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Brief Report

Constructs of social and emotional effectiveness: Different labels, same content?

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ABSTRACT

Social skills, interpersonal competence, political skill, emotional intelligence, empathy, and emotion recognition ability all belong to the domain of social and emotional effectiveness constructs (SEECs). To date, it remains unclear to what extent SEECs overlap and differ and how they fit in the nomological net of personality. We examined the overall dimensional structure of 32 scales from five self-report and three performance-based instruments, representing the above-mentioned constructs. Four components, namely Expressivity, Sensitivity, Emotional Abilities, and Self-Control, were identified and correlated meaningfully with the Big Five. Trait emotional intelligence and other self-reported SEECs overlapped largely rather than measuring separate constructs. This study provides the basis for a taxonomy of SEECs that will help integrating previous and future research in this domain.

1. Introduction

Understanding other people and social situations as well as acting according to this understanding is at the core of many constructs that have been related to success in personal and professional life, such as social skills, social or interpersonal competence, interpersonal communication skill, social intelligence, and more recently, political skill and emotional intelligence (Ferris, Perrewé, & Douglas, 2002). Further, terms like assertiveness, empathy, interpersonal sensitivity, self-monitoring, emotion regulation, sociability, and many more have been used to describe more specific aspects of such constructs, which we will refer to as social and emotional effectiveness constructs (SEECs).

Although there is a considerable body of research on each of these constructs, SEECs have been rarely studied comparatively (Ferris et al., 2002). As a consequence, the structure and nomological net of this domain have received little theoretical and empirical attention. More specifically, it is unclear how SEECs overlap and differ and which broader underlying competencies they cover. For example, it seems plausible that two constructs with similar labels like social skill (see Riggio & Riggio, 2001) and interpersonal competence (Buhrmester, Furman, Wittenberg, & Reis, 1988) measure a similar characteristic, although both have been developed independently. As a notable exception to the lack of empirical research on the SEEC domain, Heggestad and Morrison (2008) have studied the factor structure of several SEEC measures and found five underlying dimensions, namely Social Potency, Social Appropriateness, Social Emotion Expression, Social Reputation, and Emotional Intelligence. However, to date no taxonomy or organization scheme as how to classify SEECs exists (Ferris et al., 2002). One reason is that some SEECs themselves are defined and used inconsistently.

Emotional intelligence is a construct with a particularly controversial debate about its conceptualization. In one research stream, emotional intelligence is defined as a set of four cognitive abilities, namely emotion perception, emotion facilitation, understanding emotions, and emotion management ("ability emotional intelligence"; Mayer, Salovey, Caruso, & Sitarenios, 2003). In the second research stream that includes many different models emotional intelligence is defined as a set of non-cognitive traits, competencies, and motivational variables that are linked to interpersonal success ("trait emotional intelligence"). For example, the trait emotional intelligence model by Petrides and Furnham (2003) includes 15 facets such as Emotion Regulation, Stress Management, Self-Motivation, Empathy, and Optimism. Some researchers criticized trait emotional intelligence models as a "grab bag" of loosely connected attributes that are not new (e.g., Joseph & Newman, 2010). Indeed, for example the facets of the Petrides and Furnham (2003) model resemble long established SEECs, although a formal comparison is missing. Cherniss (2010) therefore proposed to consider trait emotional intelligence models as SEECs and to save the label emotional intelligence exclusively for the ability-based model. However, his distinction between SEECs and ability emotional intelligence is somewhat ambiguous. For example, the ability to recognize emotions in others from the face, voice, and body (emotion recognition ability) is considered a SEEC with a long research tradition (Cherniss, 2010), but also a basic dimension in ability emotional intelligence. Further, emotion recognition ability occurs

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in several trait emotional intelligence models. This ability might thus well be a common dimension underlying many SEECs and emotional intelligence.

