Scientific Research Publishing

Psychology, 2026, 17(11), 1290-1298
https://www.scirp.org/journal/psych
ISSN Online: 2152-7199
ISSN Print: 2152-7180

Who Is Optimistic? Individual Differences and Self-Assessed Optimism

Adrian Furnham[1,2*], David S. Semmelink[2,3]

[1]Norwegian Business School, Oslo, Norway
[2]Department of Psychology, University of Pretoria, Pretoria, South Africa
[3]Department of Psychology, Thomas International, Pretoria, South Africa
Email: *adrian@adrianfurnham.com

How to cite this paper: Furnham, A., & Semmelink, D. S. (2026). Who Is Optimistic? Individual Differences and Self-Assessed Optimism. *Psychology, 17,* 1290-1298.
https://doi.org/10.4236/psych.2026.1711064

Received: October 20, 2026
Accepted: November 16, 2026
Published: November 19, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/

Open Access

Abstract

An international sample of 1801 adults rated their optimism and completed a number of additional measures, including a work-based personality questionnaire. Hierarchical regressions indicate that age was the only significant correlate among the demographic factors (sex, age, education), which accounted for 2% of the variance. When ideological (religious and political beliefs) and self-esteem factors were added, results suggest that older, less well-educated people who were more religious and had high self-esteem were more optimistic. These variables accounted for an additional 10% of the variance. The final step in the regression suggested that people higher on Adjustment (low Neuroticism), Curiosity (Openness), Risk Approach (Courage) and Competitiveness (low Agreeableness) were more optimistic. In total, all variables accounted for a quarter of the variance. Results are discussed in terms of the origin and maintenance of optimism.

Keywords

Optimism, Personality, Religiosity, Self-Esteem

1. Introduction

Optimism is the expectation that most events lead to particularly favourable, desirable, and positive outcomes in daily life. Optimism appears to be a stable, trait-like variable. Dispositional or trait optimism reflects a *consistent and stable* belief that the future will "work out for the best" for all. Further, it has long been shown that optimism-pessimism is not a single dimension of opposites: essentially, they are independent traits that relate to quite different origins and outcomes.

There is a wealth of data in health and work psychology that attests to the ben-

efits of dispositional optimism (Carver & Scheier, 2002; King & Belkin, 2020; Peterson, 2000; Peterson et al., 2012; Vaughan, 2000). Optimists are, amongst other things, healthier and more successful in social relationships and work settings. Conversano et al. (2010) argued that optimism exerts an indirect influence on the quality of life. Optimism influences mental and physical well-being by promoting a healthy lifestyle, adaptive behaviours, and cognitive responses associated with greater flexibility, problem-solving capacity, and better processing of negative information.

The topic of optimism has attracted extensive research (Alarcon et al., 2013; Chen et al., 2025; Gallagher et al., 2020; Purol & Chopik, 2021; Rizvi & Hossain, 2017; Seligman, 1990; Shanahan et al., 2021) as well as genetic studies (Schulman et al., 1993). People have little difficulty in rating to what extent they are (generally) optimistic or pessimistic (Bates, 2015). There are, however, a number of tests that have been used to measure optimism, defined usually as an attribution style (Cadena et al., 2019; Dember et al., 1989; Hinz et al., 2017; Lemola et al., 2010; Millstein et al., 2019). It is, however, possible to measure traits like optimism and happiness by very short scales, even single-item measures (Furnham & Robinson, 2023).

Optimism appears to be related to demographic variables (age, sex, class, education), ideological variables, such as religious and political beliefs, and personality. For instance, in two very large studies, Chopik et al. (2020) found that optimism increased across younger adulthood, plateaued in midlife, and then decreased in older adulthood.

Optimism is also related to a number of personality variables (Sharpe et al., 2011; Stapleton et al., 2021). Using a measure similar to the one used in this paper, Furnham and Robinson (2023) showed that older, more religious, but less intelligent males, with higher self-esteem and belief in a Just World (BJW), were more optimistic. They also found that Open, Extraverted, Agreeable, Emotionally Stable, religious people with higher self-esteem and low on dark-side Negative affectivity and Detachment, but high on Disinhibition, were most optimistic. Finally, they found that those with a lower Dweck "fixed personality mindset" belief were more optimistic.

