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Whichever intelligence makes you happy: The role of academic, emotional, and practical abilities in predicting psychological well-being

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ABSTRACT

Recent findings suggest a positive effect of intelligence on psychological well-being but remain inconclusive as to whether this criterion would be better predicted by drawing on emotional and practical abilities–besides traditional "academic" ones–and whether any path from intelligence to well-being bypasses socioeconomic status. We investigated these issues with a sample of 288 working adults (*N* in path analyses = 157), employing three standard tests of academic intelligence (Matrix Reasoning, Verbal Analogies, General Knowledge); the Mayer-Salovey-Caruso Emotional Intelligence Test; the practical sections of Sternberg's Triarchic Abilities Test to assess practical intelligence; and Ryff's Scales of Psychological Well-Being. Hierarchical regression analyses yielded academic intelligence (Step 1), specifically Matrix Reasoning, and emotional intelligence (Step 2, with practical intelligence), specifically Understanding and Managing Emotions, as independent predictors of well-being. Subsequent path analyses revealed that the effect of academic intelligence on well-being was indirect (mediated by socioeconomic status) and the effect of emotional intelligence a direct one, the latter also being stronger and primarily due to the Managing Emotions branch. While expanding the evidence on the real-life utility of academic intelligence, the present results draw special attention to knowing/reasoning about emotions as an incremental predictor of well-being, the implications of which are discussed.

1. Introduction

Commonly conceived as the mental ability to solve problems, adapt to the environment, and achieve certain performance goals (e.g., Sternberg & Berg, 1986), intelligence should by definition be a major predictor of success on a wide array of tasks. Indeed, empirical evidence attests to its pervasive predictive power vis-à-vis educational (Deary, Strand, Smith, & Fernandes, 2007; Laidra, Pullmann, & Allik, 2007; Roth et al., 2015), occupational (Schmidt & Hunter, 2004), and even health outcomes (Deary & Batty, 2011). But can one rely on intelligence to solve emotional problems, adapt socially to the environment, and achieve the much-desired goal of happiness and fulfillment–ultimately, does intelligence predict one's psychological well-being (PWB)?

In addressing the above question, we adopted a multifaceted view on human intellect, differentiating between traditionally conceived, "academic intelligence" (cf. Sternberg & Kaufman, 2011), captured by standard IQ-tests, and two "nonacademic" intelligences, which have been conceptualized and validated as distinct sets of cognitive capacities: Mayer and Salovey's emotional intelligence (Salovey, Brackett, & Mayer, 2004) and Wagner and Sternberg's (1986) practical intelligence. At the other end, we opted for a comprehensive conception of well-being, represented by the term PWB, which goes beyond positive affect (happiness) and life satisfaction–two major elements of subjective well-being (SWB)–to encompass more "existentialist" aspects of wellness such as a developed sense of autonomy, connectedness, and purpose in life (Ryff & Keyes, 1995).

1.1. Academic intelligence (AI) and well-being

When it comes to intelligence as indicated by IQ, extant research has mainly focused on its relationship with one aspect of PWB, namely self-reported happiness. Until recently, most studies have failed to establish a positive effect of IQ on happiness (for a review see Veenhoven & Choi, 2012), fortifying the claim of the former's irrelevance for PWB. However, three newer studies with large, representative samples (Ali et al., 2013; Kanazawa, 2014; Nikolaev & Juergensen McGee, 2016) consistently reported positive associations between IQ (verbal/general) and happiness–thus suggesting that the above widespread assertion be reconsidered.

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1.1.1. Socio-economic status as a mediator

A salient ingredient in accounts of the intelligence–PWB relationship–elucidating both positive and nil effects of IQ on happiness–is socioeconomic status (SES). On the one hand, SES is employed to explain how intelligence may contribute to PWB: a higher IQ, it is argued, implies more socioeconomic advantages, experiences of educational/economic success, and material resources, which, in turn, are factors known to promote well-being (Ali et al., 2013; Kanazawa, 2014; Nikolaev & Juergensen McGee, 2016). On the other hand, IQ is claimed to have no direct relation to well-being, its impact on the latter depending wholly on "the degree to which intelligent people excel in society" (Diener, Suh, Lucas, & Smith, 1999, p. 294). Empirically supporting the proposed role of SES, Ali et al. (2013) found the IQ–happiness relationship to be strongly mediated by income, and Sigelman (1981, in Diener et al., 1999) reported a non-significant effect of intelligence on PWB once sociodemographic variables were controlled for. In view of such findings, a common suggestion in the relevant literature has been to shift the focus from academic to other types of intelligence (Diener et al., 1999; Nikolaev & Juergensen McGee, 2016; Veenhoven & Choi, 2012), which may be more directly responsible for PWB.

