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Replication Study: Key Factor Revealed For Determining Success in Work and in Life

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Executive Summary

The purpose of this current replication study, with a sample of 1,361 non-coach participants, is to replicate the study done in 2011 (Key Factor Revealed for Determining Success in Work and in Life, Karen A. Buck, MS & Diana Galer, PhD, CPC, ELI-MP, ACC February, 2011).

The current data ($r = 0.69$, $p < 0.001$) confirmed the previous finding that the higher a person's E-Factor (also known as A.R.L., or Average Resonating Level of Energy), the greater overall life satisfaction they reported. Furthermore, a person's E-Factor was correlated with satisfaction in each of the 14 areas of life and work evaluated ($r = 0.35$ to 0.53, all $p < 0.001$).

Individuals with a predominant Anabolic range of energy were significantly more satisfied than those in the Catabolic range. Overall, satisfaction levels were 1.94 to 4.00 times higher in those whose E-Factor was in the Anabolic range than in those whose E-Factor was in the Catabolic range.

When the sample was further stratified into six groups based on participant's E-Factor, the differences in satisfaction between those in the High Anabolic range (i.e., E-Factor of 4.0 and higher) and those in the High Catabolic range (i.e., E-Factor < 2.5) were remarkable. For example, relative to individuals with High Catabolic energy, individuals with High Anabolic E-Factor are 14.83 times as likely to be satisfied with their communication skills, leadership ability, and personal freedom. In all 14 areas evaluated, the higher the Anabolic energy, the greater the satisfaction levels.

The results in this current replication study are consistent with the results from previous studies, with both indicating that people with higher E-Factors are more satisfied with all aspects of their lives and are able to engage in their activities and relationships with more energy and passion. Further, people with higher E-Factors (i.e., Anabolic Energy) were statistically significantly more satisfied on each of the 14 success indicators than people with low E-Factors (i.e., Catabolic Energy).

When the data was disaggregated, there was no statistically significant difference between males and females in E-Factor, overall satisfaction, nor in satisfaction ratings in 10 of the 14 success indicator areas. However, male participants reported being significantly more satisfied in four areas (Financial Success, Health and Wellness, Intimate Relationships, and Work/Life Balance).

Finally, people with E-Factors of 3.37 or higher are statistically significantly more likely to report a moderate or higher overall level of satisfaction. People whose E-Factors are 3.64 or above are more likely than not to be very or completely satisfied (in these 14 areas).

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Replication Study: Key Factor Revealed For Determining Success in Work and in Life

Purpose of the Study and Background

The purpose of this current replication study, with a sample of 1,361 non-coach participants (hereafter referred to as participants), is to replicate the study done in 2011 (Key Factor Revealed for Determining Success in Work and in Life, Karen A. Buck, MS & Diana Galer, PhD, CPC, ELI-MP, ACC February, 2011). The research reveals that a single factor, called the E-Factor, determines success in work and in life. This indicator of success is derived from the Energetic Self Perception Chart, which delineates seven levels of consciousness, or awareness of self and life, with the first two levels being Catabolic (destructive, draining, de-motivating, or contracting) and the next five being Anabolic (constructive, rejuvenating, self-motivating, or expanding). The Energy Leadership Index assessment quantifies the way in which a person perceives and approaches work and life, and how they react to different circumstances and experiences. The results produce a combined numerical value (i.e., the E-Factor) of spiritual, mental, emotional, and physical energy that indicates the person's overall level of consciousness.

Results

Correlations

The current data ($n = 1,361$ with $r = 0.69$, $p < 0.001$) confirmed the previous finding that the higher a person's E-factor, the greater overall life satisfaction reported. Furthermore, a person's E-Factor was correlated with satisfaction in each of the 14 areas of life and work evaluated ($r = 0.35$ to 0.53, all $p < 0.001$).

