

On the Micro-Foundations of Creative Economy: Life Satisfaction and Social Identity

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Abstract: Incorporating the unavoidable changes manifesting in the behavior of individuals as an outcome of evolution at the level of development of the economy and society, we pinpoint a new theoretical background requiring the reconfiguring of the micro-foundations of economic theory regarding the creative economy. We, thus, set the theoretical micro-foundations of the creative economy where the main microeconomic incentive lies in life satisfaction attainment rather than utility maximization. At the macroeconomic level, we propose the pairing of sustainability with the creative economy. The objective is met through the vehicle of social identity derived from the responses to a questionnaire distributed in Greek society. Through principal components analysis, we locate two sets of variables shaping life satisfaction; the exogenous influences within social identity (state of health, age, and level of education) and the endogenous primary influences within social identity (lending, cultural change, and happiness). Each one of these variables is determined by other interpretative variables. Furthermore, we observe a weakness of economic policy to influence life satisfaction in advanced Western societies resulting in a paradox of the economic toolkit. Our findings are relevant for policymaking to promote life satisfaction, especially within the creative economy context.

Keywords: Life Satisfaction; Social Identity Theory; Creative Economy; Microfoundations; Paradox of the Economic Toolkit; Principal Components Analysis

Sample Size Information

This study conducted field research within Greek society over 2 years (2019–2020) and used a sample size of 800 people each year. It was conducted by a survey bureau, a member of the European Society for Opinion and Market Research (ESOMAR), and the Market Research and Public Opinion Companies' Association (SEDEA), who conducted household interviews, using a printed questionnaire. The sample choice was made proportional to the population size sampling.

The total population of respondents comprised males and females who were over the age of 18, were from the urban and rural areas of the Greek mainland and islands and who had sufficient knowledge of the Greek language for the purpose of the interview. The results were analyzed according to the population's distribution of age and sex.

In total, 51% were female and 49% were male. Regarding age, 10% were 18–24 years old, 7% were 25–34 years old, 18% were 35–44 years old, 17% were 45–54 years old, 14% were 55–64 years old and 24% were 65 years old or older. Regarding education, 24% had attained primary education, 50% had attained high school education and 26% had attained tertiary education. Regarding occupation, 17% were freelance professionals; 3% were farmers, producers and stockbreeders; 36% were daily wage earners; 9% were unemployed; 8% were housewives; 6% were students; and 22% were pensioners.

1. The Variables of Social Identity

Name of Variable	Question	Scale of Answers and Quantification
1. <u>Degree of Life Satisfaction and Individual State</u>		
Happiness	In general, how happy would you say you are?	Perfectly Unhappy to Exceptionally Happy Scale from 0 to 10
Satisfaction	Overall, how satisfied are you with your life today?	Perfectly Dissatisfied to Exceptionally Satisfied Scale from 0 to 10
State of Health	How would you assess your current state of health?	Very good, good, average, poor, very poor 1,2,3,4,5 (respectively)
Security	Is it important for you to live in a safe environment?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all 1,2,3,4,5,6 (respectively)
2. <u>Identity Traits</u>		
2.1 <u>Basic Traits</u>		
Creativity	Is it important for you to be creative and have new ideas?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all 1,2,3,4,5,6 (respectively)
Equitability	Do you believe that all people in the world should be treated equally?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all 1,2,3,4,5,6 (respectively)

Inequality and the State	Do you agree that government must take measures to reduce the income gap?	Completely agree, agree, neither agree nor disagree, disagree, completely disagree.
		1,2,3,4,5 (respectively)
Megalothymia	Is it important for you to show your abilities?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Religiosity	Regardless of whether you belong to a specific religion, how religious would you say you are on a scale from 0 to 10?	Not religious at all to Extremely religious
		Scale from 0 to 10
Tradition	Is tradition important for you?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Adherence to rules	Do you believe that schools need to teach children to adhere to rules and to be disciplined?	Completely agree, agree, neither agree nor disagree, disagree, completely disagree.
		1,2,3,4,5 (respectively)
Acknowledgment of external values	Do you believe that people should do what they are told?	Very much so, yes, somewhat, a little, not so, not at all
		1,2,3,4,5,6 (respectively)
Having a good time	It is important for you to have a good time?	Very much so, yes, somewhat, a little, not so, not at all
		1,2,3,4,5,6 (respectively)
Lending	How difficult or easy would it be to borrow money?	Very difficult, difficult, somehow difficult, easy, very easy
		1,2,3,4,5, (respectively)
Family	The main priority in a person's life should be his family	Agree, probably agree, probably disagree, disagree
		1,2,3,4 (respectively)

