

# Higher Education Social Sustainability Case Study: Outcomes That Emerged During the Pandemic from The Outlook of the Autotelic Personality Questionnaire

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## ABSTRACT

The study reports on technology and business fields undergraduate adolescent (n=76) Autotelic Personalities using Questionnaire (APQ). The survey refers to a zodiac star chart for positioning AP qualities. High AP promotes engagement and satisfaction in periodic liveliness; thus, its potential is the quintessential set for traversed features that facilitate perceptual flow in daily life. This study utilized mixed-methods as mobile learning to analyze students' APQ perceptions using a Likert barometer, testing measurement validity ( $\alpha$ ,  $\beta$ ) factorization. Perceptual levels on AP Meta-Skills: Curiosity, Persistence, Low Self-centeredness, Intrinsic Motivation, and Receptive-Active Model postulates the sum of Enjoyment and transformation of Challenge, neutrally perceived Enjoyment and transformation of Boredom, and Attentional Control. Each factor R-square considers discriminant validity issues because 4/7 of AP sum correlates more highly with variables outside the parent factor than with the parent factor. The study seeks resolution for biases and results in recommendations for changing pedagogical practice.

**Keywords:** autotelic personality, big five, linear regression, factor analysis, structural equation

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## 1. Introduction

Autotelic is defined as a person who has a purpose or purpose in life per se. Those with an autotelic personality are characterized by the highest propensity to seek challenges in the flow of experience actively.

A space and state of flow involves an activity that streams work and life in a fluidic, unstoppable movement. A person with an autotelic personality experiences a flow where nothing seems to interfere with performing the activity, as the experience is so enjoyable, they sacrifice for doing it.

This study compiles and analyses undergraduate students' autotelic personal development levels using a mixed-methods approach. Design converges quantified information into qualitative information striving for explaining and seeking support for biases. In other words, the quantitative part captures an autotelic personality signals among undergraduate students and is analyzed with versatile discriminatory methods.

As might be expected, the development of autotelic personality in the pool of young adult students is still partly in progress. The result of character can be seen from the perspective of lifelong learning as a lifelong process. Thus, this research seeks methods to understand students' underdevelopment or developmental disability bias from the autotelic personality



perspective. The study builds and proposes a framework for enhancing support for indicating pains for domain-specific manipulable (subject to change) areas.

First, the research proceeds theoretical framework for autotelic meta-skills and receptive-active models. Did you know that autotelic personality is studied by measuring these two connecting entities? Meta-Skills approaches vernacularly human being curiosity, persistence, self-consciousness, and motivation. We, humans, perform our daily living pretty automatically in terms of learning. We are curious to learn something new because it is genetic, as species have always survived by knowledge. What if we don't know and are not interested? Our species will not survive. To this end, the receptive-active model takes the power of the will to curious learning to a practical level. We ought to experience challenges, boredom, and difficulties with a concentration in our lives. Do you find the task too challenging and miss it? Or did you leave tedious tasks halfway done? Can you turn challenges and boredom into enjoyment? Autotelic personalities have superpowers to solve tricky situations and turn boredom into an inner resource, enthusiasm, and happiness.

Second, the study approaches the measurement of autotelic personality from an empirical perspective. I asked 76 students to respond to a questionnaire with 3-4 statements per topic. The measurement was a barometric opinion survey. The student responded by choosing a number between 1 and 7. Number one (1) meant disagreeing, four (4) were neutral, and seven (7) ultimately agreed. The data collected in the fall of 2020 and the spring of 2021 during the corona pandemic. The instrumentation used was having empirically validated framework of Tse *et al.* (2018). The study used the Tse *et al.* (2018) method to compare precisely how the unfinished autotelic personality of undergraduate students has been at the time of measurement. The methods examined the levels of content reliableness; measured meta-skills and receptive-active model variables; correlation charges between variables; and discriminant validity.

Third, empirical results extracted findings that review the sample autotelic personality characteristics. The first (1) research question suggests that the sample represented, on average, somewhat mildly autotelic personalities. The variables had regular scatter, peculiar negative skewed, and prickly peculiarities. The worst biases and peaks made the sample enjoyable to examine. What exactly were the students thinking in the big picture? The second (2) research question approached the regression coefficients of the factorized model. The model revealed the magnitudes of the factor loadings. Correlation magnitudes were above the general limit. The separability of the ratios was above the acceptance level for the model. The third research question looked at the same correlation magnitude squared. From the perspective of the discriminative validity theme, the study noticed severe shortcomings in the mean variances in the negative favor of the model. As a third question result, 2/4 of the Meta-Skills variables and 2/3 of the receptive-active variables were "failed" to explain variances for half of the sample.