% Satisfaction for Respondents with Predominantly Catabolic Energy

To illustrate these relationships, the participants were divided into those (n = 308) whose E-Factor fell in the Catabolic range (i.e., E-Factor less than 3.0) or those (n = 1,053) in the Anabolic range (i.e., E-Factor of 3.0 or higher). As shown in Table 1, less than 35% of respondents with an E-Factor in the Catabolic range expressed being "Very" or "Completely" satisfied in each of the 14 success indicator areas evaluated.

TABLE 1

Table 1: % Satisfaction for Respondents with Predominantly CATABOLIC Energy

Success Indicator	% of Respondents "Very" or "Completely" Satisfied
Communication Skills	26%
Energy	12%
Engagement at Work	27%
Family Relationships	34%
Financial Success	15%
Health & Wellness	21%
Intimate Relationships	31%
Leadership Ability	14%
Personal Freedom	24%
Productivity	23%
Spiritual Connection	19%
Time Management	17%
Work/Life Balance	20%
Working Relationships	23%

% Satisfaction for Respondents with Predominantly Anabolic Energy

As shown in Table 2, of the respondents with an E-Factor in the Anabolic range (i.e., E-Factor of 3.0 or higher), 50% or more reported being "Very" or "Completely" satisfied in eight of the 14 areas evaluated – the 6 exceptions were Energy, Financial Success, Health & Wellness, Leadership Ability, Time Management, and Work/Life Balance.

TABLE 2

Table 2: % Satisfaction for Respondents with Predominantly ANABOLIC Energy

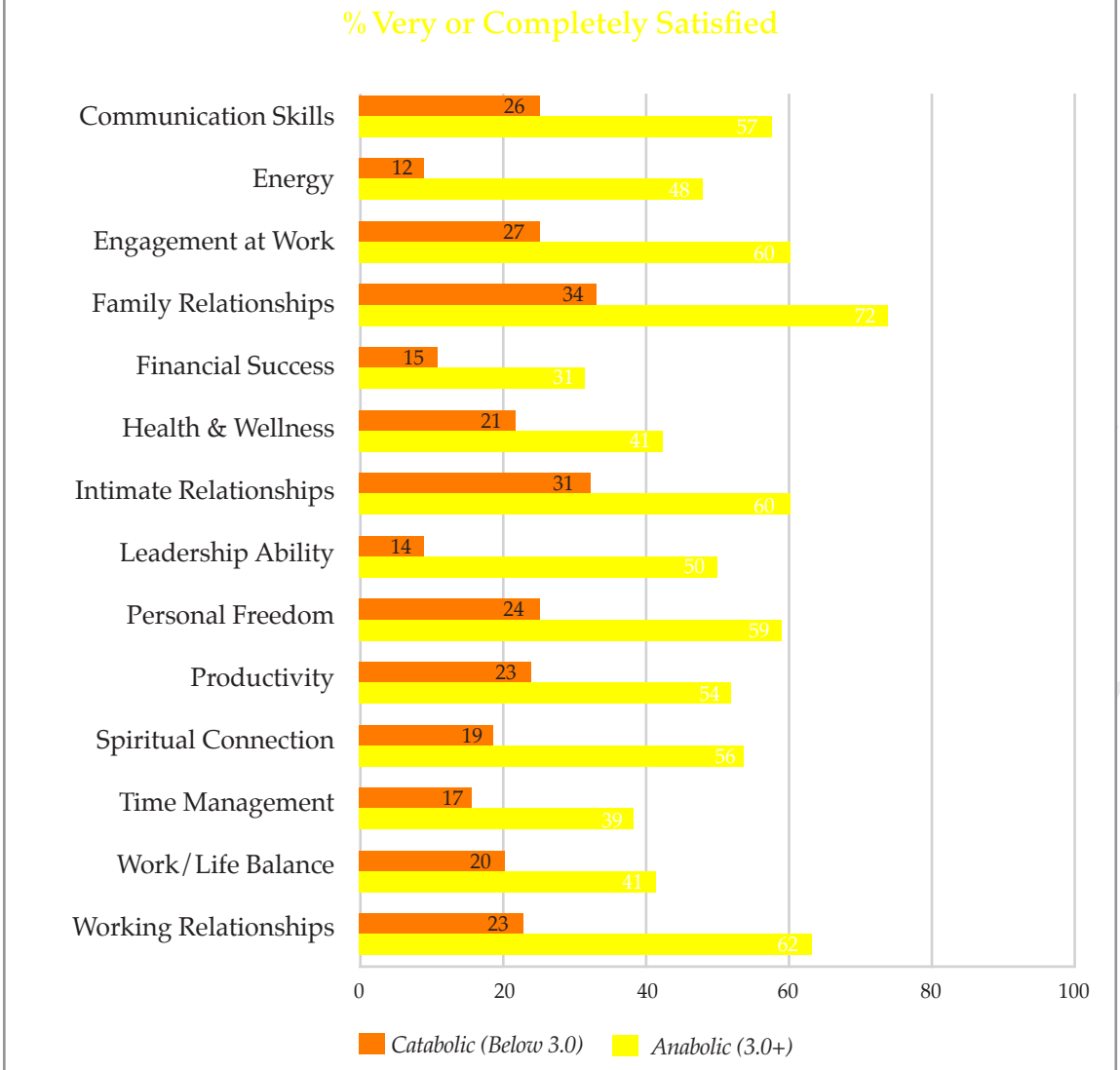
Success Indicator	% of Respondents "Very" or "Completely" Satisfied
Communication Skills	57%
Energy	48%
Engagement at Work	60%
Family Relationships	72%
Financial Success	31%
Health & Wellness	41%
Intimate Relationships	60%
Leadership Ability	50%
Personal Freedom	59%
Productivity	54%
Spiritual Connection	56%
Time Management	39%
Work/Life Balance	41%
Working Relationships	62%