To summarize, to date it is unclear what the relationship (a) among established SEECs themselves and (b) of emotional intelligence models and their components with established SEECs is and what common dimensions SEECs and emotional intelligence share. In this study, we will investigate the nomological network of SEECs and emotional intelligence. By doing so, we will contribute to the overdue integration of the largely independent research fields within the SEEC domain. More specifically, we will focus on three questions:

First, which are the broader dimensions underlying the SEEC domain? To answer this question, we administered a range of widely used questionnaires and tests to broadly cover the domain. In particular, we included questionnaires of social skills comprising social and emotional sensitivity, expressivity, and control scales (Riggio & Carney, 2003); interpersonal competence which includes the ability to handle interpersonal tasks such as initiating relationships, personal disclosure, and empathic concern (Buhrmester et al., 1988); political skill which refers to abilities that are particularly relevant in organizational contexts, such as networking ability and the ability to influence others (Ferris et al., 2005); interpersonal reactivity or empathy (Davis, 1983), and trait emotional intelligence (Petrides & Furnham, 2003). In addition, we used two performance-based assessments of emotion recognition ability and an emotional intelligence test.

Second, where do ability and trait emotional intelligence fit in the domain space of SEECs? As discussed above, we expect trait emotional intelligence to overlap with the dimensions underlying established SEECs, given similar subscale labels and item wordings. For example, emotionality from the Petrides and Furnham (2003) emotional intelligence model might measure essentially the same as certain facets of empathy (Davis, 1983) or emotional and social sensitivity (Riggio & Carney, 2003). For ability emotional intelligence, we predict a substantial correlation with emotion recognition ability, which is a basic emotional intelligence component, and less overlap with self-reported SEECs because of the different measurement approaches. However, given the common conceptual origin of all emotional intelligence models (Cherniss, 2010) ability emotional intelligence should not be independent from trait emotional intelligence and self-reported SEECs.

Finally, how are the SEEC dimensions related to personality? A criticism often raised with respect to trait emotional intelligence is that it overlaps largely with personality. In their meta-analysis, Joseph and Newman (2010) found correlations between .26 and .45 with all Big Five traits, namely agreeableness, extraversion, conscientiousness, openness, and emotional stability (reverse-coded neuroticism). In fact, the same criticism might be applicable to SEECs more generally. For instance, Gurtman (1999) suggested that social skills and interpersonal competence can be considered a blend of extraversion, dominance, and agreeableness. The dimensional approach used in the present study will help to disentangle the relationship between specific SEEC components and personality traits.

2. Method

One hundred and forty seven French-speaking students (male = 62) of various disciplines were recruited at the University of Geneva and completed the study for payment. Mean age was 25.40 (*SD* = 7.45).

Participants completed three performance-based measures: The Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT, Mayer et al., 2003), Multimodal Emotion Recognition Test (MERT, Bänziger, Grandjean, & Scherer, 2009), and the short version of the Profile of Nonverbal Sensitivity (MiniPONS, Bänziger, Scherer, Hall, & Rosenthal, 2011). The MSCEIT includes 141 items distributed over eight tasks such as identifying the causes for certain emotions or solving problems using different moods. In the MERT and MiniPONS, participants are asked to watch (or listen to, respectively) short video clips, still pictures, or audio recordings of actors expressing different emotions and affective states, and to indicate which emotion or state was being expressed by the actor. Responses are coded as correct or incorrect and yield modality-specific and total emotion recognition scores.

Furthermore, we administered six self-report questionnaires, namely the Big Five Inventory (BFI, John, Donahue, & Kentle, 1991), Social Skills Inventory (SSI, Riggio & Carney, 2003), Interpersonal Competence Questionnaire (ICQ, Buhrmester et al., 1988), Interpersonal Reactivity Index (IRI, Davis, 1983), Political Skill Inventory (PSI, Ferris et al., 2005), and the Trait Emotional Intelligence Questionnaire (TEIQUE, Petrides & Furnham, 2003). The subscales of each measure as provided in the respective citation are displayed in Table 1. Detailed information on the measures can be found in the Supplementary material. Participants completed the study online in four blocks (block 1: all questionnaires and demographic information, block 2: MSCEIT, block 3: MiniPONS, block 4: MERT) and were allowed to take breaks after each block. The total duration of the study without breaks was 2 h 30 min.

