ONLINE APPENDIX

Validation of Expanded Attachment Scales

Because of the alterations made to the original Maertz and Campion (2004) scales, we conducted a construct validation study to confirm that the factors loaded correctly on the items and that the expanded scales continued to measure the intended attachment constructs. A sample of 315 adults currently employed in the United States was obtained through Qualtrics panel service. The sample consisted of individuals working in a variety of industries (e.g., educational services, healthcare and social assistance, and retail trade). The average age was 47.28 years old, and 50% were female. The race/ethnicity of the participants was 83% white, 6% black, 5% Asian, and 4% Hispanic; 47% had at least a bachelor's degree.

Participants completed the expanded attachment scales as well as a series of referent scales selected to assess convergent validity based on examples of other predictor variables that Maertz and Boyar (2012) identified as corresponding to the forces. To ensure quality data, Qualtrics applied a series of data checks including attention filters, response time checks, and response variability checks to ensure that panel participants attended to study instructions and maintained that attention throughout the full length of the study.

Confirmatory factor analysis (CFA) was used to judge the likelihood that scale items loaded appropriately on the associated eight latent attachment variables (i.e., the eight proximal forces of attachment). As recommended by Little (2013), items were parceled using a balancing technique so each latent variable had three indicators to improve parsimony. Items were parceled based on the strength of loadings (i.e., the highest matched to the lowest) to create parcels with

approximately equal loadings (Little, Cunningham, & Shahar, 2002). Table 1 lists all of the items and the associated parcels.

MPLUS was used to conduct the confirmatory factor analyses (CFA) and estimate the fit of the hypothesized model compared to various alternative models. We began by testing the fit of a single factor structure model. Goodness-of-fit indices, such as SRMR, RMSEA, and CFI, were used to judge the fit of the model based on cutoff criteria recommended by MacCallum, Browne, and Sugawara (1996) and O'Boyle and Williams (2011). MacCallum et al. suggest that RMSEA values of .01, .05, and .08 indicate excellent, good, and mediocre fit, respectively. O'Boyle and Williams suggest that a CFI > .90 and an SRMR < .10 is acceptable to index good fit. The SRMR was the only index that met the threshold for good fit (.09). The other goodness-of-fit statistics indicated that the single-factor model did not fit the data well: χ^2 (252) = 1221.23, p < .001; CFI =.71, RMSEA = .11. Next, we tested the hypothesized 8-factor structure. This model displayed notably better fit. Each goodness-of-fit statistic met its threshold for good fit: χ^2 (224) = 548.06, p < .001; SRMR =.06, CFI =.90, RMSEA = .07, and each indicator loaded significantly (p < .01) on its intended factor. Table 2 presents the factor loadings from this analysis. We also tested a 4-factor structure model drawing on theoretical arguments outlined in Maertz and Boyar (2012) for how the various attachment forces could be meaningfully grouped. One factor represented high-affect loaded organizational forces (i.e., affective and calculative). A second factor consisted of lower affect-loaded organizational level forces (i.e., alternative and behavioral). The third factor was made up of normatively-loaded non-organizational forces (i.e., normative and moral). The last factor consisted of relational forces (i.e., constituent and contractual). This four-factor model did not fit the data well: χ^2 (246) = 1415.14, p < .001; SRMR =.18, CFI =.66, RMSEA = .12. Finally, to further substantiate the hypothesized 8-factor

model, we estimated the fit of this model using the data from Sample 1. Again, goodness-of-fit statistics indicated that the hypothesized model fit the data well: χ^2 (224) = 516.13, $p < .01$; SRMR =.06, CFI =.93, RMSEA = .06.

Convergent validity was also established by reviewing the correlations between the expanded attachment scales and the referent scales of similar constructs. Convergent coefficients for five of the scales ranged from .69 to .86, exceeding the common threshold for acceptable convergent validity (Kline, 1999). The constituent attachment scale correlated significantly (r = .69, $p < .01$) with a 6-item coworker support scale (Shanock & Eisenberger, 2006). The affective attachment scale correlated significantly (r = .78, $p < .01$) with a 6-item affective commitment scale (Meyer, Allen, & Smith, 1993). The alternative attachment scale correlated significantly (r = -.73, $p < .01$) with a 3-item ease of movement scale (Iverson & Deery, 2000). The calculative attachment scale correlated significantly (r = .71, $p < .01$) with a 5-item career development support scale (London, 1993). The contractual attachment scale correlated significantly (r = .86, $p < .01$) with a 6-item normative commitment scale (Meyer et al., 1993).