Comparison between the Responses of the Anabolic and Catabolic Participants

Figure 1 shows a comparison of the responses of the Anabolic and Catabolic participants in each of the 14 success indicator areas evaluated.

FIGURE 1

Figure 1: Percent of Individuals Reporting They Were "Very" or "Completely" Satisfied in 14 Success Indicator Areas



Relative Satisfaction between Anabolic and Catabolic Individuals

Satisfaction levels of the two groups were compared; respondents in the Anabolic range of energy were significantly more satisfied than those in the Catabolic range. Overall, as shown in Table 3, satisfaction levels were 1.94 to 4.00 times higher in those individuals whose E-Factor was in the Anabolic range than in those whose E-Factor was in the Catabolic range.

TABLE 3

Table 3: Relative Satisfaction between Individuals in the Anabolic Range (E-Factor of 3.0 and higher) as Compared to the Catabolic Range (E-Factor < 3.0)

	Relative Difference in Satisfaction*
Communication Skills	2.19
Energy	4.00
Engagement at Work	2.22
Family Relationships	2.12
Financial Success	2.07
Health & Wellness	1.95
Intimate Relationships	1.94
Leadership Ability	3.57
Personal Freedom	2.46
Productivity	2.35
Spiritual Connection	2.95
Time Management	2.29
Work/Life Balance	2.05
Working Relationships	2.70

*Note: * % Satisfied for Anabolic range / % Satisfied for Catabolic range.*

Relative Satisfaction between High Anabolic and High Catabolic Individuals

The sample was further stratified into six groups based on each individual's E-Factor. The differences in satisfaction between those in the High Anabolic range (i.e., E-Factor of 4.0 and higher) and those in the High Catabolic range (i.e., E-Factor < 2.5) were remarkable. For example, relative to individuals with High Catabolic energy, individuals with High Anabolic E-Factors are 14.83 times as likely to be satisfied with their communication skills, leadership ability, and personal freedom. As shown in Table 4, in all 14 areas evaluated, the higher the Anabolic energy, the greater the satisfaction levels.