2.2. Life Attitudes

Role of migrants	Do you believe that our culture is enriched by the presence of migrants in our country?	Agree, probably agree, probably disagree, disagree
		1,2,3,4 (respectively)
Role of the state	Do you agree with the following sentence? The less the state intervenes in the economy, the better for the country	Completely agree, agree, neither agree nor disagree, disagree, completely disagree.
		1,2,3,4,5 (respectively)
Cultural change	Overall, is the cultural life of Greece downgraded or enriched by people coming to live here from other countries?	Cultural life is downgraded to Cultural life is enriched
		Scale from 0 to 10

Altruism	Is it important for you to help others?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Environment	Do you firmly believe that it is important for people to take care of nature?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Trust	Generally speaking, would you say that we can trust people or we should always be cautious?	We should always be cautious to We can trust most people
		Scale from 0 to 10
Motive for wealth accumulation	Is it important for you to be wealthy?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Surprises	Do you enjoy surprises and experiencing new things?	Extremely so, yes, moderately so, a little, not so, not at all.
		1,2,3,4,5,6 (respectively)
Making decisions	Is it important for you to make decisions about the things you do?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Successful	Is it important for you to be successful?	Extremely so, yes it's important, it's somewhat important, a little, not important, not important at all
		1,2,3,4,5,6 (respectively)
Adventure-Seeking	Do you seek adventure and do you enjoy taking risks?	Extremely so, yes, moderately so, a little, not so, not at all.
		1,2,3,4,5,6 (respectively)
Political self-definition	How would you position yourself in politics?	Left to Right
		Scale from 0 to 10

3. Demographics

Income status	In which of the following categories does the total monthly income after tax of your household belong?	<700 euro, 701-1000 euro, 1001-1250 euro, 1251-1500 euro, 1501-1750 euro, 1750 -2000 euro, 2001-2500 euro, 2501-3000 euro, 3001-4000 euro, 4001 euro and over
		1,2,3,4,5,6,7,8,9,10 (respectively)
Age	In what age category do you fall under?	18-24, 25-34, 35-44, 45-54, 55-64, 65+ years of age
		1,2,3,4,5,6 (respectively)

Level of education	What is the highest level of education you have attained?	Attended some primary school, graduated from primary school, three years of high school, graduated from six years of high school/lyceum, graduated from technical school /vocational training Institute, graduated from technical college, graduated from tertiary education, completed postgraduate studies 1,2,3,4,5,6,7,8 (respectively)
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2. Social Identity (2019-2020)

2.1 The Results of the Principal Components Analysis

Importance of components:										
	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Standard deviation	2.1106	1.8255	1.40989	1.22613	1.11699	1.07993	1.0442	1.01532	0.99831	0.95815
Proportion of Variance	0.1536	0.1149	0.06854	0.05184	0.04302	0.04022	0.0376	0.03555	0.03437	0.03166
Cumulative Proportion	0.1536	0.2685	0.33705	0.3889	0.43192	0.47213	0.5097	0.54528	0.57965	0.6113
	PC11	PC12	PC13	PC14	PC15	PC16	PC17	PC18	PC19	PC20
Standard deviation	0.93265	0.89515	0.87455	0.87411	0.855	0.82838	0.81562	0.79957	0.78536	0.7615
Proportion of Variance	0.02999	0.02763	0.02637	0.02635	0.0252	0.02366	0.02294	0.02205	0.02127	0.02
Cumulative Proportion	0.6413	0.66893	0.6953	0.72165	0.7469	0.77052	0.79346	0.8155	0.83677	0.8568
	PC21	PC22	PC23	PC24	PC25	PC26	PC27	PC28	PC29	
Standard deviation	0.75662	0.7344	0.72572	0.70966	0.67869	0.6529	0.63573	0.60749	0.59296	
Proportion of Variance	0.01974	0.0186	0.01816	0.01737	0.01588	0.0147	0.01394	0.01273	0.01212	
Cumulative Proportion	0.87651	0.8951	0.91326	0.93063	0.94651	0.9612	0.97515	0.98788	1	

