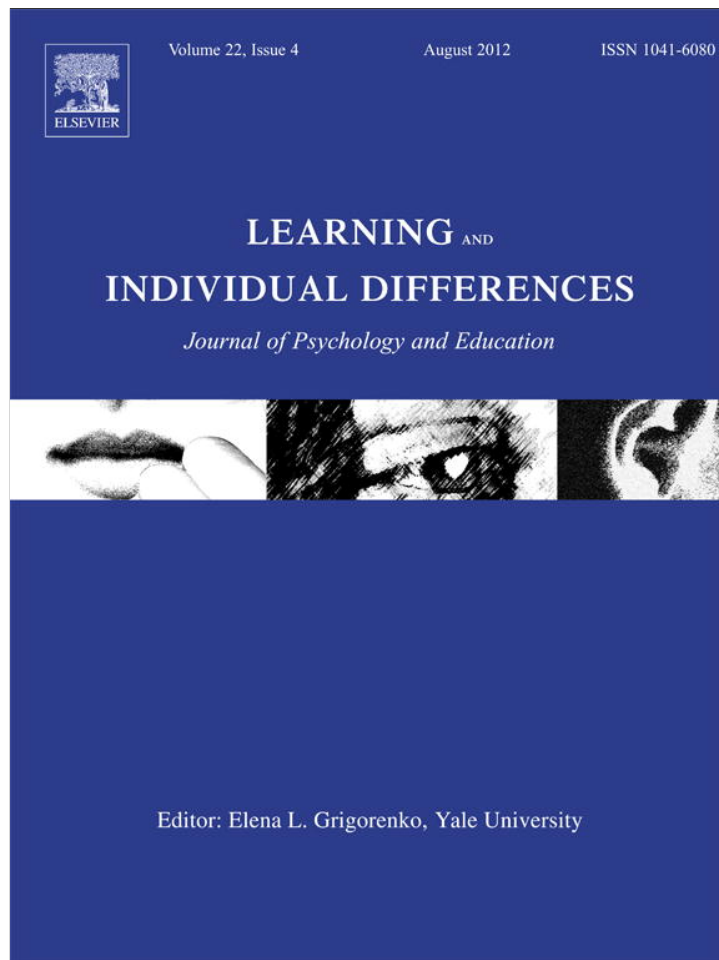


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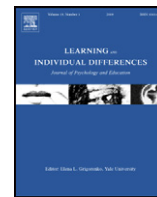
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The utility of general and school-specific personality traits and an examination of their relationship over time

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ABSTRACT

A university student sample was used to compare school-specific (i.e., personality at school) and general personality (i.e., personality across all life domains) over eight weeks. School-specific and general personality incrementally predicted change in school-specific criteria (i.e., school satisfaction and school citizenship behaviors). Less consistent results were found for general criteria. Specifically, school-specific and general personality incrementally predicted change in general mental health, but failed to incrementally predict change in life satisfaction. In addition, we examined the school-specific–general personality relationship over time. Contrary to expectations, a unidirectional relationship was found in which school-specific personality predicted change in general personality, but general personality did not predict change in school-specific personality. Theoretical and practical implications are discussed.

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Although personality is a widely researched topic among educational researchers (Kappe & van der Flier, 2010; Poropat, 2009), the low levels of predictive validity have led some researchers to question their utility (Siu & Reiter, 2009). Cognitive ability, for example, is consistently a better predictor of academic performance than student personality (Ferrando et al., 2011; Poropat, 2009). In an effort to improve the predictive validity of personality measures, several recent studies have compared the general and context-specific personality in organizational settings (Bing, Whanger, Davison, & VanHook, 2004; Hunthausen, Truxillo, Bauer, & Hammer, 2003; Lievens, De Corte & Schollaert, 2008; Schmit, Ryan, Stierwalt, & Powell, 1995). As a result, context-specific personality measures are believed to be more reliable and correlate more strongly with criteria within the same context than are general measures and provide incremental effects after controlling for general personality (Bowling, Eschleman, Wang, Kirkendal, & Alarcon, 2010; Wang, Bowling, & Eschleman, 2010). However, past findings are largely based on cross-sectional data (Bowling, Eschleman, et al., 2010; Bowling, Wang, Ying Tang, & Kennedy, 2010; Wang et al., 2010) and no study has compared context-specific to general personality when predicting change in educational criteria.