This Study

This study concerns four sets of determinants of optimism. *First,* we look at demographic (age, education, sex) correlates. We predict, based on previous studies, that males, more than females; older, more than younger; and better-educated, rather than less-well-educated, people would be more optimistic. *Second,* we explore "ideological" correlates, namely religiosity and political beliefs. We predict that more religious and left-wing people would be more optimistic. *Third*, we look at self-esteem correlates, predicting that high self-esteem would be a cause and consequence of optimism, and, hence, positively associated with it. *Fourth,* we observe work trait correlates, focusing on six work-related traits. We predict that better adjusted (low Neuroticism), more Curious (Open), and Competitive (low Agreeable) people would be more optimistic.

2. Method

2.1. Participants

The sample consisted of 1801 respondents, of whom 54% were female and 46% male. Half of the respondents reported being British (51%), followed by South African (17%), Canadian (8%), American (8%), European (6%), Australian (4%), and Irish (3%), while 4% reported as Other/not specified. Two-thirds (65%) indicated that they had obtained a degree, and 35% did not obtain a degree. Their ages ranged from 18 to 73 (M = 45.8, SD = 11.1).

2.2. Measure

Optimism (Furnham & Robinson, 2023). This was assessed by a simple question: How much do you agree with this statement: I am an optimist (1 = Disagree to 9 = Agree; M = 6.84, SD = 1.89).

HPTI (MacRae & Furnham, 2020). The High Potential Trait Indicator is a self-reporting six-trait personality-based questionnaire with a seven-point Likert-type scale. It has been used in a number of studies (Teodorescu et al., 2017). The six traits and their corresponding alphas were .75 for Conscientiousness (ω = .78), .81 for Adjustment (ω = .83), .77 for Curiosity (ω = .80), .76 for Risk Approach (ω = .79), .74 for Ambiguity Acceptance (ω = .77), and .79 for Competitiveness (ω = .80).

Self-esteem (Semmelink & Furnham, 2026). Participants rated themselves on four self-perception scales, each on a 1 - 100-point scale: *Physical Attractiveness* (M = 59.26, SD = 19.97); *Physical Health* (M = 63.84, SD = 21.13); *Intelligence* (M = 75.50, SD = 14.51); and *Emotional Intelligence* (M = 75.43, SD = 19.01). These were combined into a single score with an alpha of .73 (ω = .76). In their research on the validity of this measure, Semmelink and Furnham (2026) established the scales' reliability and internal structure as well as the convergent and discriminant validity of the scale using two established self-esteem measures.

Ideology. They rated themselves on two scales: How religious are you? (*Not at all* = 1 to *Very* = 9; M = 3.66, SD = 2.69). How would you describe your political beliefs? (*Very Conservative* = 1 to *Very Liberal* = 9; M = 5.43, SD = 2.01).

2.3. Procedure

Participants were recruited from a pool of individuals who had completed a psychometric assessment provided by the test publisher, Thomas International, for genuine occupational test use. This invitation was sent to a large, international pool and was done on a regular basis. Subsequently, some volunteered to partake in further research, though it is not clear what percentage. As an incentive, participants were offered brief feedback on their results following the study. Participants were informed of the study and provided with a link to complete it via email. We obtained informed consent to analyse and publish the anonymised data. The study was conducted on an online survey platform. As was usual with this data collection method there were almost no missing data. The research received approval from the committee LSA/TI/2022. Finally, participants were debriefed and thanked for their time.

2.4. Data Analysis

All statistical analyses were conducted in *R* (version 4.5.2; R Core Team, 2025). Descriptive statistics were computed for all study variables. Relationships between continuous variables were examined using Pearson product-moment correlation coefficients. We checked whether the results (distributions, variances) were appropriate for the analyses that we intended to perform.

To examine the unique contribution of demographic characteristics, religiosity, self-esteem, and personality traits to optimism, a hierarchical linear regression was conducted in three steps. The first step included sex, age, and degree; the second added political alignment, religiosity, and self-esteem; and the final step added the six HPTI traits. Statistical significance was evaluated using a two-tailed alpha level of .05.

Finally, the final model (Step 3) was internally validated using bootstrap resampling with 1000 iterations using the rms package (Harrell Jr., 2015) in R. Bootstrap validation was used to estimate model optimism and assess the expected performance and generalisability of the regression model in new samples.