TABLE 4

Table 4: Relative Satisfaction of Individuals in the High Anabolic Range (E-Factor of 4.0 and higher) as Compared to Individuals in the High Catabolic Range (E-Factor < 2.5)

	High Catabolic (< 2.5)	High Anabolic (4.0 and higher)	Relative Difference in Satisfaction*
Communication Skills	6%	89%	14.83
Energy	0%	86%	NA†
Engagement at Work	13%	93%	7.15
Family Relationships	19%	96%	5.05
Financial Success	6%	75%	12.50
Health & Wellness	6%	79%	13.17
Intimate Relationships	25%	89%	3.56
Leadership Ability	6%	89%	14.83
Personal Freedom	6%	89%	14.83
Productivity	25%	86%	3.44
Spiritual Connection	13%	86%	6.62
Time Management	13%	71%	5.46
Work/Life Balance	19%	72%	3.79
Working Relationships	13%	100%	7.69

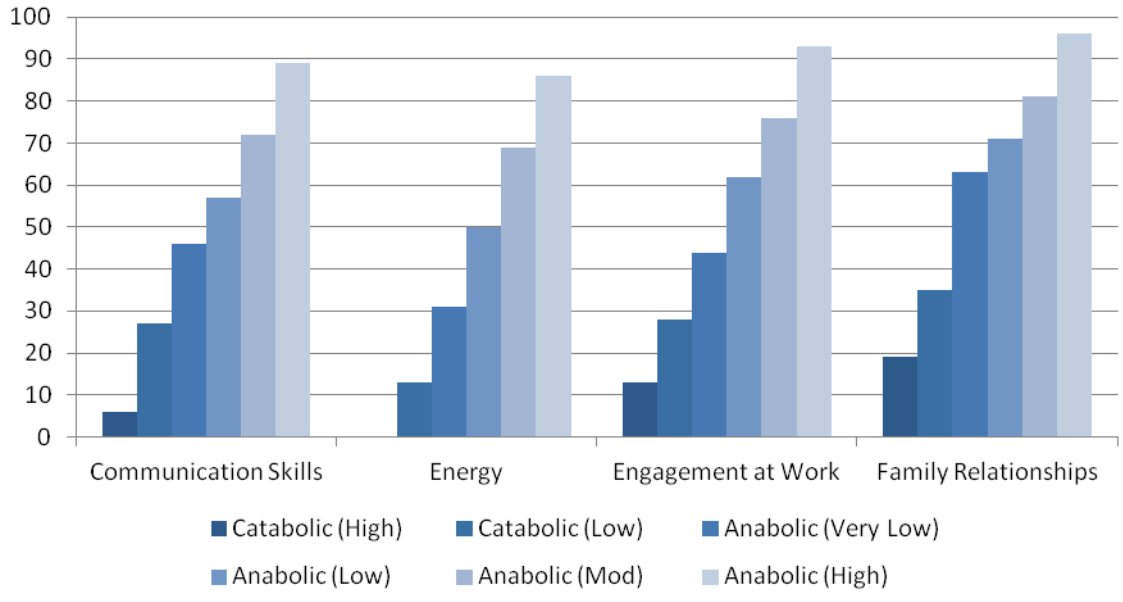
*Note: * % Satisfied for High Anabolic range / % Satisfied for High Catabolic range; †NA (Not Applicable) because the denominator is zero.*