A better understanding of the relationship between general–context-specific personality has important practical implications. For example, counselor may not want to commit resources to the improvement a student's school-based self-esteem because of the strong correlation with general esteem. In other words, an intervention may be seen as futile if

context-specific personality is largely determined by factors outside of the school's control (i.e., general personality). However, if the general–context-specific personality relationship is bidirectional, interventions targeting context-specific personality are likely to be more successful. That is, targeted changes in context-specific personality may lead to changes in general personality as the individual processes and assimilates their new behavioral repertoire. In the current study, we compare general and context-specific personality over time. Specifically, we examine the utility of general and context-specific personality in predicting the change in criteria and use cross-lag regression analyses to gain a better understanding of the directional relationship between general and context-specific personality.

1. The utility of general and context-specific personality

Context-specific personality is expected to have greater predictive validity for several reasons. First, because measures of context-specific personality identify the specific frame-of-reference to be used when interpreting items, context-specific measures are expected to result in the reduction of both between-subject variability (Bing et al., 2004) and within-subject inconsistency (Lievens, De Corte, & Schollaert, 2008) in item interpretation. Between-subject variability occurs when different respondents use a different frame-of-reference to interpret the same personality item. One person, for example, may consider his/her behavior as a student when responding to a conscientiousness item, whereas another person may consider his/her behavior as a parent when responding to the same item. Within-person inconsistency, on the other hand, occurs when an individual interprets a set of personality items using different frames-of-reference. A person may, for example, consider his/her behavior

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as a spouse when responding to one emotional stability item and consider his/her behavior as a student when responding to another emotional stability item. Both forms of inconsistency are most likely to occur when general rather than context-specific personality measures are used because general measures do not specify the particular frame-of-reference that respondents are expected to use when responding to items. The presence of between-person variability and within-person inconsistency is expected to attenuate predictive validity by lowering the reliability of general personality measures (Bing et al., 2004; Lievens et al., 2008).

Another explanation for why context-specific personality measures yield stronger relationships with context-specific criteria than do general personality measures is based on the notion that the relationship between a given personality trait and an outcome variable is greatest when the two share conceptual similarities (Heggestad & Gordon, 2008; Lievens et al., 2008). This notion is often referred to as the Principle of Compatibility (Fishbein & Ajzen, 1974). Because context-specific personality items (e.g., emotional stability at school) are more conceptually similar to context-related outcomes (e.g., school satisfaction) than are general personality measures, relatively strong relationships should be observed for context-specific measures. Conversely, because general traits (emotional stability in general) are more conceptually similar to general outcomes (e.g., general health), relatively strong relationships should be observed for general criteria. Indeed, context-specific personality measures only yield enhanced validity when they employ a frame-of-reference that is theoretically relevant to the criteria (Lievens et al., 2008), whereas general personality traits often are more strongly related to general criteria (e.g., Wang et al., 2010). Surprisingly, the frame-of-reference research is largely cross-sectional, as noted by several meta-analyses comparing context-specific and general personality (Bowling, Eschleman, et al., 2010; Bowling, Wang, et al., 2010; Wang et al., 2010). In fact, it is yet to be explored whether context-specific personality predicts change in context-specific criteria incrementally over general personality traits. In addition, it is yet to be explored whether general personality traits predict change in general-criteria incrementally over context-specific personality.

Hypothesis 1. Context-specific personality will predict change in context-specific criteria (i.e., school satisfaction, citizenship behaviors) after controlling for general personality measures.

Hypothesis 2. General personality will predict change in general criteria (i.e., life satisfaction, general health) after controlling for context-specific personality.

2. The relationship between context-specific and general personality over time

Although we expect general and context-specific personality to differentially predict criteria, the process by which this occurs is still unclear. As previously noted, the differential prediction of general and context-specific personality may be because the conceptual similarity between the predictor and criteria (Heggestad & Gordon, 2008; Lievens et al., 2008). This notion implies a hierarchical relationship among personality traits. That is, general personality traits are higher-order constructs of which there are many situation-specific sub-dimensions (Bowling, Eschleman, et al., 2010; Bowling, Wang, et al., 2010; Korman, 1970, 1976). In other words, general personality has a causal effect on one's level of context-specific personality, which in turn will affect criteria taken from a similar context. Bowling, Eschleman, et al., 2010; Bowling, Wang, et al., 2010 found evidence for this mediation effect using meta-analytic data on general and organization based self esteem. However, the majority of primary samples were cross sectional and a bidirectional relationship between general and context-specific personality was not tested. A unidirectional