Fourth, study go through discussing the distribution of factors and the limitations of the study. Study discusses suggestions for improving the errors experienced in the analyzes for the four error variables mentioned above, which are an integral part of developing a autotelic-like personality because it is the teacher's necessity to support them. Paper also go through the improvement and interpretation perspectives of the three positively realized variables to see the overall picture as well as possible. Finally, compiling the results derives new lines for future research. The study indicates that other data collected simultaneously can be used to clarify the weaknesses of this study and suggests further studies for the study inventory.

## 2 Theoretical Framework

Autotelic personality characters collectively connect to a single extensive model. The meta-skills Model postulates individuals who possess specific attributes for entering and sustaining

a flow state. Meta-skills include curiosity and interest toward life, persistence, and low self-centeredness, which results in intrinsically motivated mastering abilities (Tse et al. 2018, 2 cited Nakamura & Csikszentmihalyi 2002, 93).

The Receptive-Active Model suggests two angled entries for achieving challenges. Foremost to note, regular avoidance orientation produces adverse outcomes. Highly autotelic individuals can identify and seek new challenges by *receptively registering* them. Through a growth mindset, a highly autotelic individual can engage in and persist in the face of challenges, *actively mastering* them. (Tse et al. 2018, 2 cited Csikszentmihalyi *et al.* 1993; Nakamura & Csikszentmihalyi 2002).

Highly performing autotelic individuals can endure challenge-competencies imbalances better than in contrast to high. Due to everyday challenges, most people feel bored. Highly autotelic personalities owning participants'' can transform and enjoy boredom by being sensitive to opportunities from processing situations from a challenging angle, e.g., from a playful mindset.

When flow is cut-off and suddenly stopped for some reason, nervous disorders may occur. The Receptive-active Model acknowledges that more developed autotelic individuals can probably transform competencies more appropriate to complete the task and enjoy highly tedious and challenging situations. (Tse et al. 2018 cited Csikszentmihalyi *et al.* 1975).

All discussed models have considered all but attention control, that is, individuals' ability to focus both narrowly on the task at hand and widely on the surroundings to seek out new challenges, which heavily impacts the total Model of autotelic personality. Highly autotelic personality owners ought to concentrate effortlessly and yet discover new challenges from surrounding learning environments.

Overall, Meta-Skills and Receptive-Active Models integrate into the Flow and Autotelic Personality framework. These models contribute meaningfully and uniquely to the Autotelic Personality.

## 2.1. Conceptualizing Autotelic Personality Meta-skills and Receptive-Active Model

Present studies show that the autotelic personality questionnaire is validated, and it has a static framework for quantifiable and measurable phenomena (Tse et al. 2018). Previous studies motivate the operationalization of autotelic personality research.

Meta-skills model and receptive active model are converging from autotelic personality entity. Entry view through the seven-factor lens considers core attributes given in Table 1, and sub-chapters below frame the core topics.

Table 1.

*Autotelic questionnaire personality assessment instrument content*

Substructure definition	Abbr.	Associated functions
Curiosity	CU	Expressing enjoyment for life through interest
Persistence	PE	A strong passion transcends goals with lasting
Low Self-centeredness	LS	Narcissistic lifestyle reflects a loss of achieving mastery
Intrinsic Motivation	IM	Enjoys achieving despite external premia, for their own
Enjoyment and transformation of	EC	Menacing positions arranged into a pleasant achievement
Enjoyment and transformation of	EB	Free forming exciting monotonic features into enjoyment
Attentional Control	AC	Plasticity to absorption that resists schizophrenic

### 2.1.1. Curiosity

Curiosity and interest in life are illustrable by intellectual curiosity (Tse et al. 2018 cited Csikszentmihalyi, Rathunde, & Whalen 1997, 76). Autotelic people require time to improve

interest and curiosity to enjoy life for its particular purpose (Tse et al. 2018 cited Csikszentmihalyi 1997, 127).

### **2.1.2. Persistence**

All autotelic people expose a peculiarly intense passion for surpassing (achievement), are feeling to process to attain their goals (endurance) (Tse et al. 2018 cited Csikszentmihalyi, Rathunde, & Whalen 1997, 76).