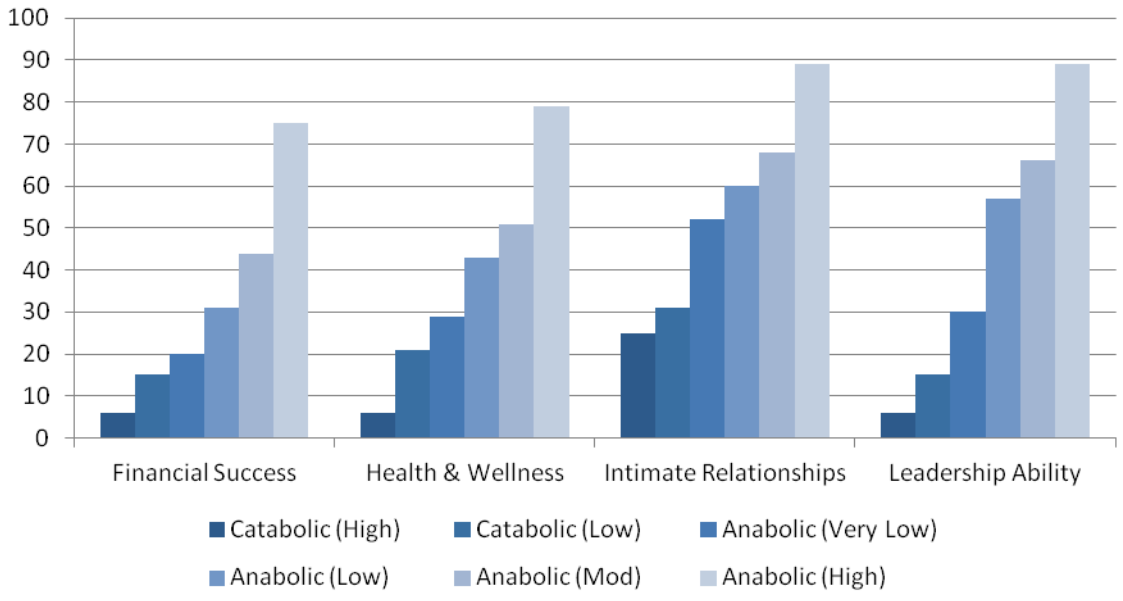
Group Comparison: % Reporting "Very" or "Completely" Satisfied

Figures 2.1, 2.2, 2.3, and 2.4 provide the total research group's percentage of "Very" and "Completely" satisfied in the 14 success indicator areas evaluated relative to six E-Factor groups.

FIGURES 2.1 & 2.2

Figures 2.1 and 2.2: Work and Life Satisfaction in Relation to E-Factor Level (% Reporting Being "Very" or "Completely" Satisfied)