relationship is likely only present when the context is a relatively new environment. For example, new students are unlikely to have developed a context-specific personality given their limited experiences within the environment. Thus, the new students will rely heavily upon their general personality to shape their behavior and attitudes while in the workplace. Once students have attended school for a sufficient amount of time, however, their context-specific personality is likely to be influenced less by general personality and more by personal experiences within their environment. Because certain domains (e.g., school or work) represent an important aspect and play a dominant role in the lives of most students (Rice, Near, & Hunt, 1980; Robinson, 1977), these changes in one's level of context-specific personality could actually have a causal effect on general personality. Thus, the relationship between general and context-specific personality may be reciprocal (Bowling, Eschleman, et al., 2010; Pierce & Gardner, 2004; Wang et al., 2010).

Hypothesis 3. General personality will predict change in context-specific personality. More specifically, general personality at time 1 will be associated with context-specific personality at time 2 after controlling for context-specific personality at time 1.

Hypothesis 4. Context-specific personality will predict change in general personality. More specifically, context-specific personality at time 1 will be associated with general personality at time 2 after controlling for general personality at time 1.

3. Method

3.1. Sample and procedure

A student sample was used to test the aforementioned hypotheses. Because school is likely the most important context of a student's life, context-specific personality and context-specific criteria were assessed within the school context. Possible order effects were controlled for by randomly assigning participants to a condition in which they were presented either general or context-specific personality measures first. A total of 150 full-time undergraduate students completed the study. The surveys were administered to students within several undergraduate psychology courses during week 2 (Time 1) and week 10 (Time 2) of an 11-week quarter. Participants were an average of 23 years old, 78% female,¹ 86% Caucasian, and had been at the same university for an average of 2.5 years.

3.2. Measures

3.2.1. Personality

General personality included measures of conscientiousness, extraversion, agreeableness, and emotional stability using the Big Five Factor Markers of the International Personality Item Pool (Goldberg et al., 2006). In addition, general core self-evaluation (CSE) was assessed using the average of 12 items adapted from Judge, Erez, Bono, and Thoresen (2003). The instructions accompanying these items indicated to participants that they should think about how they generally are. Example items included: "Follow a schedule", "Start conversations", "Take time out for others", and "Am easily disturbed".

School-specific conscientiousness, extraversion, agreeableness, emotional stability and CSE were assessed using a modified version of the general personality scales. Following the approach of previous frame-of-reference studies (Bowling, Wang, et al., 2010; Lievens et al., 2008; Schmit et al., 1995), we added the tag "at school" to the

¹ The high percentage of female participants was because of the participants were from psychology courses. Gender did not likely influence change in personality because people from different birth cohorts, ethnicity, sex, and educational levels have similar stability trajectories (Terracciano et al., 2010).

end of each item and instructed participants to think about their school when responding to the item. For example, “Follow a schedule” became “Follow a schedule at school”.

3.2.2. Criteria

General mental health was assessed with twelve items (Goldberg & Hillier, 1979). Life satisfaction was assessed with five items (Diener, Emmons, Larsen, & Griffin, 1985). School satisfaction was assessed with an adapted three-item version of the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979). University citizenship behavior was assessed using ten items from Schmitt et al. (2007). The criteria were selected because the content is similar despite the differences in specificity (e.g., life satisfaction and school satisfaction). In addition, criteria were also required to represent the entire domain (e.g., university citizenship behavior and general health), rather than a specific subset of a domain (e.g., the classroom).

4. Results

Correlations, descriptive statistics, and alpha reliabilities for variables from time 1 and time 2 are presented in Tables 1 and 2, respectively. As reported in Table 3, stability coefficients for both general and context-specific measures were similar.

4.1. The utility of general and context-specific personality

Support was found for Hypothesis 1, which states that context-specific personality will predict change in context-specific criteria after controlling for general personality. Context-specific personality explained an additional 5% ($\Delta R^2 = .05, p < .01$) of the variance in the change in school satisfaction and an additional 14% ($\Delta R^2 = .14, p < .01$) of the variance in the change in citizenship behaviors (see Table 4) after controlling for the effects of general personality. It should be noted that general personality also explained incremental variance in the change in school satisfaction ($\Delta R^2 = .03, p < .01$) and citizenship behaviors ($\Delta R^2 = .06, p < .01$) after controlling for context-specific personality.