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Happiness	-0.12952	0.033403	-0.16451	0.524409	-0.00532	0.178467	-0.0913	0.059431	0.039245	0.041173
Security	-0.02039	-0.26264	-0.17123	-0.14759	-0.0445	0.242466	-0.04606	0.194899	-0.27665	0.206976
Creativity	0.308159	-0.12151	0.003173	-0.06971	-0.00019	0.015605	0.088515	-0.15132	-0.04799	-0.15767
Equitability	0.104229	-0.18248	-0.35733	-0.08238	-0.24433	0.015406	-0.00259	0.058404	-0.00633	-0.11347
Inequality	0.009718	-0.11334	-0.36778	0.128164	-0.07356	-0.19854	-0.02103	-0.12651	0.342035	0.322511
Megalothymia	0.262607	-0.1679	0.115393	0.087789	0.299333	0.086346	0.065179	0.049442	-0.06812	0.225854
Religiosity	0.212614	0.232888	-0.20063	0.140017	-0.04585	0.185762	-0.09981	0.057363	-0.08558	-0.04161
Tradition	-0.13772	-0.38568	-0.0443	-0.11649	0.054727	0.084391	0.027146	-0.03146	-0.09598	-0.05435
Adherence to rules	-0.13264	-0.30736	0.040418	-0.16464	0.273386	-0.0283	0.033068	-0.114	0.116522	0.088749
Acknowledgment of external values	-0.09441	-0.15947	0.142003	0.245967	0.24951	-0.27264	-0.26682	-0.03911	-0.14072	-0.1282
Having a good time	0.261574	-0.17979	0.110055	0.190947	-0.02215	0.07269	0.008739	0.168008	0.045881	0.049035
The role of migrants	0.149788	0.192302	-0.29773	-0.09972	0.441788	-0.10377	0.162145	0.13757	-0.0884	-0.06324
Role of state	0.038204	-0.06126	-0.00189	0.24371	0.230576	-0.40798	-0.37556	-0.23723	-0.10738	-0.15045

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Cultural change	-0.12793	-0.24318	0.22443	0.220968	-0.43628	0.162882	-0.11747	-0.1488	0.063754	0.122415
Altruism	0.018659	-0.18284	-0.30192	-0.04331	0.02431	-0.18358	-0.22732	-0.03101	0.215007	0.367603
Environment	0.077431	-0.23729	-0.35633	-0.05776	-0.06117	0.083181	-0.08786	0.029763	-0.12509	-0.25372
Trust	-0.0807	0.036026	-0.0664	0.126114	0.20286	0.521899	0.046273	-0.50659	0.036891	-0.09419
Motive for wealth accumulation	0.241482	-0.12215	0.215324	0.230666	0.054764	0.027991	0.014068	0.20363	0.046734	0.23756
Surprises	0.290249	-0.15284	0.015928	0.030591	-0.06874	-0.11102	0.139516	-0.21445	0.046168	-0.2022
Makes decisions	0.206802	-0.19548	-0.18635	0.130814	-0.11905	0.029254	-0.09067	0.127154	-0.10663	-0.37111
Successful	0.264283	-0.16491	0.131556	0.073886	0.259176	0.201996	0.174728	0.120609	0.013864	0.141477
Seeks adventure	0.320091	-0.08053	0.13129	0.153977	-0.11854	-0.0902	0.094408	-0.04245	0.179946	-0.14249
Political self-definition	0.099598	0.213657	-0.28652	0.1791	0.096323	0.088367	0.120569	-0.08419	0.279085	0.107562
State of health	0.26235	0.038532	0.088548	-0.29861	-0.13872	-0.12004	-0.00411	-0.30065	-0.10524	0.180009
Income status	-0.11202	-0.0531	-0.07479	0.166952	-0.17847	-0.34154	0.510567	0.188581	-0.19595	0.107212
Age	0.310029	0.106155	0.022592	-0.17061	-0.14506	-0.05956	-0.06684	-0.27664	0.058428	0.122228
Level of education	-0.15519	-0.13708	0.042272	0.045166	0.037404	-0.08953	0.412614	-0.04578	0.460609	-0.32064
Ledings	-0.07874	-0.03191	-0.1223	0.249215	-0.02416	-0.0855	0.362809	-0.41664	-0.50848	0.180684
Family	-0.14278	-0.3217	-0.03151	-0.16767	0.173243	0.050698	0.048685	-0.07508	0.097715	0.008918

