Araştırma Makalesi / Research Article

Investigation the Association Between Hope and Emotional Intelligence on University Students¹

Üniversite Öğrencilerinin Umut ve Duygusal Zekâları Arasındaki İlişkilerinin İncelenmesi

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- 1.hope
- 2.agency
- 3.pathways
- 4.emotional intelligence
- 5.university students

Anahtar Kelimeler

- 1.umut
- 2.eyleyici düşünce
- 3.alternatif yollar düşüncesi
- 4.duygusal zeka
- 5. üniversite öğrencileri

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Abstract

Purpose: Hope is one of the vital constructs that are related to an array of important emotional characteristics. Despite emotional intelligence encompasses a number of emotion-related self-efficacies such as social competence or emotionality, the link between hope domains and dimensions of emotional intelligence is yet to be explored. Thus, the current study aimed to examine the link between hope and emotional intelligence, an important concept that has a critical impact on individuals' well-being.

Design/Methodology/Approach: 143 undergraduate and postgraduate students were recruited from the United Kingdom and administered the Adult Dispositional Hope Scale, a short form of trait emotional intelligence questionnaire, and a short-form of the personality scale.

Findings: Correlation analyses demonstrated the significant and positive relationship between agency/pathways and factors of emotional intelligence. Moreover, regression analyses demonstrated that the agency uniquely explains a significant amount of variance in the well-being dimension of emotional intelligence while pathways accounted for a significant amount of variance in the dimension of sociability beyond age, gender, and personality traits.

Highlights: Agency is a more well-being-related component while pathways is the social aspect of hope.

Ö

Çalışmanın amacı: Umut, duygusal karakter özellikleri ile ilişkili olan önemli bir kavramdır. Duygusal zekâ, duyguların ifadesi ve duyguların algılanması gibi duygularla ilişkili önemli öz-yeterlilikleri kapsamasına rağmen, umut alt ölçekleri (eyleyici düşünce ve alternatif yollar düşüncesi) ile ilişkisi henüz araştırılmamıştır. Bu çalışma, umut alt ölçekleri (eyleyici düşünce ve alternatif yollar düşüncesi) ile bireylerin iyi oluşları üzerinde kritik etkiye sahip bir kavram olan duygusal zekâ faktörleri arasındaki ilişkiyi incelemeyi amaçlamıştır.

Materyal ve Yöntem: Bu çalışma Birleşik Krallık 'tan 143 lisans ve yüksek lisans öğrencisi ile yapılmıştır. Katılımcılar, umut ölçeği, duygusal zekâ anketi ve kişilik testini cevaplamıştır.

Bulgular: Korelasyon analizlerinin sonuçlarında umut alt ölçekleri ve duygusal zekâ faktörleri arasında pozitif ve anlamlı bir ilişki bulunmuştur. Buna ek olarak regresyon analizlerine göre, yaş, cinsiyet ve kişilik özelliklerinin etkisi kontrol edildiğinde, eyleyici düşüncenin iyi oluş faktörünü, alternatif yollar düşüncesinin ise sosyallik faktörünü anlamlı olarak yordadığı belirlenmiştir.

Önemli Vurgular: Sonuçlar değerlendirildiğinde, eyleyici düşüncenin daha çok iyi oluş üzerinde, alternatif yollar düşüncesinin ise daha çok sosyal değişkenler üzerinde etkisi olabileceği tartışılmıştır.

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INTRODUCTION

The positive psychology movement prompted the proposal of vital human characteristics that contributes to an array of positive life outcomes. Emotional intelligence is surely one of these characteristics and linked to individuals' well-being. Emotional intelligence refers to unique mental abilities to recognize and identify the feelings of oneself and others, differentiating one's emotions, and using this information to guide thoughts and actions (Davies, Stankov, & Roberts, 1998). The construct plays a vital role in human relations as emotional intelligence is related to emotional sensitivity and involves processing emotion-related information (Salovey & Mayer, 1990). A growing body of research documented the relationship between emotional intelligence and a number of positive life outcomes including self-esteem and less perceived stress (Villanueva et al., 2020), academic achievement (Halimi, AlShammari & Navarro, 2020), social support, and less worry (Zysberg & Zisberg, 2020), and subjective well-being (Di et al., 2020). Moreover, previous research provided evidence that EI is a more powerful predictor than IQ on pivotal constructs, such as career success (de Haro Garcia & Castejon Costa, 2014) and perhaps surprisingly, academic performance (Ferrando et al., 2011).