Partial support was found for Hypothesis 2, which states that general personality will predict change in general criteria after controlling for context-specific personality. More specifically, general

personality did not explain incremental variance in the change in life satisfaction, but did explain incremental variance in the change in general health ($\Delta R^2 = .06, p < .01$; see Table 5). Similar results were found for school-specific personality. Context-specific personality did not explain incremental variance in the change in life satisfaction, but did explain incremental variance in the change in general health ($\Delta R^2 = .07, p < .01$).

4.2. The relationship between context-specific and general personality over time

Contrary to Hypothesis 3, we found that general personality did not predict change in context-specific personality. More specifically (see Table 6), general personality was not a significant predictor of change in 4 of 5 context-specific personality traits (e.g., conscientiousness, extraversion, emotional stability, and CSE). Agreeableness was the only case in which general personality predicted change in context-specific personality ($\Delta R^2 = .02, p < .01$).

Consistent with Hypothesis 4, context-specific personality predicted change in general personality. More specifically (see Table 6), context-specific personality predicted change in conscientiousness ($\Delta R^2 = .03, p < .01$), extraversion, ($\Delta R^2 = .04, p < .01$), emotional stability ($\Delta R^2 = .02, p < .01$), agreeableness ($\Delta R^2 = .08, p < .01$), and CSE ($\Delta R^2 = .06, p < .01$).

5. Discussion

5.1. The utility of general and context-specific personality

We conducted several regression analyses to examine the utility of context-specific and general personality in predicting change in context-specific criteria. As hypothesized, context-specific personality predicted change in both forms of context-specific criteria (i.e., school satisfaction and citizenship behaviors) after controlling for general personality. Similar results were found for general personality. Thus, both context-specific and general personality traits explain unique variance in the change of context-specific criteria. These results are consistent with cross-sectional and meta-analytic findings which find that context-specific and general personality differentially predicts context-specific criteria (Bowling, Eschleman, et al., 2010; Hunthausen et al., 2003; Wang et al., 2010).

Table 1
Descriptive statistics, reliabilities, and correlations for study variables at time 1.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
General personality																
1 Conscientiousness	5.31	0.78	(.80)													
2 Extraversion	4.49	1.21	-.05	(.92)												
3 Emotional stability	4.28	1.10	.14	.33**	(.89)											
4 Agreeableness	5.69	0.71	.19*	.36**	.21*	(.77)										
5 Core-self evaluation	5.12	1.05	.27**	.33**	.78**	.26**	(.90)									
School-specific personality																
6 Conscientiousness	5.86	0.72	.82**	-.28**	.03	.09	.27**	(.81)								
7 Extraversion	3.72	1.23	.00	.85**	.28**	.36**	.34**	.17*	(.91)							
8 Emotional stability	4.57	1.09	.37**	.23**	.77**	.22**	.74**	.37**	.21*	(.86)						
9 Agreeableness	4.88	1.01	.21**	.25**	.19*	.65**	.18*	.11	.35**	.17*	(.87)					
10 Core-self evaluations	5.44	1.00	.42**	.19*	.57**	.17*	.83**	.53**	.25**	.70**	.14	(.90)				
School-specific criteria																
11 School satisfaction	5.71	1.32	.26**	.00	-.09	.06	.03	.32**	.12	.05	.31**	.29**	(.91)			
12 Citizenship behaviors	2.59	0.74	.30**	.30**	.22**	.33**	.22**	.23**	.49**	.17*	.39**	.22**	.23**	(.76)		
General criteria																
13 General health	3.18	0.55	.29**	.23**	.68**	.07	.80**	.28**	.27**	.70**	.12	.74**	.13	.16*	(.90)	
14 Life satisfaction	4.83	1.33	.25**	.22**	.56**	.19*	.69**	.20*	.41**	.46**	.31**	.51**	.05	.44**	.51**	(.88)

Uncorrected correlations presented below the diagonal. Alpha reliabilities are presented on the diagonal in parentheses.
* $p < .05$.
** $p < .01$.