	PC11	PC12	PC13	PC14	PC15	PC16	PC17	PC18	PC19	PC20
Happiness	-0.10538	-0.21075	0.218798	0.024793	0.086505	0.020566	0.293821	-0.55789	-0.00409	-0.07371
Security	0.07759	0.464509	-0.30726	0.097465	-0.05509	-0.21174	0.005247	-0.32413	-0.19647	-0.10626
Creativity	0.094185	-0.15313	0.091158	-0.00313	-0.05963	0.127069	-0.29965	-0.2441	-0.26063	0.294798
Equitability	-0.07839	0.093485	-0.04599	-0.02471	0.139473	0.662732	-0.19531	-0.09496	0.293101	-0.17539
Inequality	-0.14476	-0.02331	-0.27643	0.149971	-0.53565	-0.01209	0.156937	0.049843	0.000645	0.084331
Megalothymia	0.126677	-0.10548	-0.05396	0.229311	-0.15814	0.183179	-0.13864	-0.01958	0.383444	0.027825
Religiosity	-0.12362	0.178857	0.095916	-0.0301	-0.12813	-0.13933	-0.32132	-0.01861	-0.10848	-0.12986
Tradition	0.047381	-0.07597	0.192455	-0.03069	-0.01732	-0.16939	0.10395	-0.05034	-0.03635	-0.03483
Adherence to rules	-0.19101	-0.00784	0.110547	-0.07932	-0.18038	0.233733	0.083801	0.081907	-0.29252	0.185487

Acknowledgment of external values	-0.50714	0.031232	-0.11593	-0.18674	-0.10155	-0.13565	-0.37403	0.006313	0.132377	-0.26182
Having a good time	-0.12093	0.241532	-0.16618	-0.12197	0.228454	0.003312	0.131969	0.311277	-0.26386	-0.01574
The role of migrants	-0.10673	-0.11809	-0.07813	-0.13966	0.083918	-0.01487	0.120376	-0.19283	-0.1148	0.063088
Role of state	0.508225	0.364503	0.062796	0.065155	0.015307	0.096957	0.174205	-0.054	0.032855	0.027249
Cultural change	0.089824	-0.035	0.096087	-0.01588	-0.04314	-0.00097	-0.12864	0.026932	-0.03478	0.010094
Altruism	0.142715	-0.28102	-0.12045	-0.14616	0.577982	-0.18969	-0.19047	0.067164	-0.02115	-0.00095
Environment	-0.0445	-0.01776	0.245851	0.090234	-0.06681	-0.42157	-0.03259	0.16168	0.373822	0.359707
Trust	0.133406	-0.0024	-0.33622	-0.4535	-0.02336	-0.00356	0.006288	0.050807	0.158195	0.061184
Motive for wealth accumulation	-0.14128	0.202551	0.12876	-0.25316	0.094097	0.083088	-0.01651	-0.13277	0.072733	0.490805
Surprises	0.160014	-0.12594	-0.18039	0.091976	-0.05832	-0.12313	-0.22322	-0.19682	-0.27669	-0.11049
Makes decisions	-0.06228	-0.09713	-0.05773	-0.15821	-0.02273	0.132699	0.390854	0.291489	-0.1293	-0.06242
Successful	0.154726	-0.1059	0.046879	0.175986	0.007382	-0.09314	0.113402	0.163065	0.196002	-0.38042
Seeks adventure	-0.05909	-0.17991	0.021031	0.035251	-0.0311	-0.18206	0.068087	-0.07693	-0.04136	-0.10252
Political self-definition	0.088765	0.306593	0.431204	-0.01023	-0.04155	-0.01074	-0.20073	0.246982	-0.15211	-0.09712
State of health	-0.17009	0.177642	0.175082	-0.20125	0.018681	-0.0969	0.196914	-0.15011	0.208307	-0.00428
Income status	0.278266	-0.01334	0.015845	-0.50884	-0.19827	-0.07985	-0.04949	-0.00484	0.111428	-0.09111
Age	-0.15843	0.064308	0.042868	-0.10515	0.027246	-0.05471	0.24695	-0.11154	0.098443	-0.23282
Level of education	-0.12661	0.360809	-0.1375	0.171422	0.267745	-0.11872	0.019646	-0.1591	0.201734	0.048085
Ledings	-0.23351	0.002277	0.033438	0.328842	0.257678	0.059539	0.031504	0.174762	-0.106	0.059272
Family	-0.01875	0.039174	0.409129	-0.1387	-0.02382	0.056478	-0.02129	-0.07716	-0.12155	-0.32937