1.2. Emotional intelligence (EI) and well-being

Conceived as another broad facet of human intellect, EI refers to the ability to cognitively process emotion-related information, including at least three narrow abilities: accurately perceiving emotions in immediate expressions and cultural artefacts; understanding emotions and the rules of emotional functioning (i.e., grasping the nomenclature, structure, and dynamics of emotional experiences); and knowing how to use and regulate emotions in oneself and others (cf. Elfenbein & MacCann, 2017). The construct was initially popularized precisely under the assumption that it matters more than IQ in handling the socio-emotional challenges of life. Indeed, empirical evidence corroborates the predictive utility of EI regarding such outcomes as self-perceived quality of social interactions and interpersonal relationships (Lopes et al., 2004; Lopes, Salovey, & Straus, 2003), positive relations being one facet of broadly defined PWB (Ryff & Keyes, 1995). Moreover, a recent meta-analysis (Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2015) has confirmed a significant positive effect of EI on life satisfaction and happiness, the two components of the narrower construct of SWB. What has yet to be established is whether the observed effect holds when the criterion is comprehensively assessed PWB (particularly in view of recently reported null associations of ability EI with life satisfaction/meaningfulness in Italian adolescents; Di Fabio & Kenny, 2016), and whether it is mediated by certain sociodemographic variables (cf. Fernández-Berrocal & Extremera, 2016)–as apparently is the effect of AI; last but not least, it would be useful to know how EI measures up to the latter as a predictor of PWB, specifically whether it predicts this criterion above and beyond academic abilities.

1.3. Practical intelligence (PI) and well-being

Defining PI as a distinct kind of intelligence usually involves (one of) the following two propositions: that it operates on a specific class of problems, referred to as out-of-school or *practical problems*, and that it relies on the ability to acquire and apply *tacit knowledge*, i.e., practical know-how which is not formally taught, but is highly relevant for achieving personal goals (cf. Wagner, 2011). Notably, both defining elements imply that PI plays a significant role in emotional and social adjustment: practical problems are namely those that "challenge the *well-being*, needs, plans, and survival of the individual" (Charlesworth, 1976, in Wagner & Sternberg, 1986, p. 52, emphasis added), while tacit knowledge is assumed to go beyond task-related know-how, to include knowledge about managing self and others (Wagner & Sternberg, 1986). Indeed, Grigorenko and Sternberg (2001) found PI to predict self-reported adaptive functioning (i.e., better physical health, lower depression and anxiety, and higher self-efficacy), beyond sociodemographic variables–gender, age, and level of education. Unfortunately, their study employed only a self-report measure of PI; a significant association between objectively assessed practical abilities and PWB–although theoretically sustained–has yet to be confirmed by empirical evidence.

1.4. The present study

The above review points to several unresolved issues regarding the effect of intelligence on PWB; of these, the following featured as our research questions: Do academic, emotional, and practical abilities make independent contributions to the prediction of broadly conceived PWB; if so, is their effect on PWB fully mediated by socioeconomic status, or also a direct one; which component-abilities (i.e., factors or branches) of AI, EI, and PI are (most) responsible for the effect; and finally, which kind of intelligence is most predictive of PWB?

Based on the available evidence and theoretical considerations we put forth three major hypotheses. First, we proposed that PWB would be positively predicted by AI (H1a), but beyond that also by EI (H1b) and PI (H1c). Second, we expected socioeconomic status to fully mediate the effect of academic abilities on PWB (H2a), but not the effect of EI (H2b) and PI (H2c), because the latter two involve capacities which may be directly involved in attaining a sense of well-being (e.g., understanding and managing emotions, tacit knowledge about managing self and others). For the same reason, we expected PWB to be more strongly predicted by EI (H3a) and PI (H3b) than by traditional academic abilities.