Table 2
Descriptive statistics, reliabilities, and correlations for study variables at time 2.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
General personality																
1 Conscientiousness	5.37	0.78	(.79)													
2 Extraversion	4.49	1.21	-.06	(.91)												
3 Emotional stability	4.40	1.26	.30**	.25**	(.93)											
4 Agreeableness	5.51	0.73	.35**	.23**	.17*	(.81)										
5 Core-self evaluation	5.24	0.95	.40**	.40**	.68**	.25**	(.89)									
School-Specific personality																
6 Conscientiousness	5.82	0.86	.82**	-.08	.31**	.37**	.41**	(.88)								
7 Extraversion	3.94	0.72	-.02	.88**	.27**	.27**	.37**	.04	(.90)							
8 Emotional stability	4.61	1.05	.40**	.32**	.83**	.29**	.72**	-.46**	.37**	(.89)						
9 Agreeableness	4.80	1.00	.29**	.20**	.21*	.77**	.15	.29**	.31**	.25**	(.87)					
10 Core-self evaluations	2.39	0.98	.43**	.35**	.64**	.23**	.91**	.50**	.38**	.76**	.15	(.89)				
School-specific criteria																
11 School satisfaction	5.54	1.42	.22**	.09	.05	.24**	.24**	.28**	.26**	.23**	.27**	.34**	(.93)			
12 Citizenship behaviors	2.57	0.62	.32**	.20*	.15	.39**	.21*	.23**	.35**	.25**	.45**	.21*	.35**	(.73)		
General criteria																
13 General health	3.17	0.54	.30**	.23**	.70**	.20*	.74**	.40**	.27**	.70**	.17*	.74**	.20*	.23**	(.89)	
14 Life satisfaction	4.98	1.20	.26**	.28**	.53**	.35**	.60**	.27**	.28**	.46**	.26**	.45**	.14	.25**	.56**	(.89)

Uncorrected correlations presented below the diagonal. Alpha reliabilities are presented on the diagonal in parentheses.

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

Change in general criteria was also examined, but less consistent results were found. Surprisingly, general personality did not incrementally predict change in life satisfaction after controlling for context-specific personality. Consistent with our expectations, however, general personality did incrementally predict change in general health after controlling for school-specific personality. It is important to note that we found similar results for the incremental effects of context-specific personality.

5.2. The relationship between context-specific and general personality over time

In addition to examining the utility of general and context-specific personality over time, we tested for a hypothesized bidirectional relationship between general and context-specific personality. Contrary to expectations, general personality did not predict change in context-specific personality. More specifically, only general agreeableness was a significant predictor of change in context-specific agreeableness. Consistent with expectations, all five context-specific personality traits predicted change in general personality traits. In other words, evidence was found for a largely unidirectional relationship in which context-specific personality predicted change in

general personality. It is important to note that no significant differences in stability were found between context-specific and general personality. Thus, the unidirectional relationship was not because there was less change in context-specific personality to predict.

Although a bidirectional relationship was expected, a unidirectional relationship stemming from context-specific personality is not surprising. School environments are likely to be very high in situational strength because of the formal rules and procedures, clear instructions, unambiguous feedback, and powerful incentives tied to specific behaviors. Because strong situations can neutralize the effects of individual differences (Mischell, 1977; Weiss & Adler, 1984), general personality may be less likely to influence context-specific personality in domains that are high in situational strength. In addition, school environments are likely to be one of most dominant domains in people's lives; certainly in respect to time. Thus, any changes to personality in the domain of school are likely to have some effect on a general personality. In sum, the unidirectional relationship may have been because the university experience plays such a dominant role in the participants' lives. These results may not be consistent with future research with samples of non-traditional university students (e.g., part time students or married) because the university experience is less likely to be a dominant life domain.

5.3. Implications and future research

The findings from the current study have several important implications and lead to important avenues for future research. First, the current study is the first to examine the incremental effects of context-specific personality while predicting change in criteria. These results provide additional support for the use of context-specific personality. Additionally, the inconsistent findings for general criteria raise into question the differences in context-specific and general personality traits when predicting general criteria. These findings are not limited to the current study. In a meta-analysis comparing general locus of control and work locus of control, Wang et al. (2010) suggest that general locus of control was a stronger predictor of general criteria than work locus of control. However, only two of four correlations were significantly stronger in the direction of general locus of control and one correlation was stronger in the direction of work locus control. Although Wang et al.'s findings indicate that general personality is likely to be stronger predictor of general criteria than context-specific personality, the differences are not as consistent as compared to context-specific criteria. As a result, practitioners and

Table 3
Stability coefficients of general and school-specific personality measures.

Variable	Stability coefficient
General personality	
Conscientiousness	.79
Extraversion	.84
Emotional stability	.83
Agreeableness	.73
Core self evaluation	.82
School-specific personality	
Conscientiousness	.79
Extraversion	.82
Emotional stability	.79
Agreeableness	.81
Core self evaluation	.75
General criteria	
Life satisfaction	.82
General health	.72
School-specific criteria	
School satisfaction	.87
Citizenship behaviors	.63

Stability coefficient = correlation between time 1 and time 2.