	PC21	PC22	PC23	PC24	PC25	PC26	PC27	PC28	PC29
Happiness	0.022415	0.05756	0.133966	0.078067	-0.22438	-0.00719	0.180095	0.083576	-0.02106
Security	0.053333	0.140425	0.108606	-0.17226	0.172584	0.003646	0.119097	-0.09706	-0.11519
Creativity	-0.20267	0.353858	0.0481	0.356274	0.268607	0.131464	0.153522	0.226429	-0.05396

Equitability	0.216787	-0.12897	0.110162	0.08087	0.055131	-0.07001	-0.06549	-0.03013	0.097692
Inequality	-0.06475	-0.03828	-0.1994	0.202399	0.106447	-0.0706	-0.01118	0.047774	0.079323
Megalothymia	-0.11128	0.128252	-0.11359	-0.15122	-0.33121	0.132111	-0.10132	-0.08141	-0.45292
Religiosity	-0.50199	-0.32529	0.13871	0.019253	-0.13579	-0.06947	-0.37153	0.131897	0.01538
Tradition	0.251562	0.183768	-0.12618	0.187315	-0.09047	-0.2208	-0.66453	0.235084	0.004272
Adherence to rules	-0.04906	-0.11699	0.604042	-0.21623	-0.18992	0.068646	-0.01089	-0.00745	0.059211
Acknowledgment of external values	0.100069	0.234146	0.013448	0.018828	0.066569	0.014908	0.075274	-0.01038	0.049433
Having a good time	0.174073	-0.15285	-0.03229	0.486372	-0.29374	0.183939	0.09975	0.084446	-0.17831
The role of migrants	0.070577	-0.04162	-0.11547	0.114124	0.061497	0.324087	-0.2505	-0.47584	0.144654
Role of state	-0.044	-0.12237	0.071831	0.070418	0.072522	0.031252	-0.0772	-0.00432	0.031299
Cultural change	-0.10216	0.071743	-0.01056	0.040203	0.023965	0.405499	-0.21753	-0.49901	0.188608
Altruism	-0.17724	0.053901	0.082927	-0.09559	-0.00155	-0.06432	-0.01101	0.02588	-0.05605
Environment	0.126042	-0.17866	0.09063	0.00343	-0.06186	0.20715	0.232818	-0.00693	0.04108
Trust	0.049627	-0.07031	-0.00025	0.009363	0.075445	-0.06652	0.026882	0.010817	-0.0493
Motive for wealth accumulation	0.054456	-0.12966	-0.25213	-0.27594	0.193391	-0.17164	-0.07121	0.092908	0.248164
Surprises	0.218667	-0.14809	-0.18296	-0.26271	-0.43596	-0.12071	0.121684	-0.03815	0.306917
Makes decisions	-0.33619	0.329621	-0.13556	-0.31881	0.004392	-0.1053	0.008027	-0.08311	-0.02741
Successful	-0.10446	0.027855	0.216754	0.142444	0.218414	-0.05958	0.097669	0.046163	0.515179
Seeks adventure	0.206917	-0.25737	0.272401	-0.07062	0.414983	-0.2028	-0.12892	-0.22494	-0.44866
Political self-definition	0.29795	0.386317	0.01971	-0.13251	-0.01211	-0.05463	0.040959	-0.12097	-0.05536
State of health	-0.16043	0.147089	0.071356	0.23784	-0.25027	-0.35843	0.111954	-0.32548	0.020712
Income status	-0.05039	-0.00467	0.144733	-0.00114	-0.05933	0.09681	0.032929	0.102072	-0.05452
Age	0.108636	0.053066	0.001835	-0.26146	0.058494	0.539471	-0.12163	0.404363	0.01148

Level of education	-0.27805	0.117356	0.022963	-0.01347	-0.0461	0.068553	-0.09298	0.017582	0.001687
Ledings	-0.04053	-0.0826	-0.05893	-0.06494	0.116316	-0.0278	-0.01552	0.019084	-0.01826
Family	-0.20385	-0.33972	-0.44851	0.002547	0.13537	0.062652	0.25222	-0.03707	-0.17176