### **2.1.3. Low Self-Consciousness**

A less radical barrier to encountering flow is excessive self-consciousness (Tse et al. 2018 cited Csikszentmihalyi 1990, 84). Narcissistic preoccupation with oneself restricts oneself from classifying probabilities and achieving mastery through creating a lifestyle discriminated by apathy and stress (Tse et al. 2018 cited Csikszentmihalyi & Csikszentmihalyi 1988, 371).

At the minimum extreme flat level, self-centeredness results in narcissism and a lack of ownership for one's image. Thus, a kind of self-centeredness is not equivalent to low selfishness (Tse et al. 2018 cited Csikszentmihalyi 2016).

### **2.1.4. Intrinsic Motivation**

Autotelic souls enjoy living regardless of whether an individual will get external rewards for it (Tse et al. 2018 cited Csikszentmihalyi, 2000, 22). Autotelic denotes an individual who generally does things for their own sake, rather than to achieve some later external goal (Tse et al. 2018 cited Csikszentmihalyi 1997, 117).

### **2.1.5. Enjoyment and Transformation of Challenges**

The 'autotelic self' is one that easily translates potential threats into enjoyable challenges (Tse et al. 2018 cited Csikszentmihalyi 1990, 209). Some people appear to have autotelic personalities that address it more comfortable for them to enjoy daily living and change the routine and yet to threaten circumstances into challenging possibilities for performance (Tse et al. 2018 cited Csikszentmihalyi & Csikszentmihalyi 1988, 364).

### **2.1.6. Enjoyment and Transformation of Boredom**

Autotelic people habitually respond to monotonous circumstances by querying stimulation (Tse et al. 2018 cited Csikszentmihalyi, Rathunde, & Whalen 1997, 157). Why is the same homework boring to some and enjoyable to others?

All must be scanned for in the students' personality, toward their brains to identify difficulties at a level corresponding with their talent, anywhere others hardly mind monotonous barriers (Tse et al. 2018 cited Csikszentmihalyi & Csikszentmihalyi 1988, 32).

### **2.1.7. Attention Control**

Conceivably one feature that discriminates a person with an autotelic disposition is this sense to focus increased efficiently, with more limited effort (Tse et al. 2018 cited Csikszentmihalyi & Csikszentmihalyi 1988, 371).

This adaptability of attention contradicts so distinctly with the helpless overinclusion of the person with schizophrenia. Such may fit the neurological foundation for the autotelic disposition (Tse et al. 2018 cited Csikszentmihalyi 1990, 88).

## 2.2. Metaskills and Receptive Active Orientation Model

The mediation model for APQ was formed and validated. APQ predicts life satisfaction with life mediated by flow proneness and tested the indirect effect with path analysis. The SEM model (see more Li et al. 2021) fit was satisfactory, ( $\chi^2(4) = 8.26$ ,  $p = .083$ ,  $\chi^2/df = 2.07$ , CFI = .99, SRMR = .02, RMSEA = .07, 90 % CI of RMSEA [.00, .16]). For APQ indirect effect on satisfaction with life through flow proneness was significant ( $\beta = .34$ ,  $p < .001$ ), providing support for criterion validity. The APQ signified prognosticating both flow proneness and satisfaction with life assertively. (Tse *et al.* 2018.) A motivational and illustrative pattern is formed based on these predictions to merge convergently in Figure 1.