Data was analyzed by calculating the mean scores of the 32 subscales of the eight instruments (without the BFI, see Table 1) and running a Principal Component Analysis (PCA) on the correlation matrix. We used PCA because our goal was to explore whether the various instruments measuring SEECs can be reduced to a smaller number of composite variables which would help organizing the field. It was beyond the scope of this analysis to propose theoretically motivated latent variables that influenced participants' responses on the observed variables, for which exploratory factor analysis would have been the more appropriate method. The number of components to extract was determined with parallel analysis implemented in the "paran" package in R (Dinno, 2009). Parallel analysis adjusts the number of components to extract by the number of components that would be derived from random data. The extracted components were rotated using the oblique Promax rotation method, as we assumed that SEEC components might be correlated. We displayed the correlations between the 32 variables in a correlation plot with the qgraph package in R (Epskamp, Cramer, Waldorp, Schmittmann, & Borsboom, 2011). This plot visualizes the relationships between the subscales and helps understanding the nature of the identified components. Finally, we calculated component scores and correlated them with the mean scores on the Big Five dimensions.

3. Results

According to the results of the parallel analysis, four components were extracted that explained 54% of the variance. The Promax-rotated component matrix was readily interpretable (see Table 1): Scales loading on the first component measured proactive, expressive, and confident behaviors and traits, like Initiation (ICQ), Interpersonal Influence (PSI), and Sociability (TEIQUE). Individuals scoring high on scales of this component or dimension that we labeled "Expressivity" tend to describe themselves as successful in communicating their needs and desires and at achieving their interpersonal goals. The second component consisted of scales such as Empathic Concern (IRI), Emotional Sensitivity (SSI), and Empathic Support (ICQ) that are characterized by (self-reported) sensitivity and supportive behavior towards others. We thus labeled this dimension "Sensitivity". The performance-based

Table 1
Factor loadings of the 32 SEEC scales, correlations between SEEC dimensions, and correlations of the dimensions with Big Five traits.

Number in Fig. 1	Subscale (instrument)	*M*	*SD*	Expressivity	Sensitivity	Emotional abilities	Self-control
4	Interpersonal Influence (PSI)	.72	.15	.852	.344		
32	Sociability (TEIQUE)	.68	.10	.812			.289
15	Initiation (ICQ)	.70	.15	.779	.282		
10	Social Control (SSI)	.70	.12	.774			
8	Social Expressivity (SSI)	.58	.15	.723	.221		
5	Emotional Expressivity (SSI)	.58	.10	.695			−.393
1	Networking Ability (PSI)	.53	.18	.679		−.395	
2	Social Astuteness (PSI)	.71	.13	.646	.313		
17	Disclosure (ICQ)	.70	.13	.587	.500	.201	
16	Negative Assertion (ICQ)	.71	.15	.498			
29	Well-Being (TEIQUE)	.75	.11	.440			.426
25	MERT video	.61	.13		.206	.814	
26	MERT audio–video	.63	.12			.773	
27	MERT picture	.51	.12			.765	
28	MiniPons	.78	.10			.714	
24	MERT audio	.44	.13			.708	
22	Understanding Emotions (MSCEIT)	.49	.07			.700	
20	Perceiving Emotions (MSCEIT)	.48	.12			.610	
23	Managing Emotions (MSCEIT)	.37	.07	.207	.353	.590	
21	Using Emotions (MSCEIT)	.42	.08	.328	.407	.559	
11	Empathic Concern (IRI)	.80	.12	.272	.727	.231	−.345
14	Perspective Taking (IRI)	.80	.13		.708		
6	Emotional Sensitivity (SSI)	.66	.12	.562	.655		
18	Emotional Support (ICQ)	.86	.12	.508	.633	.345	
19	Conflict Management (ICQ)	.74	.10		.616		.316
31	Emotionality (TEIQUE)	.72	.09	.529	.609		
9	Social Sensitivity (SSI)	.66	.14		.562		−.445
2	Apparent Sincerity (PSI)	.81	.14	.428	.480	.227	
12	Fantasy (IRI)	.74	.18	.228	.432	.222	−.231
30	Self-Control (TEIQUE)	.64	.11				.837
13	Personal Distress (IRI)	.58	.16	−.250			−.677
7	Emotional Control (SSI)	.58	.12				.669
Variance explained (total: 53.9%)				22.5%	8.7%	16.2%	6.6%
Dimension intercorrelations							
	Sensitivity			.304**			
	Emotional abilities			.033	.278**		
	Self-control			.064	−.098	.064	
Correlations with Big Five traits							
	Extraversion	0.66	0.15	.684***	.111	−.051	−.250*
	Agreeableness	0.77	0.12	−.021	.486***	.024	.105
	Conscientiousness	0.75	0.13	.194*	.124	.044	.234*
	Neuroticism	0.56	0.17	−.068	.292**	.198*	−.715***
	Openness	0.76	0.13	.301**	.350***	.069	−.029