Table 4

Unique variance explained in the change in school-specific criteria by either school-specific or general personality.

Criteria	Ordered predictors	B	ΔR^2	Ordered predictors	ΔR^2	Total R^2
School satisfaction at time 2	(1) Order effect	.00	.00	(1) Order effect	.00	.84**
	(2) School satisfaction at time 1	.79**	.77**	(2) School satisfaction at time 1	.79**	
	(3) General at time 1		.03**	(3) School-specific at time 1	.04**	
	Conscientiousness	-.14*		Conscientiousness		
	Extraversion	.04		Extraversion		
	Emotional stability	.03		Emotional stability		
	Agreeableness	-.21**		Agreeableness		
	Core-self evaluation	-.07		Core-self evaluation		
	(4) School-specific at time 1		.05**	(4) General at time 1	.03**	
	Conscientiousness	.20*		Conscientiousness		
	Extraversion	-.06		Extraversion		
	Emotional stability	-.19**		Emotional stability		
	Agreeableness	.22**		Agreeableness		
	Core-self evaluation	.01		Core-self evaluation		
Citizenship behaviors at time 2	(1) Order effect	.01	.00	(1) Order effect	.00	.58**
	(2) Citizenship behaviors at time 1	.38**	.39**	(2) Citizenship behaviors at time 1	.39**	
	(3) General at time 1		.05*	(3) School-specific at time 1	.13**	
	Conscientiousness	.12		Conscientiousness		
	Extraversion	-.40**		Extraversion		
	Emotional stability	.12		Emotional stability		
	Agreeableness	-.15		Agreeableness		
	Core-self evaluation	-.05		Core-self evaluation		
	(4) School-specific at time 1		.14**	(4) General at time 1	.06**	
	Conscientiousness	.21		Conscientiousness		
	Extraversion	.49**		Extraversion		
	Emotional stability	-.07		Emotional stability		
	Agreeableness	.33**		Agreeableness		
	Core-self evaluation	-.18		Core-self evaluation		

B = Standardized regression coefficients from the final regression model after all predictors were added. ΔR^2 = Change in variance explained by each block of predictors. Total R^2 = Total variance explained by all predictors.

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

Table 5

Unique variance explained in the change in general criteria by either school-specific or general personality.

Criteria	Predictors	B	ΔR^2	Predictors	ΔR^2	Total R^2
Life satisfaction at time 2	(1) Order effect	.00	.00	(1) Order effect	.00	.72**
	(2) Life satisfaction at time 1	.68**	.67**	(2) Life satisfaction at time 1	.67**	
	(3) General at time 1		.03*	(3) School-specific at time 1	.04**	
	Conscientiousness	-.13		Conscientiousness		
	Extraversion	.10		Extraversion		
	Emotional stability	-.04		Emotional stability		
	Agreeableness	.01		Agreeableness		
	Core-self evaluation	.13		Core-self evaluation		
	(4) School-specific at time 1		.02	(4) General at time 1	.01	
	Conscientiousness	.10		Conscientiousness		
	Extraversion	-.06		Extraversion		
	Emotional stability	.12		Emotional stability		
	Agreeableness	.12		Agreeableness		
	Core-self evaluation	-.04		Core-self evaluation		
General health at time 2	(1) Order effect	-.01	.00	(1) Order effect	.00	.63**
	(2) General health at time 1	.33**	.52**	(2) General health at time 1	.52**	
	(3) General at time 1		.05*	(3) School-specific at time 1	.06**	
	Conscientiousness	-.10		Conscientiousness		
	Extraversion	-.34**		Extraversion		
	Emotional stability	.23		Emotional stability		
	Agreeableness	-.10		Agreeableness		
	Core-self evaluation	-.02		Core-self evaluation		
	(4) School-specific at time 1		.07**	(4) General at time 1	.06**	
	Conscientiousness	.10		Conscientiousness		
	Extraversion	.33**		Extraversion		
	Emotional stability	.07		Emotional stability		
	Agreeableness	.05		Agreeableness		
	Core-self evaluation	.27*		Core-self evaluation		

B = Standardized regression coefficients from the final regression model after all predictors were added. ΔR^2 = Change in variance explained by each block of predictors. Total R^2 = Total variance explained by all predictors.