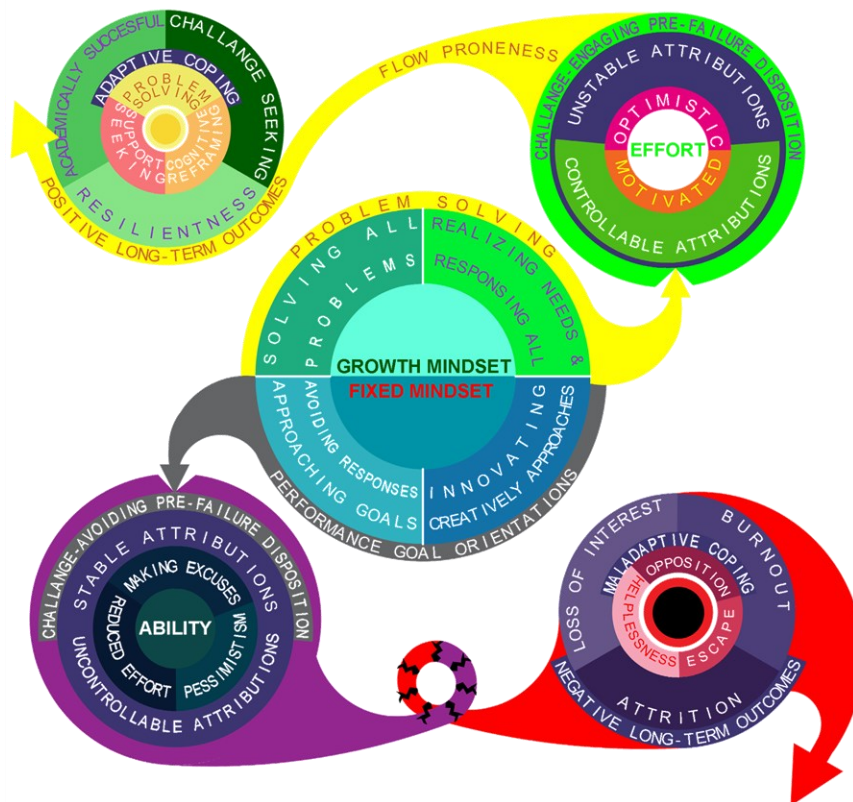


Figure 1: Visual mediation model for growth and fixed mindset autotelic personality and prediction of flow proneness

Note: Maintaining growth requires appropriate maintenance, work, and leisure. Positive long-term outcomes bring satisfaction with life and vice versa. The autotelic model combines mediating and direct effects for Autotelic Personality, Flow Proneness, and Satisfaction within Life Instruments (Tse et al. 2018). The combining model considers success, achievement, and task-specific motivation Orientation models within Science, Technology, Engineering, And Mathematics (STEM) context growth / fixed-Mindset concept (Pintrich 1988; Henry et al. 2019; Kuusisto & Tirri 2019; Dweck 2007).

## 2.3. Research Problematicization and Hypotheses

The research questions (RQs) are formed from the top levels and cover the treatment of their sub-concepts. The RQs are at what level, association, and context of the Autotelic Personality Questionnaire (APQ) 7-core characters relate with existing APQ framework model fit indices.

The research hypotheses (RHs) are stated as follows:

*H1: Respondee's variations fit in the Autotelic Personality model.*

*H1.1: Curiosity supports the Autotelic Personality model positively.*

*H1.2: Persistence support Autotelic Personality model positively*



*H1.3: Low Self-centeredness\* support Autotelic Personality model positively*

*H1.4: Intrinsic Motivation support Autotelic Personality model positively*

*H1.5: Enjoyment and transformation of Challenge support Autotelic Personality model positively*

*H1.6: Enjoyment and change of Boredom support Autotelic Personality model positively*

*H1.7: Attentional Control support Autotelic Personality model positively*

\*Low Self-centeredness was and is reverse-scored. Model testing is fully adapted from Tse *et al.* (2018).

### 3 Research Methodology

#### 3.1. Subjects to be Examined

Participants are Anonymous university students (N = 76), with an overall response rate of 94.5% divided into two groups. Cohort 1 spectacularly represents students earning a Bachelor in Mechanical Engineering (BME) degree (n = 34) with a response rate of 89%, and Cohort 2 represents Bachelor of Business Administration (BBA) students (n = 42) with a response rate of 100%. (Percent rate calculated for respondents who have completed courses related to the survey context).

According to the combining beliefs theory, the respondents' results converged as one set as they have equal sum variables, didactics, reliability, and logical representation (Konieczny & Pino 2011).

#### 3.2. Instruments Used

Autotelic personality instrument indicators in the context of Big Five personality traits are interesting. The grounding is on structurally validated indicators (see Tse *et al.* 2018).

Participants responded to perceptual levels for a given phenomenon on a 7-point Likert scale are, where one (1) = 'strongly disagree' - 7 = 'strongly agree.' The example statements are reported after a few chapters. For understanding questionnaire structure, read *Table 3—factor loading and commonalities*.

#### 3.3. Methods of Data Analysis

The study uses a multimethod embedded correlation model. The model characterizes by the interpretation of quantitative data (Creswell & Clark 2007). In quantitative research, the analysis method provides information on the distribution of the sum variables under study and the dependencies of the variables.

In the first step, justifying what results will be subject to a more detailed, qualitative interpretation to explain the predictive and effective sum variables is chosen (Creswell & Clark 2007).

In the second step, quantitative results are interpreted qualitatively and merged (Creswell 2015; Edmonds & Kennedy 2019).

### 3.4. Reliability Levels

The Cronbach's  $\alpha$ -coefficients for respondees signals are derived from formed sum variables.  $\alpha$ -coefficients range from reasonable to reliable reliability values, see Table 2 (Taber 2016).