2. Method

2.1. Participants and procedure

Participants were 288 adults (44.4% female, age range 21–61, $M_{\text{age}} = 40.41$, $SD_{\text{age}} = 8.19$) employed within various departments (i.e., production, distribution, administration, marketing and sales, management) of a large dairy production company. 68.4% participants had a high-school degree (12y of education), 26.4% a university diploma (16y), and 3.5% held post-graduate titles (17 + y); data were missing for 1.7%. Most (76.4%) were married or in a stable relationship, 21.5% were single or divorced/separated, and 2.1% did not report on marital status. As for income (in Serbian dinars), 17.4% earned < 40,000, 32.6% made 41,000–60,000, 5.9% got 61,000–80,000, and 5.6% were paid > 80,000 per month; data on income were unavailable for 38.5%.

With permission of the CEO to invite all employees of the Belgrade branch of the company to participate in the study, potential participants were recruited at their workplace and tested during working hours in available conference and dining rooms. Prior to test administration, all were informed about the general nature of the study as a scientific, noncommercial endeavor guaranteeing confidentiality of the data; those who agreed to partake in the study signed the informed consent forms. As a compensation for their efforts, they were offered and later provided individual feedback on their test results (but received no financial incentives). The research procedure had previously been approved by the Ethics Committee of the Serbian Psychological Association.

2.2. Measures

A standard sociodemographic data sheet was used to acquire data on gender, age, level of education, and marital status. Data on income group were supplied by the company's management for $N = 177$. *Socio-economic status* (*SES*) was calculated as an aggregate of education level and income categories (cf. Vanderploeg & Schinka, 1995), resulting in a range of 2–6 ($M = 3.23$, $SD = 1.20$, with higher values reflecting higher education and income).

2.2.1. Measures of academic abilities

AI was assessed with a battery of three well-established cognitive ability tests: an 18-item test of Matrix Reasoning (MR), measuring fluid intelligence, a 30-item test of Verbal Analogies (VA), tapping both crystallized and fluid abilities, and a 30-item test of General Knowledge (GK), as a marker of crystallized intelligence. Internal consistencies for these and all other employed measures are reported in Appendix A. A principal component analysis of the respective test scores yielded a strong general factor (69.8% of variance explained; factor loadings = 0.80–0.87), which served as a global indicator of academic intelligence in subsequent analyses.

2.2.2. Mayer-Salovey-Caruso Emotional Intelligence Test version 2.0 (MSCEIT v2.0; Mayer, Salovey, & Caruso, 2002)

An operationalization of the Mayer-Salovey model, this performance test of EI assesses four branches: Perceiving Emotions (PE), Using Emotions (UsE), Understanding Emotions (UE), and Managing Emotions (ME). It contains 141 items grouped into eight tasks (two per branch), yielding one global and four branch scores. We administered the approved Serbian translation of the instrument, which previously exhibited good psychometric properties (Altaras Dimitrijević & Jolić Marjanović, 2010). Responses were scored by the publisher (Multi-Health Systems) using the “general consensus” method.

2.2.3. Sternberg Triarchic Abilities Test (STAT; Sternberg, 1993)

The STAT is a multiple-choice cognitive abilities test comprising nine sections/subscales, three of which were designed to measure practical abilities (henceforth STAT-P) and thus utilized as a measure of practical intelligence in the present study. The three STAT-P sections assess practical-verbal (solving real-life problems presented as narratives), practical-quantitative (mathematical reasoning in real-life situations) and practical-figural reasoning (route planning to navigate through a map-depicted area) with four items each. The overall STAT-P internal consistency in this study was poor (see Appendix A), but similar as previously reported (Sternberg, Castejón, Prieto, Hautamäki, & Grigorenko, 2001).

2.2.4. Ryff's Scales of Psychological Well-Being (RSPWB; Ryff & Keyes, 1995)

The 18-item version of the scales, which we used in this study, was designed to provide a brief, yet comprehensive self-assessment of PWB, including the following facets: Positive Relations, Self-Acceptance, Autonomy, Self-Growth, Environmental Mastery, and Purpose in Life. Respondents are asked to score each item on a Likert-type scale, with 1 (*strongly disagree*) and 7 (*strongly agree*) as anchor points. Since the multidimensionality of the RSPWB has been questioned in independent studies (e.g., Springer & Hauser, 2006), we considered only the global score.

3. Results

3.1. Basic statistics

Descriptive statistics and bivariate correlations are presented in Appendix A. Both global and component-level AI and EI scores were positively related to PWB, as was global PI and its Verbal-Practical component.