3. Results

Table 1 presents the descriptive statistics and zero-order correlations among the study variables. Optimism was positively associated with age, religiosity, self-esteem, Conscientiousness, Adjustment, Curiosity, Risk Approach, Ambiguity Acceptance, and Competitiveness (r's = .05 to .42, $p < .05$). The strongest bivariate associations were observed for Adjustment ($r = .42$), Risk Approach ($r = .33$), and self-esteem ($r = .31$). Political alignment and educational attainment showed little or no association with optimism.

Table 1. Means, standard deviations, and correlations of variables.

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1) Optimism	6.84	1.89	—											
2) Sex	.55	.50	.05*	—										
3) Age	45.79	11.07	.14***	−.04	—									
4) Degree	.66	.48	−.01	.07**	−.06**	—								
5) Political Alignment	5.43	2.01	.02	.12***	−.04	.11***	—							
6) Religiosity	3.66	2.69	.11***	.00	.02	.05*	−.19***	—						
7) Self-esteem	274.02	55.58	.31***	−.05*	.00	.14***	.02	.14***	—					
8) Conscientiousness	70.40	9.04	.23***	−.01	.15***	.02	−.11***	.14***	.27***	—				
9) Adjustment	63.26	12.10	.42***	−.04	.19***	−.03	−.05*	.00	.31***	.28***	—			
10) Curiosity	68.30	8.63	.24***	−.03	.00	.11***	.13***	.03	.22***	.34***	.16***	—		
11) Risk Approach	63.39	9.82	.33***	−.20***	.20***	−.04	−.08***	.05*	.30***	.50***	.49***	.45***	—	
12) Ambiguity Acceptance	50.28	9.86	.22***	−.07**	.22***	.08***	.02	−.11***	.15***	.20***	.43***	.31***	.48***	—
13) Competitiveness	49.05	11.44	.05*	−.17***	−.14***	.02	−.14***	.04	.17***	.32***	−.06**	.11***	.27***	.06**

Note. *$p < .05$, **$p < .01$, ***$p < .001$; Sex: 0 = Male, 1 = Female; Degree: 0 = No, 1 = Yes; Political Alignment: 1 = Very Conservative, 9 = Very Liberal; Religiosity: 1 = Not at all, 9 = very.

A hierarchical multiple regression was conducted to examine the unique predictors of optimism (Table 2). Demographic variables entered at Step 1 accounted for a small but significant proportion of the variance (R^2 = .02). Adding educational attainment, political alignment, religiosity, and self-esteem at Step 2 significantly increased the explained variance (ΔR^2 = .10). The inclusion of the six HPTI personality traits at Step 3 produced a further significant improvement (ΔR^2 = .14), resulting in a final model explaining 26.0% of the variance in optimism (R^2 = .26, adjusted R^2 = .25).

Table 2. Hierarchical linear regression with optimism as the dependent variable.

	Step 1					Step 2					Step 3				
	B	*SE*	β	*t*	*p*	*B*	*SE*	β	*t*	*p*	*B*	*SE*	β	*t*	*p*
Sex	.19	.09	.05	2.107	.035	.25	.09	.07	2.92	.004	.35	.08	.09	4.36	<.001
Age	.03	.00	.15	6.20	<.001	.02	.00	.14	6.36	<.001	.01	.00	.08	3.69	<.001
Degree	−.02	.09	.00	−.17	.87	−.22	.09	−.06	−2.46	.014	−.17	.08	−.04	−2.06	.04
Political Alignment						.03	.02	.03	1.17	.24	.03	.02	.04	1.64	.101
Religiosity						.05	.02	.07	2.88	.004	.06	.02	.08	3.79	<.001
Self-esteem						.01	.00	.31	13.49	<.001	.01	.00	.15	6.72	<.001
Conscientiousness											.00	.01	−.02	−.62	.54
Adjustment											.05	.00	.32	12.53	< .001
Curiosity											.03	.01	.14	5.59	< .001
Risk Approach											.01	.01	.07	2.25	.025
Ambiguity Acceptance											.00	.01	−.01	−.50	.62
Competitiveness											.01	.00	.05	1.99	.047
F (df)	13.95 (3, 1795)***					42.000 (6, 1792)***					52.26 (12, 1786)***				
R^2 (ΔR^2)	.02					.12 (.100)					.26 (.14)				
Adjusted R^2 (ΔAdjusted R^2)	.02					.12 (.098)					.26 (.14)				
Optimism-corrected R^2											.25				
AIC	7352.993					7163.74					6871.03				
BIC	7380.47					7207.696					6947.96				

Note. *p < .05, **p < .01, ***p < .001; Sex: 0 = Male, 1 = Female; Degree: 0 = No, 1 = Yes; VIF_{max} = 2.269.