2.2 PC Regression Social Identity with depended variable Life Satisfaction 2019-2020 (1305x28)

Residuals:				
Min	1Q	Median	3Q	Max
-4.204	-0.2075	0.053	0.2726	3.0418

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-1.38E-16	1.63E-02	0	1	
PC1	-1.08E-01	7.72E-03	-13.98	< 2e-16	***
PC2	1.52E-02	8.92E-03	1.702	0.088983	.
PC3	-1.54E-01	1.16E-02	-13.372	< 2e-16	***
PC4	4.53E-01	1.33E-02	34.098	< 2e-16	***
PC5	-1.87E-02	1.46E-02	-1.282	0.199904	
PC6	1.66E-01	1.51E-02	10.974	< 2e-16	***
PC7	-5.72E-02	1.56E-02	-3.669	0.000253	***
PC8	9.44E-03	1.60E-02	0.588	0.556337	
PC9	4.99E-02	1.63E-02	3.06	0.002263	**
PC10	1.88E-02	1.70E-02	1.105	0.269269	
PC11	-9.52E-02	1.75E-02	-5.452	5.97E-08	***
PC12	-1.39E-01	1.82E-02	-7.627	4.69E-14	***
PC13	1.84E-01	1.86E-02	9.905	< 2e-16	***
PC14	5.22E-02	1.86E-02	2.803	0.005134	**
PC15	7.97E-02	1.91E-02	4.186	3.03E-05	***
PC16	1.20E-02	1.97E-02	0.61	0.541946	
PC17	2.14E-01	2.00E-02	10.714	< 2e-16	***
PC18	-4.11E-01	2.04E-02	-20.167	< 2e-16	***
PC19	2.59E-02	2.07E-02	1.249	0.211918	
PC20	-6.62E-02	2.14E-02	-3.097	0.001995	**
PC21	-6.10E-03	2.15E-02	-0.284	0.776736	
PC22	1.41E-02	2.22E-02	0.635	0.525622	
PC23	7.06E-02	2.24E-02	3.146	0.001691	**
PC24	4.16E-02	2.29E-02	1.811	0.070373	.
PC25	-9.19E-02	2.40E-02	-3.829	0.000135	***
PC26	7.43E-02	2.49E-02	2.981	0.002928	**
PC27	1.09E-01	2.56E-02	4.259	2.21E-05	***

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PC28	8.78E-02	2.68E-02	3.277	0.001079	**
PC29	3.04E-03	2.75E-02	0.111	0.91175	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.588 on 1275 degrees of freedom

Multiple R-squared: 0.662, Adjusted R-squared: 0.6543

F-statistic: 86.1 on 29 and 1275 DF, p-value: < 2.2e-16

2.3 Regression of variables with loadings (≥ 0,30) which belong to statistically significant PC

2.3.1 Regression Social Identity with depended variable Life Satisfaction 2019-2020 (1305x28)

Residuals:				
Min	1Q	Median	3Q	Max
-4.204	-0.2075	0.053	0.2726	3.0418

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-2.9631	0.170812	-17.347	< 2e-16	***
Happiness	0.372956	0.009011	41.389	< 2e-16	***
Security	-0.01172	0.02132	-0.55	0.582712	
Creativity	0.004475	0.017961	0.249	0.803289	
Equitability	0.017907	0.018828	0.951	0.341756	
Inequality	0.026871	0.019407	1.385	0.166406	
Megalothymia	-0.00986	0.01574	-0.626	0.531257	
Religiosity	0.012454	0.008105	1.536	0.124671	
Tradition	-0.00942	0.019242	-0.489	0.624708	
Adherence to rules	-0.04166	0.0236	-1.765	0.077732	.
Acknowledgment of external values	0.000832	0.014452	0.058	0.954111	
Having a good time	-0.01427	0.016381	-0.871	0.383875	
The role of migrants	0.003452	0.023301	0.148	0.882237	
Role of state	0.013626	0.015043	0.906	0.365185	
Cultural change	0.023272	0.00899	2.589	0.009748	**
Altruism	-0.00855	0.019615	-0.436	0.663014	
Environment	0.036539	0.020471	1.785	0.074512	.
Trust	0.01101	0.007982	1.379	0.16803	
Motive for wealth accumulation	0.012836	0.013679	0.938	0.348242	
Surprises	-0.02705	0.016006	-1.69	0.091289	.
Makes decisions	-0.00212	0.020325	-0.104	0.916907	
Successful	0.018567	0.01641	1.131	0.258089	

Seeks adventure	0.005367	0.014725	0.364	0.71555	
Political self-definition	0.005356	0.008435	0.635	0.525563	
State of health	-0.08212	0.02154	-3.812	0.000144	***
Income status	-0.00577	0.005172	-1.117	0.264395	
Age	0.035922	0.013025	2.758	0.005899	**
Level of education	0.026705	0.009779	2.731	0.006406	**
Ledings	0.049883	0.01576	3.165	0.001586	**
Family	0.042599	0.02376	1.793	0.073228	.