3.2. Hierarchical regression analyses

To test H1, we performed a hierarchical regression analysis with global AI entered in Step 1, and global EI and PI in Step 2. The model was significant ($F(3, 253) = 31.51$, $p < 0.001$; $R^2 = 0.27$), with non-academic intelligences explaining an additional 8% of PWB variance, but only AI ($\beta = 0.32$, $p < 0.001$) and EI ($\beta = 0.30$, $p < 0.001$) surfacing as its independent predictors. In an analogous model including component-level instead of global intelligence scores ($F(10, 247) = 11.78$, $p < 0.001$; $R^2 = 0.32$), EI and PI component-abilities incrementally explained 12% of PWB variance; independent predictors in this model were Matrix Reasoning ($\beta = 0.17$, $p = 0.015$), Understanding Emotions ($\beta = 0.12$, $p = 0.047$), and Managing Emotions ($\beta = 0.32$, $p < 0.001$).

3.3. Path analyses

We employed path analyses to test the proposed mediation of SES in the intelligence–PWB relationship (H2) and to additionally explore the potential confounding effect of age. All models were tested using *Amos 16.0* on complete data sets with $N = 157$.

3.3.1. Testing the mediation by SES

According to H2, our main mediation model posited an indirect effect of AI (via SES) and a direct effect of EI on PWB (Fig. 1a); PI was excluded as it had no significant main effect on PWB in the hierarchical regression. The fit statistics for this model were excellent: $\chi^2(2) = 2.15$, $p = 0.342$; $TLI = 1.00$, $CFI = 1.00$, $RMSEA = 0.02$, $SRMR = 0.03$. Moreover, in terms of parsimony, it proved superior to two competing models, one of which additionally included a direct AI→PWB pathway ($\chi^2(1) = 0.09$, $p = 0.769$; $TLI = 0.1.05$, $CFI = 1.00$, $RMSEA = 0.00$, $SRMR = 0.01$) and the other an indirect EI → SES → PWB pathway ($\chi^2(1) = 2.06$, $p = 0.151$; $TLI = 0.94$, $CFI = 0.99$, $RMSEA = 0.08$, $SRMR = 0.02$), because the added pathways were statistically insignificant ($\beta = 0.12$, $p = 0.128$ for AI → PWB, and $\beta = -0.00$, $p = 0.686$ for EI → SES → PWB). A component-level version of the main model, in which global AI and EI were replaced by relevant component-abilities (i.e., those found to be independent predictors of PWB in the component-level hierarchical regression; Fig. 1b) also showed good fit to the data: $\chi^2(3) = 6.37$, $p = 0.095$; $TLI = 0.89$, $CFI = 0.97$, $RMSEA = 0.08$, $SRMR = 0.05$.[1]

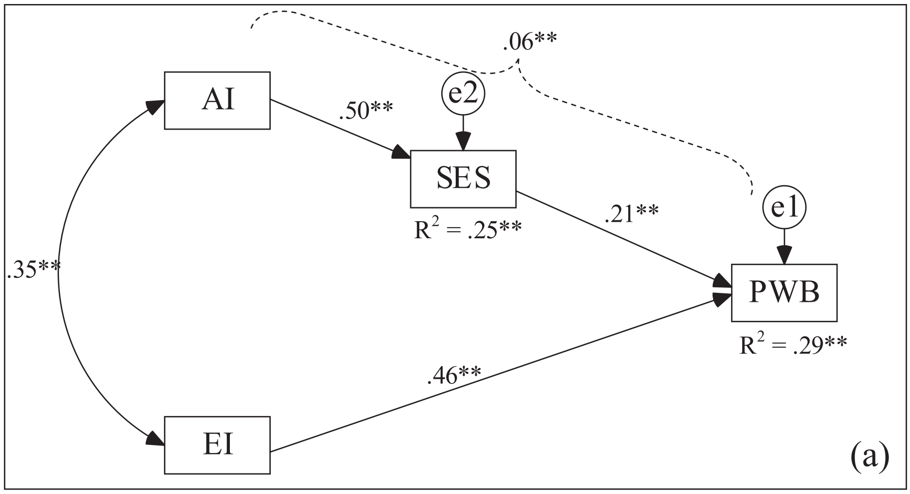
3.3.2. Testing the confounding effect of age

