, NY.

Chiaburu, D.S. and Harrison, D.A. (2008), "Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance", Journal of Applied Psychology, Vol. 93, pp. 1082-1103.

Cobb, S. (1976), "Social support as a moderator of life stress", Psychosomatic Medicine, Vol. 38, pp. 300-314.

Cohen, S. and Wills, T.A. (1985), "Stress, social support, and the buffering hypothesis", Psychological Bulletin, Vol. 98 No. 2, pp. 310-357.

Cutrona, C.E. (1986), "Behavioral manifestations of social support: a microanalytic investigation", Journal of Personality and Social Psychology, Vol. 51, pp. 201-208.

Ducharme, L. and Martin, J.K. (2000), "Unrewarding work, coworker support, and job satisfaction", Work & Occupations, Vol. 27, pp. 223-243.

Dewett, T. and DeNisi, A.S. (2007), "What motivates organizational citizenship behaviours? Exploring the role of regulatory focus theory", European Journal of Work and Organizational Psychology, Vol. 16, pp. 241-260.

Ekeh, P. (1974), Social Exchange Theory: The Two Traditions, Harvard University Press, Cambridge, MA.

Foa, U.G. (1971), "Interpersonal and economic resources", Science, Vol. 171, pp. 345-351.

Goldberg, L.R. (1992), "The development of markers for the Big-Five factor structure", Psychological Assessment, Vol. 4 No. 1, pp. 26-42.

Gorman, C.A., Meriac, J.P., Overstreet, B.L., Apodaca, S., McIntyre, A.L., Park, P. and Godbey, J.N. (2011), "A meta-analysis of the regulatory focus nomological network: work-related antecedents and consequences", Journal of Vocational Behavior, Vol. 80 No. 1, pp. 160-172.

Gottlieb, B.H. (1978), "The development and application of a classification scheme of informal helping behaviors", Canadian Journal of Behavioral Science, Vol. 10, pp. 105-115.

Gouldner, A.W. (1960), "The norm of reciprocity", American Sociological Review, Vol. 25, pp. 161-178.

Grant, A. and Dutton, J. (2012), "Beneficiary or benefactor: are people more prosocial when they reflect on receiving or giving?", Psychological Science, Vol. 23 No. 9, pp. 1033-1039.

Halbesleben, J.R., Harvey, J. and Bolino, M.C. (2009), "Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family", Journal of Applied Psychology, Vol. 94 No. 6, pp. 1452-1465.

Halbesleben, J.R.B. (2006), "Sources of social support and burnout: a meta-analytic test of the conservation of resources model", Journal of Applied Psychology, Vol. 91, pp. 1134-1145.

Higgins, E.T. (1997), "Beyond pleasure and pain", American Psychologist, Vol. 52 No. 12, pp. 1280-1300.

Higgins, E.T. (2005), "Value from regulatory fit", Current Directions in Psychological Science, Vol. 14 No. 4, pp. 209-213.

Hirsch, B.J. (1980), "Natural support systems and coping with major life changes", American Journal of Community Psychology, Vol. 8, pp. 159-172.

Hobfoll, S.E. (1988), *The Ecology of Stress*, Hemisphere, New York, NY.

Hodson, R. (2001), Dignity at Work, Cambridge University Press, Cambridge.

House, J.S. (1981), Work, Stress, and Social Support, Addison-Wesley, Reading, MA.

Jayaratne, S. and Chess, W.A. (1984), "The effects of emotional support on perceived job stress and strain", Journal of Applied Behavioral Science, Vol. 20 No. 2, pp. 141-153.

Johnson, J.W. (2000), "A heuristic method for estimating the relative weight of predictor variables in multiple regression", Multivariate Behavioral Research, Vol. 35, pp. 1-19.

Justis, R.T., Kedia, B.L. and Stephens, D.B. (1978), "The effect of position power and perceived task competence on trainer effectiveness: a partial utilization of Fiedler's contingency model of leadership", Personnel Psychology, Vol. 31 No. 1, pp. 83-89.

Keyes, R. (1973), We, the Lonely People, Harper & Row, New York, NY.

Kindred, J. and Mohammed, S.N. (2005), "He will crush you like an academic ninja! Exploring teacher ratings on ratemyprofessors.com", Journal of Computer-Mediated Communication, Vol. 10 No. 3, article 9

Lasch, C. (1978), The Culture of Narcissism: American Life in an Age of Diminishing Expectations, W.W. Norton & Co., New York, NY.

Lee, K. and Ashton, M.C. (2004), "Psychometric properties of the HEXACO Personality Inventory", Multivariate Behavioral Research, Vol. 39 No. 2, pp. 329-358.