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

Table 6
Cross-lag regression analyses predicting change in school-specific and general personality.

Criteria	Predictors	B	ΔR^2	Total R^2
Conscientiousness	General time 2	(1) Order effect	.00	.00
		(2) General time 1	.55**	.62**
		(3) School-specific time 1	.29**	.03**
	School-specific time 2	(1) Order effect	.00	.00
		(2) School-specific time 1	.77**	.63**
		(3) General time 1	.02	.00
Extraversion	General time 2	(1) Order effect	.01	.00
		(2) General time 1	.52**	.71**
		(3) School-specific time 1	.38**	.04**
	School-specific time 2	(1) Order effect	-.01	.00
		(2) School-specific time 1	.83**	.68**
		(3) General time 1	.00	.00
Emotional stability	General time 2	(1) Order effect	.00	.00
		(2) General time 1	.71**	.68**
		(3) School-specific time 1	.15*	.02*
	School-specific time 2	(1) Order effect	.00	.00
		(2) School-specific time 1	.68**	.63**
		(3) General time 1	.14	.00
Agreeableness	General time 2	(1) Order effect	.01	.00
		(2) General time 1	.49**	.53**
		(3) School-specific time 1	.36**	.08**
	School-specific time 2	(1) Order effect	.01	.00
		(2) School-specific time 1	.69**	.65**
		(3) General time 1	.18**	.02**
Core-self evaluation	General time 2	(1) Order effect	.00	.00
		(2) General time 1	.47**	.67**
		(3) School-specific time 1	.42**	.06**
	School-specific time 2	(1) Order effect	.00	.00
		(2) School-specific time 1	.66**	.57**
		(3) General time 1	.12	.00

B = Standardized regression coefficients from the final regression model after both predictors were added. ΔR^2 = Unique variance explained. Total R^2 = Total variance explained by both predictors.

* $p < .05$.

** $p < .01$.

researchers can expect to find the greatest benefit from including measures of both context-specific and general personality when predicting context-specific criteria.

Third, the unidirectional relationship from context-specific personality to general personality indicates that changes in context-specific personality are not dependent upon changes in general personality. As a result, practitioners should expect that changes to context-specific personality are not dependent upon general personality, but likely affected by environmental changes and interventions. Future research should examine the potential bidirectional relationship between environmental factors and context-specific personality. Indeed, several researchers (e.g., Bowling, Eschleman, et al., 2010; Bowling, Wang, et al., 2010; Pierce & Gardner, 2004; Spector, 1988; Wang et al., 2010) have suggested that correlations between context-specific personality and context-specific criteria are possibly due to a bidirectional relationship. In addition, an examination of the state and trait components of context-specific personality using longitudinal methods, such as latent state-trait modeling, will continue to shed light on the malleability of context-specific personality. A better understanding of how context-specific personality changes or remains stable over time will enable practitioners to design the most appropriate intervention.

Finally, changes in context-specific personality provides a method of understanding how general personality changes over time. This explanation could account for changes in general personality throughout an individual's lifespan; however, as noted above, the context of the environment and its stability may influence this process. In

addition, the age of the population being considered may influence these results as well. Terracciano, McCrae, and Costa (2010) found that the stability of personality increased up to age 30 and then plateaued. It may be that in older populations the results would be smaller, although it is unclear if this would be due to increased stability associated with age or increased stability in environmental factors. Future research addressing this question would greatly increase our knowledge about changes in personality throughout the lifespan.

5.4. Limitations

We should note a few limitations to the current study. First, all of the data were collected using self-report measures, which could make the results vulnerable to common-method variance. However, the effects of common-method variance may be overstated in organizational research (Spector, 2006). Second, the results of the current study may vary depending upon the time lag between data collection waves. Although personality was found to slightly change over eight weeks, longer durations between data collection waves is likely to affect the stability of the measures and the amount of change in one's personality. Finally, context-specific personality was only measured in a school context and the results may not generalize to other contexts, such as the workplace. However, the school domain includes several characteristics that are similar to a workplace, such as deadlines, schedules, policies, and interpersonal expectations. Thus, we expect similar results would be found for work-specific variables and employees.

5.5. Summary

The current research extends previous findings regarding frame-of-reference effects by comparing context-specific and general personality over time. Specifically, we found that context-specific personality predicted change in criteria after controlling general personality. Similar results were found for general personality. General personality predicted change in criteria after controlling for context-specific personality. In addition, we explored the directional relationship between context-specific and general personality. Surprisingly, we found consistent evidence for a largely unidirectional relationship in which context-specific personality predicts the change in general personality. Given these findings, we encourage future research to employ context-specific measures of personality.