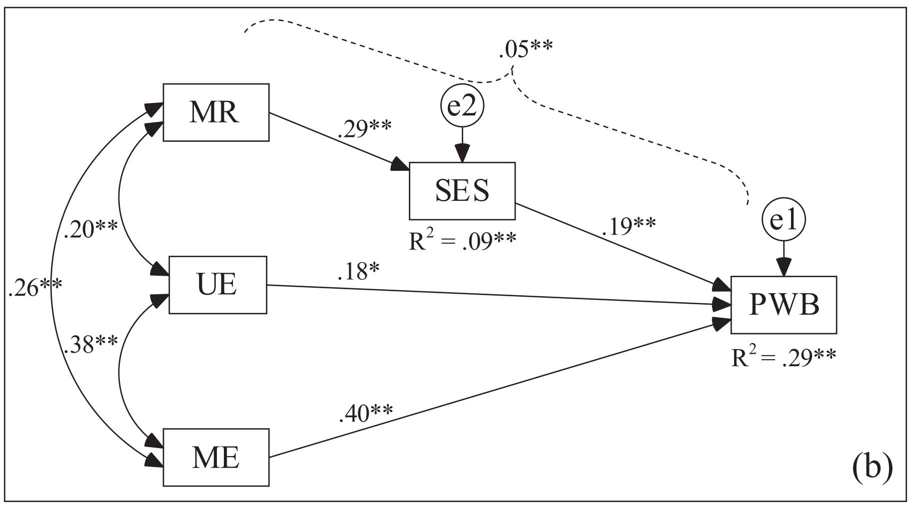
Since age was also significantly related to PWB, as well as to AI and EI, we extended the above described main model to include age–in one case, as a potential confounder; in the other, as another independent predictor. The first extended model, assuming both a direct and indirect effects (via AI and EI) of age on PWB, showed poor fit to the data: $\chi^2(4) = 19.18$, $p = 0.001$; $TLI = 0.73$, $CFI = 0.89$, $RMSEA = 0.17$, $SRMR = 0.09$. The second one, proposing only a direct effect of age on PWB (Fig. 2a), had excellent fit indices: $\chi^2(3) = 4.47$, $p = 0.215$; $TLI = 0.96$, $CFI = 0.99$, $RMSEA = 0.06$, $SRMR = 0.04$. For the component-level version of the same model (Fig. 2b), the fit indices were good to excellent: $\chi^2(4) = 7.31$, $p = 0.120$; $TLI = 0.91$, $CFI = 0.98$, $RMSEA = 0.07$, $SRMR = 0.04$.

4. Discussion

Does intelligence predict PWB? In the present study we took up this major issue, reframing it to accommodate for a broadened view of

[1] We also tested the described mediation models substituting the aggregated SES variable with income, but the results remained practically the same.





AI–Academic Intelligence; EI–Emotional Intelligence; SES–Socioeconomic Status; PWB–Psychological Well-Being; MR–Matrix Reasoning; UE–Understanding Emotions; ME–Managing Emotions; all coefficients are standardized; size of indirect effect is presented above the dashed brace line. ** $p < .01$; * $p < .05$.