Notes: PSI = Political Skill Inventory, SSI = Social Skill Inventory, IRI = Interpersonal Reactivity Index, ICQ = Interpersonal Competence Questionnaire, TEIQUE = Trait Emotional Intelligence Questionnaire, MSCEIT = Mayer–Salovey–Caruso Emotional Intelligence Test, MERT = Multimodal Emotion Recognition Test, MiniPONS = short Profile of Nonverbal Sensitivity. All means range from 0 to 1. Factor loadings <|.20| are not displayed.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

emotion recognition tests and the MSCEIT loaded on the third component that we labeled "Emotional Abilities". Finally, the three scales Self-Control (TEIQUE), Personal Distress (IRI, reverse-scored), and Emotional Control (SSI) that are related to emotion regulation skills formed the fourth component that we called "Self-Control".

The composition of these four components is visualized in Fig. 1 which displays the correlational structure between the subscales. More highly related subscales are located more closely to each other and are connected with thicker lines, whereas not significantly correlated scales appear further away from each other and have no connecting lines. As can be seen from this figure, some scales in the center of the plot are related to both the Expressivity and Sensitivity components, such as Emotional Sensitivity (SSI) and Emotional Support (ICQ). This is also indicated by high cross-loadings for these scales in Table 1. In contrast, most scales loading on Emotional Abilities and Self-Control in Fig. 1 are located relatively far from scales belonging to the other components. In line with this, Table 1 shows that the Self-Control component was not correlated with any other component, whereas Emotional Abilities were positively related to Sensitivity, but not to Expressivity. Expressivity and Sensitivity were moderately positively correlated.

As can also be easily seen from Fig. 1, the scales of most self-report instruments did not belong exclusively to one of the components. The SSI (yellow) and the TEIQUE (pink) scales were distributed over all three self-report components and the ICQ scales (emerald) covered the Sensitivity and Expressivity components. In contrast, the PSI scales (red) loaded mainly on the Expressivity component, whereas the IRI scales (green) belonged to Sensitivity and Self-Control.

The correlations of the four components with the Big Five dimensions are reported in the lower section of Table 1. Participants scoring high on Expressivity had higher scores on extraversion and openness and Sensitivity was positively associated with agreeableness, openness, and neuroticism. Participants who scored