Leonardi, P.M. (2007), "Activating the informational capabilities of information technology for organizational change", Organization Science, Vol. 18, pp. 813-831.

Leonardi, P.M. (2009), "Crossing the implementation line: the mutual constitution of technology and organizing across development and use activities", Communication Theory, Vol. 19, pp. 277-309.

Liberman, N., Idson, L.C., Camacho, C.J. and Higgins, E.T. (1999), "Promotion and prevention choices between stability and change", Journal of Personality and Social Psychology, Vol. 77 No. 6, pp. 1135-1145.

Noftle, E.E. and Shaver, P.R. (2006), "Attachment dimensions and the Big Five personality traits: associations and comparative ability to predict relationship quality", Journal of Research in Personality, Vol. 40, pp. 179-208.

O'Connor, B.N. and Cordova, R. (2010), "Learning: the experiences of adults who work full-time while attending graduate school part-time", Journal of Education for Business, Vol. 85, pp. 359-368.

Packard, V. (1972), A Nation of Strangers, McKay Publishers, New York, NY.

Pincus, A.L. and Gurtman, M.B. (1995), "The three faces of interpersonal dependency: structural analyses of self-report dependency measures", Journal of Personality and Social Psychology, Vol. 69 No. 4, pp. 744-758.

Podsakoff, P.M., MacKenzie, S.B. and Podsakoff, N.P. (2012), "Sources of method bias in social science research and recommendations on how to control it", Annual Review of Psychology, Vol. 63, pp. 539-569.

Reis, H.T., Collins, W. and Berscheid, E. (2000), "The relationship context of human behavior and development", Psychological Bulletin, Vol. 126, pp. 844-872.

Santos, V. and García, T. (2011), "Business motivation and informational needs in internationalization", Journal of International Entrepreneurship, Vol. 9 No. 3, pp. 195-212.

Sarason, I.G., Sarason, B.R. and Pierce, G.R. (1990), "Social support: the search for theory", Journal of Social & Clinical Psychology, Vol. 9, pp. 133-147.

Schwartz, C.E. and Sendor, M. (1999), "Helping others helps oneself: response shift effects in peer support", Social Science & Medicine, Vol. 48, pp. 1563-1575.

Schwarzer, R. and Leppin, A. (1989), "Social support and health: a meta-analysis", Psychology and Health, Vol. 3, pp. 1-15.

Sitzmann, T. (2008), "A meta-analysis of the meaning of trainee reactions data", presentation to the American Society for Training and Development, Alexandria, VA.

Shirom, A. (1989), "Burnout in work organizations", in Cooper, C.L. and Robertson, T. (Eds), International Review of Industrial and Organizational Psychology, Wiley, New York, NY, pp. 26-48.

Simmons, B.L., Gooty, J., Nelson, D.L. and Little, L.M. (2009), "Secure attachment: implications for hope, trust, burnout, and performance", Journal of Organizational Behavior, Vol. 30 No. 2, pp. 233-247.

Slater, P. (1976), Pursuit of Loneliness: American Culture at the Breaking Point, Beacon Press, Boston,

Thibaut, J.W. and Kelley, H.H. (1959), The Social Psychology of Groups, Wiley, New York, NY.

Tonidandel, S. and LeBreton, J.M. (2011), "Relative importance analysis: a useful supplement to regression analysis", Journal of Business Psychology, Vol. 26, pp. 1-9.

Trobst, K.K. (2000), "An interpersonal conceptualization and quantification of social support transactions", Personality And Social Psychology Bulletin, Vol. 26 No. 8, pp. 971-986.

Uchino, B.N., Cacioppo, J.T. and Kiecolt-Glaser, J.K. (1996), "The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health", Psychological Bulletin, Vol. 119 No. 3, pp. 488-531.

Vaux, A. (1988), Social Support: Theory, Research, and Intervention, Praeger, Santa Barbara, CA.

Viswesvaran, C., Sanchez, J.I. and Fischer, J. (1999), "The role of social support in the process of work stress: a meta-analysis", Journal of Vocational Behavior, Vol. 54, pp. 314-334.

Wallace, C. and Chen, G. (2006), "A multi-level integration of personality, climate, self-regulation, and performance", Personnel Psychology, Vol. 59 No. 3, pp. 529-557.

Weiss, R.S. (1973), Loneliness: The Experience of Emotional and Social Isolation, MIT Press, Cambridge, MA.

# Further reading

Brockner, J. and Higgins, E.T. (2001), "Regulatory focus theory: implications for the study of emotions at work", Organizational Behavior and Human Decision Processes, Vol. 86 No. 1, pp. 35-66.

# Corresponding author

Dan S. Chiaburu can be contacted at: dchiaburu@mays.tamu.edu