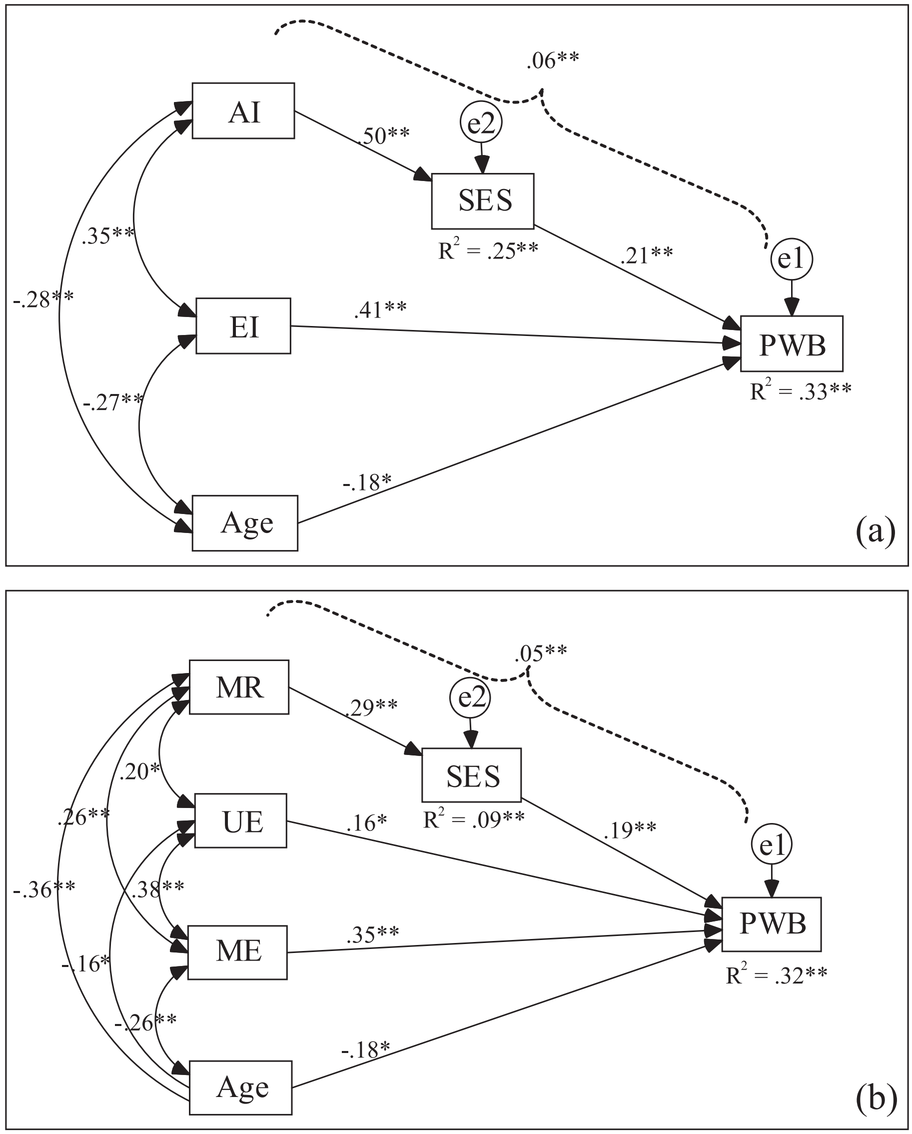
Fig. 1. (a) Global and (b) component-level mediation models.

human mental abilities (e.g., Sternberg & Kaufman, 2011), thus gauging the predictive power of three kinds of intelligence–academic, emotional, and practical–and their component-abilities vis-à-vis the chosen criterion. Additionally, we were able to examine whether any effects of intelligence on PWB are mediated by SES and confounded by age.

4.1. Which intelligence predicts PWB?

While zero-order correlations indicated that all three intelligences related positively to PWB (at least at the level of global scores), only AI and EI surfaced as its independent predictors in the hierarchical regression. Regarding AI, the obtained results echo recently reported findings of positive effects of verbal/general intelligence on self-reported happiness (Ali et al., 2013; Kanazawa, 2014; Nikolaev & Juergensen McGee, 2016), but also serve to extend them in two ways: here, AI was found to predict the broader quality of PWB, and it was non-verbal fluid reasoning which turned out to be its most predictive element. While fully supporting H1a, these results put a question mark over the choice of descriptor used to specify the kind of abilities assessed by traditional intelligence tests: evidently, these are not purely "academic", but also relevant for resolving out-of-school and personal issues to one's satisfaction. The present results thus rebut concerns about the limited real-life utility of academic intelligence (e.g., Wagner & Sternberg, 1986), and align with the growing number of data demonstrating that the (fluid) reasoning abilities captured by IQ-tests predict long-term and broadly relevant life-outcomes (e.g., Deary & Batty, 2011; Warne, 2016).

The fact that EI also emerged as an independent predictor of PWB, as proposed in H1b, supports and extends previous findings of a positive effect of EI on SWB (Sánchez-Álvarez et al., 2015): in the present study, EI predicted well-being as entailing more than positive affect and satisfaction with life, and it did so over and above AI. Furthermore, mirroring the theoretically proposed hierarchy of EI branches, our component-level analysis revealed that it was the two higher, "strategic" branches that added significantly to the prediction, most prominently the Managing Emotions branch. To understand this result, we need only draw on the definition of Managing Emotions as the ability to reflectively regulate emotions to achieve more adaptive and reinforcing



AI–Academic Intelligence; EI–Emotional Intelligence; SES–Socioeconomic Status; PWB–Psychological Well-Being; MR–Matrix Reasoning; UE–Understanding Emotions; ME–Managing Emotions; all coefficients are standardized; size of indirect effect is presented above the dashed brace line. ** $p < .01$; * $p < .05$.