Despite the consensus on the importance of emotional intelligence on important life outcomes, no agreement has been reached on the definition and assessment tools for the concept. One school proposed that emotional intelligence is an aspect of cognitive abilities and it should be assessed with maximum performance tests (ability EI). Another school put forth that emotional intelligence is an aspect of personality and it is to assess with typical performance tests (trait EI). In this regard, the current work adopts the perspective proposed by TEI theory (Petrides & Furnham, 2000a), which conceptualizes EI as an array of emotional personality dispositions regarding how individuals manage others' and their own emotions, regulate them to cope with stressful and emotional life challenges (Fiorilli et al., 2020; Petrides et al., 2007). One notable aspect of TEI theory is the unification of the emotional-motivational factors of personality under a single unified concept. The model presents global trait EI as comprising of four emotion-related factors (well-being, self-control, emotionality, and sociability) and fifteen emotional-motivational facets (e.g. adaptability, assertiveness, emotion appraisal). Such factors and facets refer to both individuals' own and their perception of others' emotional experiences.

As capturing wide research attention, a growing body of literature documented the relationship between trait emotional intelligence (TEI) and negative psychological constructs including low anxiety and depression (Chirumbolo et al., 2020) and various positive psychology concepts including job satisfaction and organizational trust (Li et al., 2018), work performance (Hjalmarsson & Dåderman, 2020), college adjustment (Krajniak et al., 2018), adaptive coping (O'Connor, Nguyen & Anglim, 2017) empathy (Khan, Niazi & Rashdi, 2016), and specifically hope (DiFabio et al., 2018).

Hope is a goal-oriented concept that helps individuals to achieve desired goals through thinking patterns such as "I can achieve my goals" (agency) and "I can find a way to attend my goals" (pathways) (Snyder et al., 1991). Similar to EI, the concept of hope is impactful on vital life outcomes. For instance, a growing body of research demonstrated that increased levels of hope is associated with greater levels of resilience (Sadeghi, Barahmand & Roshannia, 2020), subjective well-being (Xiang et al., 2020), mental health (Frankham, Richardson & Maguire, 2020), life goals (Korkmaz and Önder, 2019), and decreased levels of depression (Kaleta & Mróz, 2020) and anxiety (Karababa, 2020). As both of the concepts are similarly related to important life outcomes, both hope and emotional intelligence have theoretical and empirical similarities as well. For instance, theoretically, the agency is the motivational aspect of hope conveying the perceived capacity to achieve the desired goals while pathways refers to the perceived ability to generate routes towards the targeted goal (Snyder et al., 1991). Likewise, emotional intelligence refers to reach one's daily or social goals using emotion-related information and encompasses motivational personality dispositions. Empirically, longitudinal studies presented that hope uniquely predicted academic achievement controlling for the effect of previous academic performance, personality, and more importantly IQ (Day et al., 2010). Given theoretical and empirical convergence between the concepts, a number of studies examined the relationship between hope and global trait emotional intelligence (Batool, Niazi & Ghayas, 2014; DiFabio et al., 2018; Khodarahimi, 2015; Lee & Hwang, 2016; Sarıcam, Celik, & Coşkun, 2015). These studies are surely significant in terms of dismantling the relationship between hope and emotional intelligence, yet, to date, no studies previously examined the link between hope and the concept of EI in dimensional level (well-being, self-control, emotionality and sociability) as conceptualized in TEI theory. Thus, such a study will close the gap in the literature in several ways. First, such a study would demonstrate whether there is a relationship between hope components and dimensions of emotional intelligence. Second, TEI is an integrative theory that combines important aspects of emotion-related traits into a unified construct. Such aspects include individuals' tendencies toward emotion-related capacities, such as impulsiveness, emotion perception, etc. To this end, testing the association between hope and emotional intelligence in dimensional levels reveals whether perceived goal attainment abilities is associated with the perception of emotion-related capacities. Thus, a study exploring the association between EI and hope might be fruitful to answer such questions.