References

Bing, M. N., Whanger, J. C., Davison, H. K., & VanHook, J. B. (2004). Incremental validity of the frame-of-reference effect in personality scale scores: A replication and extension. *Journal of Applied Psychology*, 89, 150–157.

Bowling, N. A., Eschleman, K. J., Wang, Q., Kirkendal, C., & Alarcon, G. (2010). Meta-analysis on the antecedents and consequences of organization-based self-esteem. *Journal Occupational and Organizational Psychology*, 83, 601–626.

Bowling, N. A., Wang, Q., Ying Tang, H., & Kennedy, K. D. (2010). A comparison of general and work-specific measures of core-self-evaluations. *Journal of Vocational Behavior*, 76, 559–566.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. Unpublished manuscript, University of Michigan, Ann Arbor.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–76.

Ferrando, M., Prieto, M. D., Almeida, L. S., Ferrández, C., Bermejo, R., López-Pina, J. A., et al. (2011). Trait emotional intelligence and academic performance: Controlling for the effects of IQ, personality, and self-concept. *Journal of Psychoeducational Assessment*, 29, 150–159.

Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review*, 81, 59–74.

Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139–145.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., et al. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40, 84–96.

- Heggestad, E. D., & Gordon, H. L. (2008). An argument for context-specific personality assessment. *Industrial and organizational psychology: Perspectives on science and practice*, 1, 320–322.
- Hunthausen, J. M., Truxillo, D. M., Bauer, T. B., & Hammer, B. L. (2003). A field study of frame-of-reference effect on personality test validity. *Journal of Applied Psychology*, 88, 545–551.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology*, 56, 303–331.
- Kappe, R., & van der Flier, H. (2010). Using multiple and specific criteria to assess the predictive validity of the big five personality factors on academic performance. *Journal of Research in Personality*, 44, 142–145.
- Korman, A. K. (1970). Toward an hypothesis of work behavior. *Journal of Applied psychology*, 54, 31–41.
- Korman, A. K. (1976). Hypothesis of work behavior revisited and an extension. *Academy of Management Review*, 1, 50–63.
- Lievens, F., De Corte, W., & Schollaert, E. (2008). A closer look at the frame-of-reference effect in personality scale scores and validity. *Journal of Applied Psychology*, 93, 268–279.
- Mischell, W. (1977). On the future of personality measurement. *American Psychologist*, 23, 246–254.
- Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30, 591–622.
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 2, 322–338.
- Rice, R. W., Near, J. P., & Hunt, R. G. (1980). The job satisfaction/life satisfaction relationship: A review of empirical research. *Basic and Applied Social Psychology*, 1, 37–64.
- Robinson, J. P. (1977). *How Americans use time: A social-psychological analysis of everyday behavior*. New York: Praeger.
- Schmit, M. J., Ryan, A. M., Stierwalt, S. L., & Powell, A. B. (1995). Frame of reference effects on personality scale scores and criterion-related validity. *Journal of Applied Psychology*, 80, 607–620.
- Schmitt, N., Oswald, F. L., Kim, B. H., Imus, A., Merritt, S., Friede, A., et al. (2007). The use of background and ability profiles to predict college student outcomes. *Journal of Applied Psychology*, 92, 165–179.
- Siu, E., & Reiter, H. I. (2009). Overview: what's worked and what hasn't as a guide towards predictive tool development. *Advances in Health Sciences Education*, 14, 759–775.
- Spector, P. E. (1988). Development of the work locus of control scale. *Journal of Occupational Psychology*, 61, 335–340.
- Spector, P. E. (2006). Method variance in organizational research. *Organizational Research Methods*, 9, 221–232.
- Terracciano, A., McCrae, R. R., & Costa, P. T., Jr. (2010). Intra-individual change in personality stability and age. *Journal of Research in Personality*, 44, 31–37.
- Wang, Q., Bowling, N. A., & Eschleman, K. J. (2010). A meta-analytic examination of work locus of control. *Journal of Applied Psychology*, 95, 761–768.
- Weiss, H. M., & Adler, S. (1984). In L. L. Cummings, & B. M. Staw (Eds.), *Personality and organizational behavior*. *Research in organizational behavior*, Vol. 6. (pp. 1–50) Greenwich, CT: JAI Press.