Fig. 2. (a) Global and (b) component-level extended models with age as additional predictor.

mood states, handle relationships, and promote personal growth (Salovey et al., 2004)–these same effects are namely implicated in the PWB construct.

While the present results clearly demand that we dismiss H1c, and consequently all other hypotheses referring to PI (i.e., H2c and H3b), they still make us hesitant to discard the notion of PI altogether, but rather lead us to conclude that establishing its true relevance is contingent upon developing more adequate operationalizations of the construct. In this context, we would like to reiterate that a small positive association between global PI and PWB was found, which may be traced back to the Verbal-Practical subscale score. Seeking to interpret this result, we should note that the Verbal-Practical section of the STAT-P calls upon tacit knowledge about managing self and others to achieve long-term, personally-cathected goals (e.g., maintaining a friendship)–a resource which may be broadly relevant for attaining PWB; the quantitative and figural problems, per contra, primarily tap practical skills in the service of achieving short-term pragmatic goals (e.g., finding the shortest route to a target location), which may affect particular aspects of PWB (e.g., Environmental Mastery), but not the quality as a whole.

4.2. *What place in the intelligence–PWB relationship is taken by SES and age?*

Given its pervasive role in well-being research generally, and particularly in accounts of the intelligence–PWB relationship (e.g., Diener et al., 1999), our study also paid due attention to socioeconomic status as a possible mediator between cognitive abilities and PWB. In accordance with H2a and H2b, we found the data to be well-represented by models in which the effect of AI on PWB was fully mediated by SES, whereas EI had a direct effect on the criterion. Thus, just like earlier findings (Ali et al., 2013), the present ones suggest that academic abilities lead to greater contentment with oneself and life primarily by enabling one to acquire the social status and financial means which ensure better opportunities and quality of life. At the same time, our findings uphold the idea of EI having a direct beneficial influence on PWB, i.e., of self-growth, self-acceptance, and autonomy being closely affected by the ability to understand and handle emotions. Of course, it is conceivable that other sociodemographic variables (e.g., marital status) could mediate the EI–PWB relationship, which we were not able to test in the present study.

Despite both AI and EI being negatively related to age, the results of path analyses clearly supported a model in which the latter variable and the two intelligences acted independently to predict PWB, rather than one in which age also predicted PWB via AI and EI. Thus, it seems that previously uttered claims that age has no confounding effect on the relationship between IQ and happiness (Ali et al., 2013) also apply to the presently observed relation of both AI and EI to PWB.

4.3. How do academic and nonacademic abilities compare as predictors of PWB?

As to the relative contribution of academic vs. nonacademic abilities to PWB, we not only established that EI had incremental predictive value over AI, but also that it acted as the strongest predictor of PWB in the given variable set, outweighing both academic abilities and two robust sociodemographic factors of PWB (SES and age). Apart from supporting H3a, this finding bears important implications for future intelligence research and applications. For one, it calls for more efforts to comparatively chart out the dominions of predictive power of the two intelligences: Although there can be no doubt that academic abilities go beyond predicting academic and professional achievements, it may nevertheless be the ability to process emotional information that better predicts socio-emotional outcomes and should therefore be the primary object of assessment in certain contexts. Beyond that, reminiscent of Fiori's (2015) contention that AI and EI can complement and/or compensate for each other in achieving certain outcomes, the present results encourage future studies to rephrase the above question and focus on how academic and nonacademic abilities act together to promote PWB. Last but not least, learning that PWB was robustly predicted by knowledge about managing emotions, independently of differences in age and SES, provides solid empirical justification for attempts to train emotional intelligence, particularly the ability to moderate negative emotions and enhance positive ones (cf. Salovey et al., 2004).