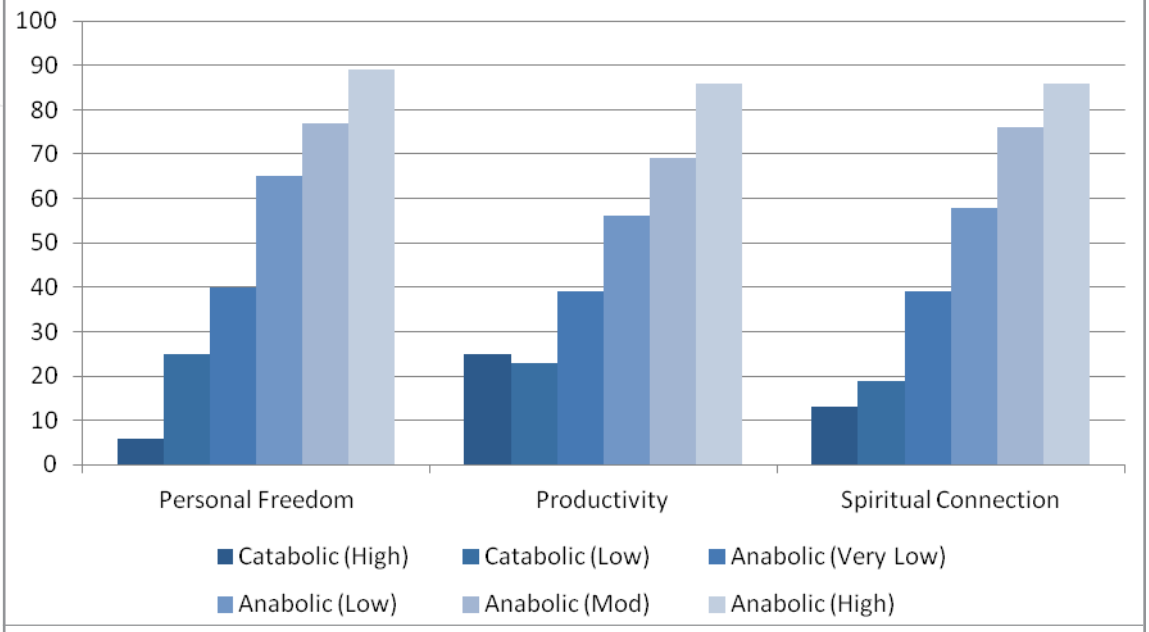


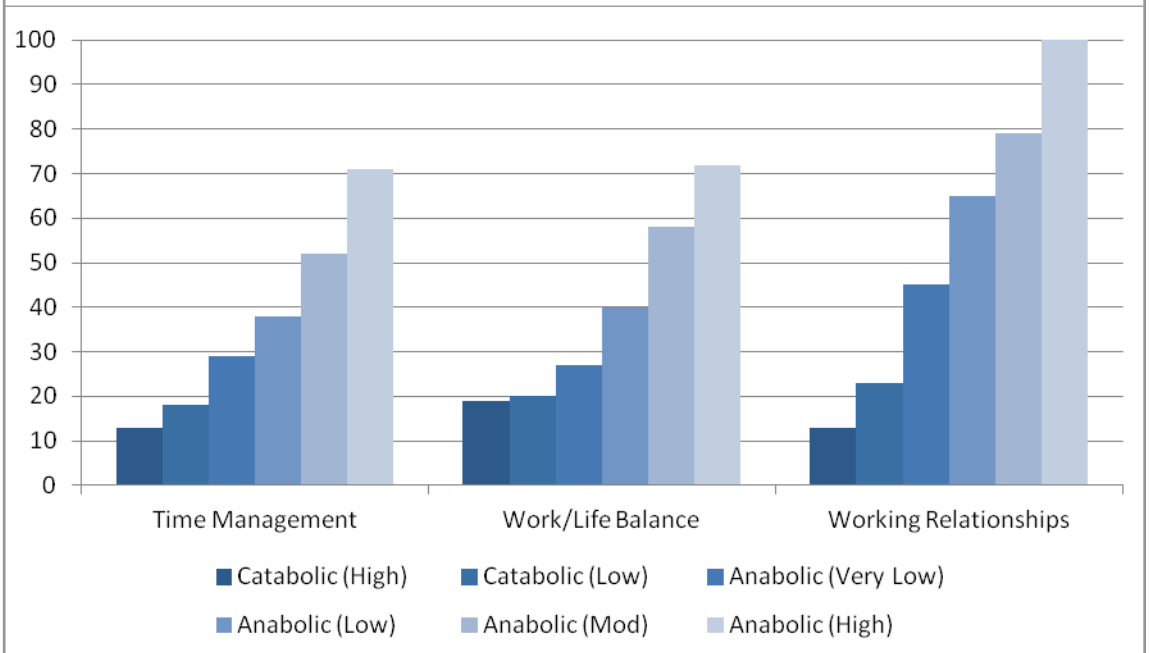


Note: E-Factor below 2.5 (High Catabolic), 2.50-2.99 (Low Catabolic), 3.00-3.249 (Very Low Anabolic), 3.25-3.49 (Low Anabolic), 3.50-3.99 (Moderately Anabolic), and 4.00 and higher (High Anabolic).

FIGURES 2.3 & 2.4

Figures 2.3 and 2.4: Work and Life Satisfaction in Relation to E-Factor Level (% Reporting Being "Very" or "Completely" Satisfied)





Note: E-Factor below 2.5 (High Catabolic), 2.50-2.99 (Low Catabolic), 3.00-3.249 (Very Low Anabolic), 3.25-3.49 (Low Anabolic), 3.50-3.99 (Moderately Anabolic), and 4.00 and higher (High Anabolic).

Conclusions

The results in this current replication study are consistent with the results from previous studies, which indicate that people with higher E-Factors are more satisfied with all aspects of their lives and are able to engage in their activities and relationships with more energy and passion.

Supplemental Analysis

T-Tests for Mean Difference between Catabolic and Anabolic Individuals

To test statistical difference in means of satisfaction in each of the 14 success indicator areas evaluated, a series of t-tests was conducted. As shown in Table 5, Anabolic individuals are statistically significantly more satisfied with all of the 14 success indicator areas than are Catabolic individuals.