Control Variable: Big-Five Personality Traits

As noted, emotional intelligence (EI) is considered as emotion-related self-efficacies under the hierarchy of personality traits. Considering such theoretical convergence, empirical studies also attempted to investigate the link between emotional intelligence and Big-Five personality traits. In such studies, particularly neuroticism and extraversion consistently were reported as the strongest determinants for global EI scores (e.g. Vernon, Villani, Schermer, & Petrides, 2008). Due to the strong association

between the variables, the current study will control the effect of personality traits in examining the relationship between hope components and factors of emotional intelligence.

Research Questions

As mentioned, a growing body of research documented the significant link between EI and various other important concepts. However, no studies per see explored the association between agency-pathways and dimensions of EI. Thus, this study targeted to explore whether the factors of hope explain a significant amount of variance in emotional intelligence dimensions controlling for the effect of demographic variables and personality traits. To this end, the research questions include:

Research Question 1: Is there a relationship between hope components and trait EI factors?

Research Question 2: Which components of hope predict specific factors of trait EI beyond those of age, gender, and the Big Five personality traits?

METHOD/MATERIALS

Participants

143 undergraduate and postgraduate students from the University of Leicester Psychology Department (12.7 % male and 87.3% female) participated in the study and ranged in age between 18 and 34 years (M= 19.97 ±2.41).

Measures

Adult Dispositional Hope Scale (ADHS)

ADHS is a 12-item self-report questionnaire that the items are scored using an 8-point rating scale (1=Definitely false, 8=Definitely true) and devised to assess the hope levels of individuals (Snyder et al., 1991). The scale comprised two factors: agency (e.g. "I meet the goals that I set for myself") and pathways (e.g. "There are lots of ways around any problem"). Agency and pathways subscale scores are obtained via the sum of the associated items and the sum for agency and pathways subscales gives a total hope score. Regarding the psychometric properties of the scale, previous studies have established good and acceptable levels of reliability for Cronbach's α coefficients for the total hope score of the measure, ranging from .74 to .80 for six different samples of undergraduate students and two different samples with mental health problems. Test-retest correlations revealed .80 above over a ten-week interval (Snyder et al., 1991).

TEIQue-SF

TEIQue-SF is a 30-item questionnaire based on a 7-point Likert scale (1=Strongly disagree, 7=Strongly agree) and developed to measure global trait EI and 4 dimensions of emotional intelligence (well-being, self-control, emotionality, sociability) (Petrides & Furnham, 2006b). The example items include "I believe I am full of personal strengths" for well-being, "I'm usually able to find ways to control my emotions when I want to" for self-control, "I often pause and think about my feelings" for emotionality, and "I would describe myself as a good negotiator" for sociability. The sum for the total item scores yields a global trait EI score and higher scores on the dimensions yield higher levels of perceived emotion-related self-efficacies. Previous studies revealed good and acceptable levels of reliability for Cronbach's α coefficients, i.e. .84 for the global trait emotional intelligence, .83 for well-being, .72 for self-control, .74 for emotionality, and .70 for sociability (Laborde, Allen, & Guillen, 2016).

Short Five

Short Five is a 60-item inventory based on a 7-point Likert scale (-3=completely disagree, 0= neutral, +3=completely agree) and devised to evaluate the aspects of personality identified by NEO PI-R, including neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Konstabel et al., 2012). Example item for measuring the trait "Extraversion" is exemplified by the question "I am optimistic and mostly in good spirits. Sometimes I am exuberantly happy", as a positively keyed item, and "I am a serious rather than a cheerful person. I have rarely been overflowing with joy" is a negatively keyed item. The factor scores are obtained via the sum of the associated item scores after reversing the negatively keyed items. The current study reports Cronbach's alpha ranging from .76 to .88 for the personality traits. Previous studies have established good and acceptable levels of reliability for Cronbach's α coefficients for the subscales of the measure, i.e. Neuroticism (.87-); Extraversion (.89); Openness to Experience (.78-); Agreeableness (.74); and Conscientiousness (.85) (Konstabel et al., 2012).