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.588 on 1275 degrees of freedom

Multiple R-squared: 0.662, Adjusted R-squared: 0.6543

F-statistic: 86.1 on 29 and 1275 DF, p-value: < 2.2e-16

2.3.2 Regression Social Identity with Dependent Variable Life Satisfaction 2019-2020 (1305x6)

Residuals:				
Min	1Q	Median	3Q	Max
-4.1204	-0.2215	0.0516	0.2708	3.156

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-2.75546	0.098708	-27.915	< 2e-16	***
Happiness	0.382487	0.00855	44.736	< 2e-16	***
Cultural change	0.016984	0.007163	2.371	0.017878	*
State of health	-0.08089	0.021008	-3.851	0.000124	***
Age	0.043798	0.011827	3.703	0.000222	***
Level of education	0.022745	0.009388	2.423	0.015533	*
Ledings	0.048319	0.015444	3.129	0.001795	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.5893 on 1298 degrees of freedom

Multiple R-squared: 0.6543, Adjusted R-squared: 0.6527

F-statistic: 409.4 on 6 and 1298 DF, p-value: < 2.2e-16

3. From the social identity variables, we remove the dependent variable of Life Satisfaction and the statistically significant variables shaping life satisfaction from section 2.3.2. We analyze further the remaining of the variables below by calculating the correlation matrices.

3.1 Correlation Matrix for the variable Happiness

	Happiness
Security	-0.03886
Creativity	-0.20681
Equitability	-0.02272
Inequality	0.112361
Megalothymia	-0.1326
Religiosity	0.048116
Tradition	0.018687
Adherence to rules	-0.05527
Acknowledgment of external values	0.093153
Having a good time	-0.10193
The role of migrants	-0.02074
Role of state	0.038318
Altruism	0.024624
Environment	-0.0021
Trust	0.136978
Motive for wealth accumulation	-0.04413
Surprises	-0.19054
Makes decisions	-0.00427
Successful	-0.12284
Seeks adventure	-0.10698
Political self-definition	0.116354
State of health	-0.30644
Income status	0.074938
Age	-0.22749
Level of education	0.042866
Family	-0.01363

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We now use the variables correlated with happiness with a percentage higher than 10% and run regression.

3.1.1 Regression with depended variable Happiness 2019-2020 (1305x11)

Residuals:				
Min	1Q	Median	3Q	Max
-3.2631	-0.5197	0.0531	0.5942	2.612

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	0.199874	0.130305	1.534	0.125301	
Creativity	-0.06972	0.027277	-2.556	0.010703	*
Inequality	0.101618	0.028348	3.585	0.00035	***
Megalothymia	-0.01346	0.023795	-0.565	0.571865	
Having a good time	0.005818	0.023945	0.243	0.808073	
Trust	0.044747	0.012296	3.639	0.000284	***
Surprises	-0.07831	0.024601	-3.183	0.001491	**
Successful	-0.02299	0.025231	-0.911	0.362334	
Seeks adventure	0.065468	0.022028	2.972	0.003013	**
Political self-definition	0.054666	0.011897	4.595	4.75E-06	***
State of health	-0.22246	0.03288	-6.766	2.00E-11	***
Age	-0.06079	0.019288	-3.152	0.001661	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9228 on 1293 degrees of freedom

Multiple R-squared: 0.1555, Adjusted R-squared: 0.1484

F-statistic: 21.65 on 11 and 1293 DF, p-value: < 2.2e-16

3.1.2 Regression with depended variable Happiness 2019-2020 (1305x8)

Residuals:				
Min	1Q	Median	3Q	Max
-3.2445	-0.527	0.0535	0.5922	2.6085

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	0.1571	0.12471	1.26	0.20801	
Creativity	-0.07718	0.02655	-2.907	0.003709	**
Inequality	0.10309	0.02824	3.651	0.000272	***
Trust	0.04433	0.01228	3.61	0.000317	***
Surprises	-0.08215	0.02413	-3.405	0.000682	***
Seeks adventure	0.05938	0.02093	2.838	0.004617	**

Political self-definition	0.05498	0.01188	4.63	4.03E-06	***
State of health	-0.22319	0.03285	-6.795	1.65E-11	***
Age	-0.06091	0.01928	-3.16	0.001615	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9225 on 1296 degrees of freedom