Two of the convergent coefficients failed to reach acceptable levels (behavioral attachment, r = .17; normative attachment, r = .30). We had difficulty locating clear analogs for these two scales; the referents used only displayed some conceptual overlap. Even though these two scales were listed as example predictors for their respective force (Maertz & Boyar, 2012), the referent for the behavioral attachment scale, a 6-item continuance commitment scale (Meyer et al., 1993), was significantly broader encompassing job availability and life pressures to stay in addition to explicit costs (Maertz & Griffeth, 2004) and the referent for the normative attachment scale, four items from the Job Embeddedness Scale Short Form that measure the extent of personal links to people and family in the community (Felps et al., 2009), assessed the same

motivating aspects but did so from a different perspective. Although both sets of items ask about the impact of family and friends, the normative items consider external pressure on a decision stay whereas the personal links items tap into regretful feelings of loss if one leaves.

To further explore the issue of the expanded scales as appropriate enlargements of the original scales, we correlated scores on the expanded scales with scores on the original scales. Those correlations were as follows: Alternative attachment (r = .94), Behavioral attachment (r = .83), Calculative attachment (r = .91), Contractual attachment (r = .86), Constituent attachment (r = 95), Normative attachment (r = .64). All values were statistically significant ($p < .01$). Note that values were not calculated for the Affective attachment scale since the expanded version uses the same items as the original version or the moral attachment scale since there was no original scale for comparison. These correlations likewise support the expanded versions as appropriate representations of the forces. Of particular relevance, the constituent attachment scale had the highest correlation suggesting that the expanded version of this scale directly aligns with how this scale was originally conceptualized.

Taken together, these results indicate that the expanded versions of the attachment scales are suitable measures of the eight forces of attachment.

References

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Table1

Single Items and Parcel Labels for CFA

Force	Item and Parcel Label	Item
Affective	Aff1	When I think about this company I feel good.
	Aff2	I like my job here.
	Aff3 parcel	Working at this company makes me feel proud.
		I feel that this company is a good place to work.
Alternative	Alt1	There are few comparable jobs available elsewhere.
	Alt2	I could easily support myself through other opportunities.
	Alt3 parcel	There aren't attractive job opportunities for me elsewhere.
		It would be difficult to find an equal or better job.
Behavioral	Beh1	This company provides me with valuable experience.
	Beh2 parcel	It would be costly to my career if I left this company.
		This company provides me access to benefits that I need.
	Beh3 parcel	Working here provides me with good compensation.
		Working here provides me access to perks and rewards that I value.
Constituent	Cons1	I want to continue working with my coworkers here.
	Cons2 parcel	I would lose valuable working relationships with the people here if I quit.
		I enjoy working here because of the people I work with.
	Cons3 parcel	I would lose valuable friendships if I quit.
		I want to continue working here because I like my coworkers.
Calculative	Cal1	This company provides me with good opportunities for promotion.
	Cal2 Parcel	I would be satisfied with a long term career at this company.
		This company provides me with development opportunities for career advancement.
	Cal3 parcel	Working here is important for my future career goals.
		This job provides me with skills that I can use to build my career.

Normative	Nor1	I would like to stay in this job because it's good for my family/important people in my life.
	Nor2	This job is a primary source of support for others in my life.
	Nor3 parcel	I feel pressure to remain in this job because it is located close to my family/important people in my life.
		Important people in my life believe it's best that I continue working here.
Contractual	Cont1 parcel	To be fair to this company, I need to stay in my job awhile longer.
		I owe it to my supervisors to stay in my job because they support me.
	Cont2 parcel	I feel obligated to stay in my job here.
		I owe it to my coworkers to stay in my job because they support me.
	Cont3 parcel	I owe it to this company to stay in my job because this company supports me.
		I feel obligated to my supervisors to stay in my job because they depend on me.
		I feel obligated to my workers to stay in my job because they depend on me.
Moral	Mor1 parcel	It is important to stay with one employer for a long time.
		I believe job hopping is unethical.
	Mor2 parcel	Even when work is frustrating, one should stay with the job and persevere.
		Changing jobs regularly helps keep me from getting bored.
	Mor3 parcel	When an individual leaves a job he/she is breaking a commitment.
		It's important to change jobs to keep ones' skills up-to-date.

Table 2

CFA Factor Loadings for Hypothesized Model

	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Factor7	Factor8
Cons1	.73							
Cons2	.91							
Cons3	.90							
Aff1		.80						
Aff2		.80						
Aff3		.91						
Alt1			.52					
Alt2			.49					
Alt3			.79					
Beh1				.71				
Beh2				.56				
Beh3				.72				
Cal1					.76			
Cal2					.91			
Cal3					.82			
Nor1						.83		
Nor2						.46		
Nor3						.69		
Cont1							.79	
Cont2							.76	
Cont3							.89	
Mor1								.64
Mor2								.51
Mor3								.54