Procedure

The students voluntarily participated in the study through the University of Leicester EPR system that is an online portal in which participants partake in the studies exchange of additional course credit. Consent forms and the mentioned questionnaires were collected via the online portal. The study procedure was approved by the University of Leicester's School of Psychology Ethics Board before commencement (28/11/2014, hb214-6f10).

Data Analysis

All analyses were conducted using SPSS version 22. In order to determine the relationship between the main study variables, Pearson Product-Moment correlation analysis was conducted. Hierarchical multiple regression was also performed to evaluate the predictor roles of agency and pathways in dimensions of EI excluding the effect of demographics and personality traits. For each regression model, in Step 1, demographic variables were entered into the models while personality traits were included in Step 2. Finally, hope components were entered in Step 3 in order to evaluate the unique variance accounted by agency and pathways in dimensions of emotional intelligence.

FINDINGS

Prior to conducting main analyses, descriptive statistics and Cronbach's alphas for each variable was examined. As Table 1 indicates, no severe violations of the normal hypotheses were encountered in terms of skewness and kurtosis values (West, Finch & Curran, 1995) and Cronbach's α coefficients for main variables were good, ranging from .73 to .87. In terms of regression models, tolerance levels (>.10) and VIF values (<10) for the subscales revealed no multicollinearity issues (Kutner, Nachtsheim, Neter, & Li, 1996).

Table 1. Descriptive statistics for the dimensions of hope, emotional intelligence, and personality

	α	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Agency	.76	11.	32	23.28	4.07	-0.08	-0.12
Pathways	.74	13	32	23.34	3.69	-0.10	0.25
El Wellbeing	.86	2.33	7	5.19	1.00	-0.49	-0.13
EI Self-control	.73	1.83	6.67	4.26	.96	-0.07	-0.15
El Emotionality	.73	2.63	6.88	5.09	.88	-0.25	-0.28
El Sociability	.74	2.33	6.67	4.78	.91	-0.16	-0.32
Neuroticism	.87	-32	29	-7.83	11.94	0.35	-0.33
Extraversion	.88	-24	35	10.20	11.55	-0.30	-0.14
Openness	.79	-10	35	14.797	9.94	-0.32	-0.48
Agreeableness	.76	-10	35	14.11	8.98	-0.17	-0.54
Conscientiousness	.82	-15	36	13.86	9.27	-0.07	0.00

Note. α = Cronbach's alpha; SD= Standard Deviation

Correlation Analyses

In order to test the relationship between main study variables, bivariate linear correlations were examined. As Table 2 demonstrates, correlation coefficients between the domains of hope and dimensions of emotional intelligence range between r= .59 to r=.31 demonstrating the medium to large effect between study variables (Cohen, 1988, 1992). In terms of the largest effect size, well-being is strongly associated with the agency while the same effect was found between sociability and pathways.

Table 2. Bivariate linear correlations between domains of hope and dimensions of emotional intelligence

	1	2	3	4	5	6
1.Agency	1					
2.Pathways	.68**	1				
3.Wellbeing	.59**	.49**	1			
4.Self-control	.40**	.41**	.61**	1		
5.Emotionality	.42**	.31**	.61**	.26**	1	
6.Sociability	.39**	.52**	.49**	.44**	.40**	1

Note. ** p < .01.

Regression Analyses

In terms of examining the predictive ability of hope components in dimensions of EI, four-step hierarchical multiple regression analyses were conducted. Demographic variables were included in the models in Step 1 while Big Five personality traits were

entered in Step 2. Finally, in Step 3, hope components were added into the models in order to evaluate the predictive role of agency and pathways in dimensions of EI.