TABLE 5

Table 5: Mean Difference between Catabolic and Anabolic Individuals

Group (308 Catabolic & 1,503 Anabolic)		Mean	Standard Deviation	Statistical Significance (2-tailed)
Overall Satisfaction	Catabolic	3.54	.63	**P < .001**
	Anabolic	4.43	.54	
Communication Skills	Catabolic	3.81	1.10	**P < .001**
	Anabolic	4.60	.82	
Energy Level	Catabolic	3.13	1.18	**P < .001**
	Anabolic	4.32	.99	
Engagement at Work	Catabolic	3.60	1.25	**P < .001**
	Anabolic	4.57	.89	
Family Relationships	Catabolic	3.90	1.22	**P < .001**
	Anabolic	4.82	.87	
Financial Success	Catabolic	3.20	1.31	**P < .001**
	Anabolic	3.94	1.11	
Health and Wellness	Catabolic	3.51	1.20	**P < .001**
	Anabolic	4.19	1.00	
Intimate Relationships	Catabolic	3.60	1.46	**P < .001**
	Anabolic	4.56	1.21	
Leadership Ability	Catabolic	3.55	.99	**P < .001**
	Anabolic	4.44	.80	
Personal Freedom	Catabolic	3.52	1.28	**P < .001**
	Anabolic	4.58	.99	
Productivity	Catabolic	3.64	1.13	**P < .001**
	Anabolic	4.48	.89	
Spiritual Connection	Catabolic	3.61	1.17	**P < .001**
	Anabolic	4.58	.91	
Time Management	Catabolic	3.32	1.23	**P < .001**
	Anabolic	4.17	.97	
Work/Life Balance	Catabolic	3.42	1.26	**P < .001**
	Anabolic	4.17	1.04	
Working Relationships	Catabolic	3.80	.97	**P < .001**
	Anabolic	4.62	.74	

T-Tests for Mean Difference between Female and Male Participants

To test whether there was a gender difference in E-Factor and satisfaction in each of the 14 success indicator areas, a series of t-tests was conducted. As shown in Table 6, there is no statistically significant difference in E-Factor between male and female participants.

Table 6: Mean Difference between E-Factor in Females and Males

Gender (882 females & 476 males)		Mean	Standard Deviation	Statistical Significance (2-tailed)
E-Factor	Female	3.25	.35	P = .30
	Male	3.23	.32	

T-Tests for Mean Difference between Female and Male Participants

Table 7 shows that there is no statistically significant difference between males and females in overall satisfaction nor in satisfaction ratings in 10 of the 14 success indicator areas. However, male participants reported being significantly more satisfied with four areas (i.e., Financial Success, Health and Wellness, Intimate Relationships, and Work/Life Balance).

TABLE 7

Table 7: Mean Difference in Satisfaction in Females and Males

Gender (882 females & 476 males)		Mean	Standard Deviation	Statistical Significance (2-tailed)
Overall Satisfaction	Female Male	4.20 4.28	.69 .64	P = .05
Communication Skills	Female Male	4.41 4.44	.94 .97	P = .57
Energy Level	Female Male	4.01 4.13	1.18 1.09	P =.06
Engagement at Work	Female Male	4.33 4.39	1.09 1.01	P = .31
Family Relationships	Female Male	4.57 4.68	1.05 .99	P = .08
Financial Success	Female Male	3.70 3.91	1.22 1.14	**P < .01**
Health and Wellness	Female Male	3.96 4.18	1.10 1.04	**P < .001**
Intimate Relationships	Female Male	4.26 4.49	1.37 1.23	**P < .01**
Leadership Ability	Female Male	4.21 4.30	.95 .88	P = .08
Personal Freedom	Female Male	4.33 4.37	1.17 1.11	P = .56
Productivity	Female Male	4.30 4.26	1.02 .99	P = .46
Spiritual Connection	Female Male	4.38 4.33	1.04 1.09	P = .49
Time Management	Female Male	4.02 3.90	1.09 1.10	P = .05
Work/Life Balance	Female Male	3.95 4.10	1.18 1.06	**P < .05**
Working Relationships	Female Male	4.44 4.44	.88 .86	P = .93

T-Tests for Mean Difference between Female and Male Participants

Cluster Analysis

The goal of this analysis was to identify the "tipping point" – the A.R.L./E-Factor value at which a participant is statistically significantly more likely to report a moderate or higher level of overall satisfaction.