In the final model, higher optimism was uniquely associated with being female, older in age, greater religiosity, higher self-esteem, higher Adjustment, greater Curiosity, higher Risk Approach, and greater Competitiveness. Educational attainment was negatively associated with optimism, whereas political alignment, Conscientiousness, and Ambiguity Acceptance did not contribute significant unique variance. Multicollinearity was low (maximum *VIF* = 2.27). Bootstrap internal validation, based on 1000 resamples, indicated an optimism-corrected R^2 of .249, supporting the stability and generalisability of the model estimates.

4. Discussion

In this study, we had a reasonably large, educated, international, adult sample. We believe the sample was big and varied enough to form reasonable generalisations, though we acknowledge it is always desirable to have an even greater, more representative sample. The final regression revealed that all demographic variables, one ideological variable (religious beliefs), self-esteem, and four traits (particularly Adjustment and Curiosity) were significantly related to Optimism, and accounted for around 1/4 of the variance. Thus, most, but not all, of our hypotheses were confirmed.

All three demographic variables were significant, indicating that females, more than males, older rather than younger, and non-graduates rather than graduates were more optimistic. In this study, females were marginally more optimistic than males, which contradicts previous studies (Dawson, 2023). This could be related to this particular sample, although it is interesting that males had higher self-esteem than females. Older people were, as predicted, more optimistic, possibly because of their greater wealth, job experience, and security. However, it is important to point out that these are simply hypotheses to be tested, as we did not have measures of these variables.

The fact that education was negatively associated with optimism was curious and worthy of further investigation, but may be the result of using an international sample, given that education is differentially available across countries. Further, we assessed education simply in terms of graduate status, and nearly 2/3 were graduates. Had we assessed people on a linear scale, from primary to post-graduate education, the results may have differed. Evidently, education being a good guarantor of work success has changed.

Previous studies have shown that more religious people tend to be optimistic, presumably because of the promises of religion and the social benefits provided. Similarly, it is not difficult to explain why self-esteem is associated with optimism, as high self-esteem is both a cause and a consequence of success and happiness (Peterson, 2000).

The single highest correlate of optimism was trait Adjustment (low Neuroticism). Low adjustment is understood in terms of anxiety, depression, psychosomatic illnesses and low self-esteem (Furnham, 2017). All studies in this area have exhibited this to be a major correlate of low optimism and high pessimism. Interestingly, trait Curiosity (high Openness) was correlated with optimism, no doubt because creative people always seek out new solutions to problems. Risk Approach, also described as Courage, and Competitiveness were also significant associations of optimism. This may be attributable to the learning experiences of proactive and ambitious people. However, we must stress that our data is only correlational and we cannot infer causation.

It is interesting to note which variables were not significant, at least in the final regression. These include Conscientiousness and Tolerance of Ambiguity, which, while powerful correlates of behaviours in some settings (Cuppello et al., 2023a, 2023b), were not directly relevant to self-assessed optimism.

5. Limitations

A number of measures, including our dependent variables, were single-item measures. The validity of these measures has been widely discussed (Abdel-Khalek, 2019; Allen et al., 2022; Matthews et al., 2022), and the consensus appears to be that well-phrased measures can be highly accurate, even though many favour multifaceted measures of psychological concepts, possibly with different facets. In addition, we could have included a measure of self-assessed pessimism to see how different correlates were.

Data Availability

The data may be requested from the first author.

Registration

This paper was not pre-registered with the journal.

Ethics

The study involved secondary analysis of anonymised data, collected from a non-vulnerable population with informed consent that allowed the use of the data by third-party researchers. It was approved by the research committee: LSA/TI/2022.

Author Contributions

AF: Conceptualization and writing drafts; DS: Data collection and analysis.

Conflicts of Interest

There were no conflicts of interest.