As Table 3 demonstrates, in the final models, inclusion of agency and pathways indicated a significant change in R^2 in factors of emotional intelligence as both hope components together explained 9 % of the variance in well-being (ΔR^2 =.09, $\Delta F_{[2,132]}$ =13.34,p<.001); 3 % in self-control (ΔR^2 =.03, $\Delta F_{[2,132]}$ =3.56 p<.05; 4 % in emotionality, ΔR^2 =.04, $\Delta F_{[2,132]}$ =3.97 p<.05; 9 % in sociability, ΔR^2 =.09, $\Delta F_{[2,132]}$ =11.81 p<.001). As the table shows, agency accounted for the significant amount of variance in well-being (θ =.31, p <.001) only, while pathways was the only predictor for the factor of sociability (θ =.41, p <.001).

DISCUSSION

Hope is a positive psychological construct that is impactful on vital life outcomes, particularly emotional intelligence. In order to better understand the construct hope and its components, this study intends to test the predictive ability of hope components on the dimensions of emotional intelligence (EI). To this end, the present study demonstrated a) significant and positive associations between all factors of emotional intelligence and both agency and pathways b) agency predicted a significant amount of variance in well-being and pathways in sociability. Concerning the correlational analyses, well-being yielded the largest effect size with the agency, while the same effect was found between pathways and sociability.

The main analyses of the study are derived from hierarchical multiple regression and the analyses demonstrated that agency uniquely explained for a significant amount of variance in the well-being dimension of emotional intelligence. Essentially, such finding is congruent with the literature as previous studies documented that an individual's perceived capacity to achieve desired goals (agency) is linked with greater well-being (MacLeod & Conway, 2007). Literature also documented that agency inflates a stronger association with subjective well-being in comparison with pathways thinking (Burrow, O'Dell, & Hill, 2010; Lu & Hsu, 2013; Shenaar-Golan, 2017). Furthermore, such results are compatible with the conceptualizations of the factor of well-being. Theoretically, the factor of well-being conveys a general evaluation of past achievements and future expectations (Goekcen, Furnham, Mavroveli, & Petrides, 2014). Likewise, the agency yields the general evaluation of one's ability to attain targeted goals irrespective of adversities (Snyder et al., 2006). To this end, both agency and well-being are grounded on the expectation that identified goals will be attained. Taken together, relevant literature and the current study highlight that the agency might be a stronger predictor for well-being compared to the pathways thinking.

Concerning the pathways, regression analyses demonstrated that pathways uniquely explained a significant amount of variance in the sociability factor of trait emotional intelligence. Essentially, findings are congruent in terms of the theoretical framework of the constructs. For instance, as a factor of emotional intelligence, sociability aligns with the ability to socialize and communicate with others. In terms of the operalization of the subscale, trait sociability is composed of dispositions such as emotion management, and social awareness (Cooper & Petrides, 2010). Social awareness conveys the emotional dispositions to feel comfortable within social context and individuals who have strong social awareness skills are able to adapt better to different situations as they are more aware of the requirement of different conditions. Likewise, pathways component of hope involves in producing alternative or new ways when the original route is no longer available. In this regard, such findings indicate that people with the ability to produce alternative routes to attain targeted goals during goal blockage also show greater skills in social awareness. Likewise, emotion management of others conveys one's ability to get people to act in a way that helps one achieve an identified goal (Austin & Vahle, 2016). Similarly, pathways thinking refers to an individual's ability to access means that enable them to attain the desired goals. (Snyder, McDermott, Cook, & Rapoff, 2002). In this regard, the findings demonstrate that individuals perceive that goals are attainable by a number of plausible routes through emotion management of others.