Multiple R-squared: 0.1543, Adjusted R-squared: 0.1491

F-statistic: 29.56 on 8 and 1296 DF, p-value: < 2.2e-16

3.2 Correlation Matrix for the variable Cultural Change (

	Cultural change
Security	0.120236674
Creativity	-0.056363338
Equitability	-0.003411579
Inequality	0.013166131
Megalothymia	-0.03783783
Religiosity	-0.260861825
Tradition	0.29289233
Adherence to rules	0.172574351
Acknowledgment of external values	0.146982331
Having a good time	0.068372037
The role of migrants	-0.571270347
Role of state	-0.003151097
Altruism	0.032356185
Environment	0.00930957
Trust	0.046921164
Motive for wealth accumulation	0.065116131
Surprises	-0.019952279
Makes decisions	0.006352657
Successful	-0.039624486
Seeks adventure	-0.006895625
Political self-definition	-0.250826263
State of health	-0.148710236
Income status	0.096203537
Age	-0.189024208
Level of education	0.131181177
Family	0.218099974

We now use the variables correlated with cultural change with a percentage higher than 10% and run regression

3.2.1 Regression with dependent variable cultural change 2019-2020 (1305x11)

Residuals:				
Min	1Q	Median	3Q	Max
-3.4079	-0.5087	-0.0531	0.4755	3.3457

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	1.798061	0.181312	9.917	< 2e-16	***
Security	0.0192366	0.027637	0.696	0.48653	
Religiosity	-0.0089327	0.010689	-0.836	0.4035	
Tradition	0.0992135	0.024835	3.995	6.84E-05	***
Adherence to rules	-0.0212043	0.031646	-0.67	0.50295	
Acknowledgment of external values	0.0256153	0.018987	1.349	0.17755	
The role of migrants	-0.5678604	0.02686	-21.142	< 2e-16	***
Political self-definition	-0.029431	0.011135	-2.643	0.00831	**
State of health	-0.0715943	0.027896	-2.566	0.01039	*
Age	0.0043424	0.01656	0.262	0.79319	
Level of education	-0.0006591	0.013128	-0.05	0.95997	
Family	0.0535764	0.031813	1.684	0.0924	.

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7998 on 1293 degrees of freedom

Multiple R-squared: 0.3658, Adjusted R-squared: 0.3604

F-statistic: 67.79 on 11 and 1293 DF, p-value: < 2.2e-16

3.2.2 Regression with depended variable Cultural Change 2019-2020 (1305x4)

Residuals:				
Min	1Q	Median	3Q	Max
-3.3826	-0.5149	-0.0603	0.4902	3.381

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	1.93358	0.12143	15.923	< 2e-16	***
Tradition	0.12381	0.02041	6.066	1.71E-09	***
The role of migrants	-0.57435	0.02634	-21.806	< 2e-16	***
Political self-definition	-0.03417	0.01064	-3.212	0.00135	**
State of health	-0.07564	0.02386	-3.17	0.00156	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
 Residual standard error: 0.7995 on 1300 degrees of freedom
 Multiple R-squared: 0.3628, Adjusted R-squared: 0.3608
 F-statistic: 185 on 4 and 1300 DF, p-value: < 2.2e-16

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3.3 Correlation Matrix for the variable Lending

	Ledings
Security	0.030229
Creativity	-0.06611
Equitability	0.023127
Inequality	0.073792
Megalothymia	-0.04271
Religiosity	-0.04067
Tradition	0.072581
Adherence to rules	0.036969
Acknowledgment of external values	0.081127
Having a good time	-0.05965
The role of migrants	-0.01453
Role of state	0.025769
Altruism	0.00328
Environment	0.038403
Trust	0.081393
Motive for wealth accumulation	-0.08817
Surprises	-0.02622
Makes decisions	-0.02654
Successful	-0.06895
Seeks adventure	-0.09757
Political self-definition	0.019222
State of health	-0.06585
Income status	0.160034
Age	-0.10405
Level of education	0.060708
Family	0.026657

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We now use the variables correlated with cultural change with a percentage higher than 10% and run regression

3.3.1 Regression with depended variable Lending (1305x2)

Residuals:				
Min	1Q	Median	3Q	Max
-1.6002	-0.9447	-0.1882	0.6559	3.7102

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-0.03371	0.088783	-0.38	0.7042	
Income status	0.043416	0.008382	5.18	2.58E-07	***
Age	-0.04428	0.016775	-2.64	0.0084	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9852 on 1302 degrees of freedom

Multiple R-squared: 0.0308, Adjusted R-squared: 0.02931

F-statistic: 20.69 on 2 and 1302 DF, p-value: 1.432e-09