4.4. Limitations and conclusions

A conspicuous limitation of the present study refers to the measurement of practical intelligence. While low internal consistencies are not unusual for situational judgment tests such as the STAT-P, we must still consider that the present results may not be revealing the true size of the association between practical intelligence and PWB. Another limitation derives from the characteristics of our sample: Recruiting participants from one large company only may have been advantageous in sifting out SES-related variance without the compounding influence of between-company differences; on the other hand, we were faced with an unexpectedly low proportion of divorced/separated and middle-aged single participants. It therefore remains for future studies to explore the role of marital status as possibly influencing the (emotional) intelligence–PWB relationship. Further, although income and education have been found to predict well-being in various nations (see e.g., Diener et al., 1999), it remains an issue whether the current findings on the mediating role of SES in the intelligence–PWB relationship are generalizable to populations which are socioeconomically substantially different from our (Serbian) sample. Finally, it should be kept in mind that we employed a correlational design, precluding any definite conclusions about causal relationships. As noted by other researchers, the possibility exists that well-being could breed intelligence (Veenhoven & Choi, 2012): for instance, feeling happy and good about oneself could allow one to be more intellectually efficient and to build or come up with more intellectual resources.

These reservations notwithstanding, it remains a valuable finding of the present study that both academic and emotional abilities bear relevance for predicting PWB–the first acting primarily through SES, and the second adding uniquely to the prediction, specifically through knowledge about managing emotions. We hope that this finding will serve to inform the field of intelligence as much as that of well-being research.

Acknowledgments

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Appendix A

Table 1
Study variables' descriptive statistics and bivariate correlations, with internal consistencies[a] on the diagonal.

Variables and scores		Age	SES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	M (SD)	Range
Academic intelligence (AI)	1. Matrix Reasoning	−0.42**	0.30**	0.79														10.57 (3.41)	1–18
	2. Analogical Reasoning	−0.37**	0.47**	0.61**	0.92													16.18 (6.69)	0–28
	3. General Knowledge	−0.02	0.50**	0.48**	0.55**	0.85												18.04 (5.63)	3–27
	4. g-factor	−0.33**	0.50**	0.84**	0.87**	0.80**	–											0.00 (1.00)	−2.41–1.91
Emotional intelligence (EI)	5. Perceiving Emotions	−0.17**	0.00	0.17**	0.10	0.09	0.15*	0.92										0.45 (0.11)	0.11–0.64
	6. Using Emotions	−0.10	0.17*	0.22**	0.28**	0.18**	0.27**	0.47**	0.73									0.43 (0.09)	0.14–0.60
	7. Understanding Emotions	−0.16**	0.15	0.23**	0.34**	0.25**	0.33**	0.27**	0.30**	0.67								0.43 (0.08)	0.18–0.62
	8. Managing Emotions	−0.23**	0.21**	0.34**	0.41**	0.27**	0.41**	0.35**	0.42**	0.33**	0.77							0.30 (0.07)	0.14–0.48
	9. Global MSCEIT score	−0.24**	0.17*	0.33**	0.37**	0.25**	0.38**	0.78**	0.76**	0.63**	0.69**	0.89						0.40 (0.06)	0.22–0.53
Practical intelligence (PI)	10. Verbal	−0.10	0.28**	0.19**	0.26**	0.21**	0.26**	0.09	0.14*	0.19**	0.12	0.18**	0.16					2.72 (0.95)	0–4
	11. Quantitative	−0.10	0.09	0.04	0.09	0.14*	0.11	0.12	0.05	0.14*	0.04	0.12*	0.13*	0.33				0.95 (0.89)	0–4
	12. Figural	−0.07	−0.06	0.13*	0.21**	0.20**	0.22**	0.03	0.02	0.01	0.11	0.06	0.04	0.08	0.01			0.89 (0.82)	0–3
	13. Global STAT-P score	−0.15*	0.19*	0.19**	0.30**	0.29**	0.31**	0.13*	0.12	0.19**	0.14*	0.20**	0.66**	0.65**	0.56**	0.34		4.56 (1.66)	0–9
Psychological well-being (PWB)	14. Global RSPWB score	−0.33**	0.29**	0.40**	0.39**	0.31**	0.44**	0.25**	0.23**	0.32**	0.47**	0.42**	0.18**	0.07	0.10	0.19**	0.74	5.38 (0.55)	3.33–6.61

[a] $N = 241–282$ for internal consistency; Cronbach's alpha for AI and PWB, and Split-half for EI and PI; $N = 257–272$ for zero-order correlations.
* $p < 0.05$.
** $p < 0.01$.

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