Table 3. Regression analyses between domains of hope and emotional intelligence

В	β	t	Sig	В	β	t	Sig	
0.07	0.16	1.05	0.054	0.02	0.04	0.46	0.642	
							0.022	
-0.27	-0.03	-1.07	0.264	-0.55	-0.19	-2.32	0.022	
0.03	0.08	1.16	0.247	-0.01	-0.01	-0.19	0.846	
-0.10	-0.03		0.608	-0.23	-0.08		0.236	
							0.000	
							0.894	
							0.449	
							0.201	
							0.102	
0.01	0.07	1.07	0.267	0.01	0.11	1.64	0.102	
0.03	0.07	1 13	0.259	-0.01	-0.02	-0.28	0.779	
-0.05	-0.02		0.808	-0.18	-0.06		0.338	
							0.000	
							0.652	
							0.814	
							0.381	
							0.389	
							0.178	
0.02			0.353	0.02			0.329	
В		t	Sig	В		t	Sig	
		2.28				3.59	0.000	
0.25	0.09	1.11	0.269	-0.54	-0.20	-2.46	0.015	
0.04	0.11	1 50	0 135	0.07	0.20	2.70	0.006	
							0.078	
-0.01	-0.11		0.175	-0.02	-0.22		0.006	
0.02	0.28		0.001	0.03	0.31		0.000	
0.02	0.20		0.021	0.01	0.05		0.561	
0.01	0.13	1.62	0.107	-0.03	-0.27	-3.53	0.001	
0.01	0.09	1.25	0.214	0.02	0.17	2.34	0.021	
0.04	0.11	1.45	0.149	0.07	0.18	2.81	0.006	
0.28	0.11	1.44	0.150	-0.20	-0.07	-1.10	0.272	
-0.01	-0.07	-0.80	0.422	-0.01	-0.12	-1.65	0.100	
0.02	0.22	2.49	0.014	0.03	0.32	3.90	0.000	
0.01	0.15	1.80	0.074	-0.01	-0.03	-0.39	0.695	
0.02	0.16	2.04	0.043	-0.02	-0.21	-2.92	0.004	
							0.000	
0.01 0.04	0.03 0.17	0.41 1.62	0.678 0.107	0.01 -0.03	0.13 -0.12	1.88 -1.19	0.062 0.234	
•	0.07 -0.27 0.03 -0.10 -0.03 0.02 0.01 0.01 0.03 -0.05 -0.02 0.02 0.02 0.01 -0.01 0.08 0.02 B 0.07 0.25 0.04 0.24 -0.01 0.02 0.02 0.01 0.01 0.04 0.28 -0.01 0.02 0.01 0.02 0.01	B β 0.07 0.16 -0.27 -0.09 0.03 0.08 -0.10 -0.03 -0.03 -0.34 0.03 0.30 0.02 0.20 0.01 0.02 0.01 0.07 0.03 0.07 -0.05 -0.02 -0.02 -0.28 0.02 0.20 0.01 -0.03 0.08 0.31 0.02 0.08 Emotion B β 0.07 0.20 0.25 0.09 0.04 0.11 0.02 0.28 0.02 0.20 0.01 0.13 0.01 0.09 0.04 0.11 0.02 0.28 0.02 0.20 0.01 0.13 0.01 0.09 0.04 0.11 0.09 0.04 0.11 0.09 0.09 0.04 0.11 0.09 0.09 0.004 0.11 0.09 0.004 0.11 0.009 0.004 0.11 0.009 0.004 0.11 0.009 0.004 0.11 0.009 0.004 0.11 0.009	0.07	B β t Sig 0.07 0.16 1.95 0.054 -0.27 -0.09 -1.07 0.284 0.03 0.08 1.16 0.247 -0.10 -0.03 -0.51 0.608 -0.03 -0.34 -4.73 0.000 0.03 0.30 3.88 0.000 0.02 0.20 2.70 0.008 0.01 0.02 0.32 0.742 0.01 0.07 1.07 0.287 0.03 0.07 1.13 0.259 -0.05 -0.02 -0.24 0.808 -0.02 0.20 2.64 0.009 0.02 0.20 2.64 0.009 0.02 0.14 1.98 0.050 0.01 0.07 1.04 0.298 -0.01 0.07 1.04 0.298 -0.01 0.07 1.04 0.682 0.08 0.31 3.43 0.001 0.02 0.08 0.93 0.353 Emotionality B β t Sig 0.07 0.20 2.28 0.024 0.25 0.09 1.11 0.269 0.04 0.11 1.50 0.135 0.24 0.09 1.22 0.224 -0.01 -0.11 -1.36 0.175 0.02 0.28 3.27 0.001 0.02 0.20 2.33 0.021 0.01 0.01 0.03 1.62 0.107 0.00 0.28 0.11 1.45 0.149 0.28 0.11 1.44 0.150 -0.01 -0.07 -0.80 0.422 0.02 0.22 2.49 0.014 0.01 0.15 1.80 0.074	B β t Sig B 0.07 0.16 1.95 0.054 0.02 -0.27 -0.09 -1.07 0.284 -0.55 0.03 0.08 1.16 0.247 -0.01 -0.10 -0.03 -0.51 0.608 -0.23 -0.03 -0.34 -4.73 0.000 -0.05 0.03 0.30 3.88 0.000 0.01 0.02 0.20 2.70 0.008 0.01 0.01 0.02 0.32 0.742 -0.01 0.01 