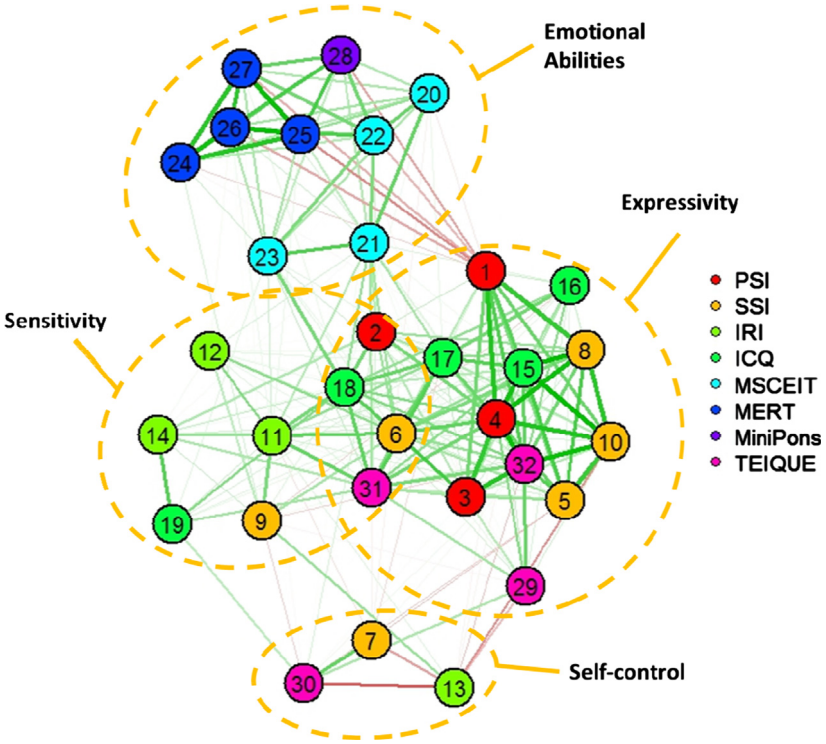

Fig. 1. Correlation plot of the 32 subscales of 8 SEEC measures (Fruchterman–Reingold layout). *Note*: Scale names and numbers are provided in Table 1. Edge thickness indicates the strength of the correlation (the thicker the edge, the stronger the correlation), edge color indicates the direction of the correlation (green = positive, red = negative). Only significant correlations ($p < .05$) are displayed. A plot displaying all correlations is provided in the Supplementary Material. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

high on Neuroticism tended to have higher Emotional Abilities, but reported much lower Self-Control skills. Conscientiousness displayed the lowest relationships with the SEEC dimensions.

4. Discussion

In this study, we investigated the dimensional structure underlying 32 subscales of eight instruments measuring a variety of SEECs. Our results suggest that the domain space of social and emotional effectiveness consists of four broad components that we labeled Expressivity, Sensitivity, Self-Control, and Emotional Abilities. Some constructs such as social skills, interpersonal competence, and trait emotional intelligence emerged as being very broad, consisting of subscales covering several SEEC components. In contrast, political skill could be characterized mainly in terms of Expressivity-related traits and competencies, whereas empathy was closely linked to the Sensitivity dimension. The Expressivity and Sensitivity dimensions contained both emotional and social competencies, indicating that the two types of competencies are closely intertwined.

With respect to the role of emotional intelligence within the SEEC domain, we found that the MSCEIT and the two emotion recognition tests loaded on one common component, supporting the construct validity of ability emotional intelligence. Further, the Emotional Abilities component was linked to the Sensitivity component as predicted. Participants with a higher performance on emotional intelligence and emotion recognition ability tests described themselves as being more empathic and sensitive towards others, but not necessarily as more expressive, outgoing, and sociable. Sensitivity and the Emotional Abilities component might thus be two facets of the same underlying dimension that differ in their measurement approach (self-report versus performance-based). In contrast to ability emotional intelligence, trait emotional intelligence subscales loaded on Expressivity, Sensitivity, and Self-Control and overlapped highly with established SEECs such as social skills and interpersonal competence. This supports Cherniss' (2010) suggestion to regard trait emotional intelligence as distinct from ability emotional intelligence. However, our results also imply that trait emotional intelligence might be redundant with SEECs that have existed much longer. Future studies should thus provide evidence for the distinctiveness and incremental validity of the construct not only with respect to the Big Five, but also other SEECs.