Method

Cluster analysis method was chosen because cluster analysis divides data into meaningful groups. The resulting groups are the matter of interest; in automatic classification primarily their discriminative power is of interest. There are various algorithms that exist to implement clustering in terms of proximity measures. In this project, k-means clustering algorithm was used. K-means clustering is an iterative aggregation method which, wherever it starts from, converges on a solution. For the first iteration, a starting point is chosen which consists in associating the center of the k classes with k objects. Afterwards, the distance between the objects and the k centers is calculated and the objects are assigned to the centers they are nearest to. Then the centers are redefined from the objects assigned to the various classes. The objects are then reassigned depending on their distances from the new centers. And so on until convergence is reached.

Results

1) Satisfied (overall satisfaction score 4.0 or higher) vs. Non-satisfied Group

When the "Satisfied" group was defined for those whose overall satisfaction score was 4.0 or higher (including "Moderately Satisfied", "Very Satisfied", and "Completely Satisfied"), the average E-Factor was 3.37. The ANOVA test showed that the difference in E-Factor between the "Satisfied" and "Non-satisfied" groups was statistically significant ($F = 386.591$, $p < 0.000$).

Among the participants whose E-Factor was greater than 3.37, 95.0% had an overall satisfaction score of 4 or higher (i.e., "Moderately Satisfied", "Very Satisfied", or "Completely Satisfied").

Final Cluster Centers

	Cluster	
	1	2
sat_grp1	.00	1.00
ARL	2.96	3.37

ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
sat_grp1	182.851	1	.000	861		
ARL	31.016	1	.080	861	386.591	.000

Number of Cases in Each Cluster

Cluster	1	263.000
	2	600.000
Valid		863.000
Missing		.000

2) "Very Satisfied" (Overall satisfaction score 5.0 or higher) vs. "Less than Very Satisfied" Group

When the "Very Satisfied" group was defined for those whose overall satisfaction score was 5.0 or higher (including "Very Satisfied" and "Completely Satisfied"), the average E-Factor was 3.64. The ANOVA test showed that the difference in E-Factor between the "Very Satisfied" and "Less than Very Satisfied" groups was statistically significant ($F = 191.270$, $p < 0.000$).

Among the participants whose E-Factor was greater than 3.64, 50.53% had an overall satisfaction score of 5.0 or higher (i.e., "Very Satisfied" or "Completely Satisfied").

Final Cluster Centers

	Cluster	
	1	2
sat_grp2	.00	1.00
ARL	3.19	3.64

ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
sat_grp2	89.944	1	.000	861		
ARL	18.194	1	.095	861	191.270	.000

Number of Cases in Each Cluster

Cluster	1	761.000
	2	102.000
Valid		863.000
Missing		.000

Conclusion

Based on the cluster profiling, the optimal tipping point of E-Factor to distinguish "Very Satisfied" vs. "Less than Very Satisfied" participants is 3.64. The optimal tipping point of E-Factor to distinguish "Satisfied" vs. "Non-satisfied" participants is 3.37. Further, the following can be reported:

1. An individual whose E-Factor between 3.37 and 3.63 is more likely to have an overall satisfaction score of 4.0 ("Moderately Satisfied") or higher.

2. An individual whose E-Factor is 3.64 or higher is more likely to have an overall satisfaction score of 5.0 ("Very Satisfied") or higher.

3. Based on the analysis of the data presented, anyone with an E-Factor of 3.37 or higher is statistically significantly more likely (at the 95.0% confidence level) to report a moderate or higher overall satisfaction level.

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