References

Abdel-Khalek, A. M. (2019). Optimism, Pessimism and the Big Five Personality Model among Egyptian College Students. *Mankind Quarterly, 60,* 214-230. https://doi.org/10.46469/mq.2019.60.2.5

Alarcon, G. M., Bowling, N. A., & Khazon, S. (2013). Great Expectations: A Meta-Analytic Examination of Optimism and Hope. *Personality and Individual Differences, 54,* 821-827. https://doi.org/10.1016/j.paid.2012.12.004

Allen, M. S., Iliescu, D., & Greiff, S. (2022). Single Item Measures in Psychological Science: A Call to Action. *European Journal of Psychological Assessment, 38,* 1-5. https://doi.org/10.1027/1015-5759/a000699

Bates, T. C. (2015). The Glass Is Half Full and Half Empty: A Population-Representative Twin Study Testing If Optimism and Pessimism Are Distinct Systems. *The Journal of Positive Psychology, 10,* 533-542. https://doi.org/10.1080/17439760.2015.1015155

Cadena, C. H. G., González D. L., & Valle de la O, A. (2019). A New Brief Scale to Measure Optimism. *Psychological Reports, 124,* 5-22. https://doi.org/10.1177/0033294119884059

Carver, C. S., & Scheier, M. F. (2002). Optimism. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 231-242). Oxford University Press. https://doi.org/10.1093/oso/9780195135336.003.0017

Chen, Y., Kubzansky, L. D., Kim, E. S., Koga, H., Shiba, K., Padgett, R. N. et al. (2025). The Distribution of Optimism across Sociodemographic Groups in 22 Countries. *Scientific Reports, 15,* Article No. 14553. https://doi.org/10.1038/s41598-024-77257-1

Chopik, W. J., Oh, J., Kim, E. S., Schwaba, T., Krämer, M. D., Richter, D. et al. (2020). Changes in Optimism and Pessimism in Response to Life Events: Evidence from Three Large Panel Studies. *Journal of Research in Personality, 88,* Article 103985. https://doi.org/10.1016/j.jrp.2020.103985

Conversano, C., Rotondo, A., Lensi, E., Della Vista, O., Arpone, F., & Reda, M. A. (2010). Optimism and Its Impact on Mental and Physical Well-Being. *Clinical Practice & Epidemiology in Mental Health, 06,* 25-29. https://doi.org/10.2174/1745017901006010025

Cuppello, S., Treglown, L., & Furnham, A. (2023a). Personality and Management Level: Traits That Get You to the Top. *Personality and Individual Differences, 206,* Article 112108. https://doi.org/10.1016/j.paid.2023.112108

Cuppello, S., Treglown, L., & Furnham, A. (2023b). Intelligence, Personality and Tolerance of Ambiguity. *Journal of Intelligence, 11,* Article 102. https://doi.org/10.3390/jintelligence11060102

Dawson, C. (2023). Gender Differences in Optimism, Loss Aversion and Attitudes towards Risk. *British Journal of Psychology, 114,* 928-944. https://doi.org/10.1111/bjop.12668

Dember, W. N., Martin, S. H., Hummer, M. K., Howe, S. R., & Melton, R. S. (1989). The Measurement of Optimism and Pessimism. *Current Psychology, 8,* 102-119. https://doi.org/10.1007/bf02686675

Furnham, A. (2017). Does It Matter Who We Are? Personality at work. In N. Chmiel, F. Fraccaroli, & M. Sverke (Eds.), *An Introduction to Work and Organisational Psychology* (3rd ed., pp. 317-334). Wiley.

Furnham, A., & Robinson, C. (2023). Correlates of Self-Assessed Optimism. *Current Research in Behavioral Sciences, 4,* Article 100089. https://doi.org/10.1016/j.crbeha.2022.100089

Gallagher, M. W., Long, L. J., & Phillips, C. A. (2020). Hope, Optimism, Self-Efficacy, and Posttraumatic Stress Disorder: A Meta-Analytic Review of the Protective Effects of Positive Expectancies. *Journal of Clinical Psychology, 76,* 329-355. https://doi.org/10.1002/jclp.22882

Harrell Jr., F. E. (2015). *Regression Modeling Strategies: With Applications to Linear Models, Logistic and Ordinal Regression, and Survival Analysis* (2nd ed.). Springer International Publishing.