0.07 1.07 0.287 0.01 0.01 0.07 1.07 0.287 0.01 0.03 0.07 1.13 0.259 -0.01 0.03 0.07 1.13 0.259 -0.01 0.03 0.07 1.13 0.259 -0.01 0.02 0.28 -4.09 0.000 -0.05 0.02 0.28 -4.09	B β t Sig B β 0.07 0.16 1.95 0.054 0.02 0.04 -0.27 -0.09 -1.07 0.284 -0.55 -0.19 0.03 0.08 1.16 0.247 -0.01 -0.01 -0.10 -0.03 -0.51 0.608 -0.23 -0.08 -0.03 -0.34 -4.73 0.000 -0.05 -0.62 0.03 0.30 3.88 0.000 0.01 0.01 0.01 0.02 0.20 2.70 0.008 0.01 0.06 0.01 0.02 0.32 0.742 -0.01 -0.09 0.01 0.07 1.07 0.287 0.01 0.11 0.03 0.07 1.13 0.259 -0.01 -0.02 -0.05 -0.02 -0.24 0.808 -0.18 -0.06 -0.02 -0.28 -4.09 0.000 -0.05 -0.57 0.02	B β t Sig B β t 0.07 0.16 1.95 0.054 0.02 0.04 0.46 -0.27 -0.09 -1.07 0.284 -0.55 -0.19 -2.32 0.03 0.08 1.16 0.247 -0.01 -0.01 -0.19 -0.10 -0.03 -0.51 0.608 -0.23 -0.08 -1.19 -0.03 -0.34 -4.73 0.000 -0.05 -0.62 -8.38 0.03 0.30 3.88 0.000 0.01 0.01 0.01 0.13 0.02 0.20 2.70 0.008 0.01 0.06 0.75 0.01 0.02 0.32 0.742 -0.01 -0.09 -1.28 0.01 0.07 1.07 0.287 -0.01 -0.11 1.64 0.03 0.07 1.13 0.259 -0.01 -0.02 -0.28 -0.05 -0.02 -0.24 0.808 </td	

Limitations

The present study offers noble findings in terms of understanding the relationship between two vital positive psychological characteristics. However, there are a few limitations to note. First, the cross-sectional and correlational nature of the study might restrict the generalizability of the results. In order to propose a causal relationship, future studies should aim for longitudinal and

experimental designs. Furthermore, participants were only recruited from the University of Leicester. Thus, future studies should aim to recruit more diverse samples in order to support the generalizability of the results. Finally, social desirability concerns might have affected the responses due to the self-report nature of the questionnaires. Thus, using observed scales or psychophysiological measures might reduce the response biases.

CONCLUSION

The present study is crucial in dismantling the role of agency and pathways in contributing to pivotal constructs, such as well-being and social life outcomes. The main findings of the study speak that agency component of hope plays a key role in the levels of individuals' well-being while pathways component implicates in socio-emotional outcomes. Especially findings regarding the pathways and sociability are surprising and promising. In conclusion, such findings might point out that pathways contributes more to social outcomes while agency promotes more to well-being related concepts.

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Statements of publication ethics

I hereby declare that the study has no unethical issues and that research and publication ethics have been observed carefully.

Ethics Committee Approval Information

The current study procedure was approved by the University of Leicester Ethics Board before commencement. (28/11/2014, hb214-6f10)

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