Regarding our third research question, we found that the SEECs components correlated substantially with the Big Five, supporting the idea that SEECs can be considered the interpersonal and emotional part of personality (Gurtman, 1999). For example, extraverted and open participants reported being more expressive and outgoing towards others, whereas those being particularly sensitive and empathic tended to be more open and agreeable, and less emotionally stable. Less emotionally stable participants also tended to score higher in Emotional Abilities. In contrast, being able to control one's emotions and behavior was strongly associated with high emotional stability or low neuroticism. Thus, there seem to be two sides of the coin of neuroticism, namely lower Self-Control on the one side, but a higher Sensitivity towards others on the other side.

Given that Self-Control was largely unrelated to the other components found in this study, it can be questioned whether it should actually be considered a part of SEECs. An additional PCA of the Expressivity, Sensitivity, and Emotional Abilities component scores revealed a higher-order dimension of socio-emotional effectiveness, with loadings of above .59 for the three components. Self-Control, when included in this PCA, did not load on the higher-order dimension (−.083). Empirically, Self-Control therefore does not

seem to be part of SEECs. On the other hand, the three scales loading on this component had been defined by the respective authors in terms of effective emotional and social functioning. For example, Riggio and Carney (2003) describe emotional control in the SSI as the ability to regulate one's emotional displays strategically and point out the conceptual link with emotion management in ability emotional intelligence. One reason for why Self-Control nevertheless emerged as a separate component in our study might be that the respective scales mix emotion regulation skills with (inversely scored) maladaptive personality syndromes such as impulsiveness and sensitivity to stress. For example, the self-control scale in the TEIQUE explicitly refers to impulsiveness and stress management which might not be SEECs. Future research should include more scales measuring social and emotion regulation abilities to clarify which traits and abilities should be considered SEECs and which ones not.

An important limitation of our study is that our selection of measures did not fully capture the SEEC domain and influenced the components that we found accordingly. First, we might have missed certain constructs that are likely to be related to socio-emotional effectiveness and for which widely used measures exist, such as emotional expressiveness (Gross & John, 1998) and emotional understanding (MacCann & Roberts, 2008). Furthermore, questionnaires based on the interpersonal circumplex model might provide a more complete coverage of social effectiveness (Gurtman, 1999). Second, we operationalized some constructs exclusively with self-report questionnaires although individuals seem to have little insight in their respective abilities and competencies (Riggio & Riggio, 2001). For some constructs, performance-based tests exist that should be included in future studies. For example, social influence and control can be captured with tests for social understanding, insight, and memory (Weis & Süß, 2007). Further, interpersonal skills in the workplace can be measured with situational judgment tests (Motowidlo, Dunnette, & Carter, 1990) to complement self-reported political skill measured in our study. However, it should be noted that for some SEECs, such as emotional expressivity, to date no standardized performance-based measures exist.

Despite our specific selection of measures, the Sensitivity and Expressivity components are similar to the main dimensions found by Heggestad and Morrison (2008), namely Social Potency and Social Appropriateness/compassion. As these components are also central to the social skills model by Riggio and Riggio (2001), we believe that they might also generalize to other sets of SEEC measures. However, future studies should investigate these components and a potential higher-order dimension in more detail to develop a taxonomy of SEECs. Such a taxonomy might be useful for comparing empirical results and for developing predictions about SEECs and work outcomes. For example, Expressivity and Sensitivity might be differentially related to job performance. Expressivity-related skills might be more predictive of concrete "task performance" on the job whereas Sensitivity might be more related to "contextual performance" that refers to interpersonal facilitation (Borman & Motowidlo, 1997).

To conclude, our study showed that despite the many different labels and measures, the SEEC domain appears to be relatively homogeneous. Future research should therefore explicitly acknowledge the similarity between the different constructs and further develop the theoretical links between them.

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Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.jrp.2013.02.005.

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