Hinz, A., Sander, C., Glaesmer, H., Brähler, E., Zenger, M., Hilbert, A. et al. (2017). Optimism and Pessimism in the General Population: Psychometric Properties of the Life Orientation Test (LOT-R). *International Journal of Clinical and Health Psychology, 17,* 161-170. https://doi.org/10.1016/j.ijchp.2017.02.003

King, S. P., & Belkin, J. B. (2020). Optimism/Pessimism, Assessment of. In B. J. Carducci, & C. S. Nave (Eds.), *The Wiley Encyclopaedia of Personality and Individual Differences: Measurement and assessment*. Wiley.

Lemola, S., Räikkönen, K., Matthews, K. A., Scheier, M. F., Heinonen, K., Pesonen, A. et al. (2010). A New Measure for Dispositional Optimism and Pessimism in Young Children. *European Journal of Personality, 24,* 71-84. https://doi.org/10.1002/per.742

MacRae, I., & Furnham, A. (2020). A Psychometric Analysis of the High Potential Trait Inventory (HPTI). *Psychology, 11,* 1125-1140. https://doi.org/10.4236/psych.2020.118074

Matthews, R. A., Pineault, L., & Hong, Y. (2022). Correction to: Normalizing the Use of

Single-Item Measures: Validation of the Single-Item Compendium for Organizational Psychology. *Journal of Business and Psychology, 37,* 873-873. https://doi.org/10.1007/s10869-022-09816-0

Millstein, R. A., Chung, W., Hoeppner, B. B., Boehm, J. K., Legler, S. R., Mastromauro, C. A. et al. (2019). Development of the State Optimism Measure. *General Hospital Psychiatry, 58,* 83-93. https://doi.org/10.1016/j.genhosppsych.2019.04.002

Peterson, C. (2000). The Future of Optimism. *American Psychologist, 55,* 44-55. https://doi.org/10.1037/0003-066x.55.1.44

Peterson, C., Park, N., & Kim, E. S. (2012). Can Optimism Decrease the Risk of Illness and Disease among the Elderly? *Aging Health, 8,* 5-8. https://doi.org/10.2217/ahe.11.81

Purol, M. F., & Chopik, W. J. (2021). Optimism: Enduring Resource or Miscalibrated Perception? *Social and Personality Psychology Compass, 15,* e12593. https://doi.org/10.1111/spc3.12593

R Core Team (2025). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing. https://www.R-project.org/

Rizvi, M. A. K., & Hossain, M. Z. (2017). Relationship between Religious Belief and Happiness: A Systematic Literature Review. *Journal of Religion and Health, 56,* 1561-1582. https://doi.org/10.1007/s10943-016-0332-6

Schulman, P., Keith, D., & Seligman, M. E. P. (1993). Is Optimism Heritable? A Study of Twins. *Behaviour Research and Therapy, 31,* 569-574. https://doi.org/10.1016/0005-7967(93)90108-7

Seligman, M. E. P. (1990). *Learned Optimism*. Pocket Books.

Semmelink, S., & Furnham, A. (2026). *Psychometric Properties of a Four-Item Self-Esteem Scale* (Paper under Review).

Shanahan, M. L., Fischer, I. C., Hirsh, A. T., Stewart, J. C., & Rand, K. L. (2021). Hope, Optimism, and Clinical Pain: A Meta-Analysis. *Annals of Behavioral Medicine, 55,* 815-832. https://doi.org/10.1093/abm/kaab001

Sharpe, J. P., Martin, N. R., & Roth, K. A. (2011). Optimism and the Big Five Factors of Personality: Beyond Neuroticism and Extraversion. *Personality and Individual Differences, 51,* 946-951. https://doi.org/10.1016/j.paid.2011.07.033

Stapleton, C., Oliver, J., & Wolak, J. (2021). The Political Consequences of an Optimistic Personality. *Political Behavior, 45,* 585-606. https://doi.org/10.1007/s11109-021-09717-7

Teodorescu, A., Furnham, A., & MacRae, I. (2017). Trait Correlates of Success at Work. *International Journal of Selection and Assessment, 25,* 36-42. https://doi.org/10.1111/ijsa.12158

Vaughan, S. C. (2000). *Half Empty, Half Full: Understanding the Psychological Roots of Optimism*. Harcourt.