Table 2 presents the varying reliability of the data sum variables, two of which are moderate-to-fairly-high (.693-.931) reliability values indicating reliable measurement level. Study tested convergent validity in a reflective model with component reliability.

Table 2.

*Construct reliability levels*

	<b>Cronbach's alpha (Standardized)</b>	<b>Composite reliability</b>
CU	0.853	0.855
PE	0.931	0.921
LS	0.900	0.902
IM	0.843	0.836
EC	0.801	0.816
EB	0.742	0.766
AC	0.693	0.707

### 3.5. Correlation and Regression

The correlation analysis was approached with Pearson's correlation coefficients. The sum variables must not correlate too strongly with each other due to multi-collinearity (Paolletta 2019.)

In regression analysis, explanatory variables are selected from the data. The suitability of the usability of the variables requires confirmation, as the results must be linear (Metsämuuronen 2001).

According to one definition, the number of observations should be at least 40 per variable for regression analysis to be a reliable method (Metsämuuronen 2001; Paolletta 2019). Due to the sample size ( $N = 76$ ), slight generalizations can be made based on the analysis, only describing this study's sample set.

Finally, the regression test determines the minimum, maximum, non-standardized B, p, and standardized  $\beta$  (Paolletta 2019) of the confidence interval comparison. The correlation coefficients are like the predictors of the regression analysis (Friel 2021), but since also review explanatory rates for the relationships of some variables.

### 3.6. Experimental Structural Equation Modeling and Factor Analysis

Structural equation modeling (SEM) and FA can be considered for the study to examine captured and clustered data sampling. For the given reliability values, the data was appropriate to process and tried in the Tse *et al.* (2018) autotelic personality model. The chosen analysis method is justified when it provides information on the phenomena's dependencies and content validity if it is worth the report (Cresswell 2015; Edmonds & Kennedy 2019).

#### 3.6.1. Factor Analysis

The sample size was sufficient ( $n > 40$  per variable) for three measurements per concept, as a total of 325-dimensional space. The dimensional reduction used Principal Component Analysis (PCA) rotation.

The FA experiment showed that the sum variables formed a reasonable variance but not a significant substance. The factor component loading matrix indicates the correlation magnitudes of each latent variable with each factor. (Friel 2021, 21.)

As is evident from Table 3, the proportion of variance in each factor accounted by the three or four latent variables is not the same (Friel 2021). i.e., the commonality is the proportion of the conflict (as variance) in a variable that accounts for the latent variables.

Table 3.

*Factor loading and communalities*

	1	2	3	4	5	6	7	Communalities
I'm curious about the world	.83							.69
I'm actively looking for information on new states	.92							.85
It takes me a while to figure out the entities	.46							.21
The driving force behind what I do, and act is	.83							.70
I'm good at finishing projects		.82						.67
When tasks get denser, I'm continuing until I		.85						.72
I perform tasks even when they are difficult		.89						.79
I'll work on the problem until I solve it		.89						.79
I'm good at finishing projects			.88					.88
When tasks get harder, I'll continue until I			.90					.90
I perform tasks even when they are difficult			.71					.71
I'll work on the problem until I solve it			.84					.84
I'd choose a job I enjoy, rather than a better salary				.69				.48
I think completing a task is rewarded by doing it				.75				.57
I care more enjoyment of the task than the				.85				.72
The most important thing for me is to enjoy the				.70				.49
I enjoy playing complex games					.76			.58
I'd rather prefer challenging over easy work					.69			.47
I like solving complex problems					.86			.73
I've fun doing things that others find boring						.62		.38
I enjoy routine work						.75		.56
Repetitive tasks can be enjoyable						.62		.38
I make the basics of everyday life playful						.69		.48
It's hard for me to choose where to focus my							.67	.45
I find myself easily disturbed							.74	.55
It's hard for me to stay in just one task							.59	.35

Thus, we obtained factorizable fit granting indices worth trying for the model. Numerous frameworks discuss the minimum range for SEM from 0.2 to 0.6 to be considered removal, but also it is stated that there is no universal framework for cut-off. Therefore, the test is valid to process, even it is not entirely fluidic.

Hair *et al.* (2017, 40, 128) states that loadings should be above the expected threshold. Researchers frequently obtain weaker loadings (<.70) in newly developed scales in social sciences.

Previous Table 3 represents factor loadings and communalities. Factor loadings smaller than (.4) are considered a generalized boundary for removal when removing leads to an increase in composite reliability (Hair *et al.* 2017). Removal is justified for better content validity.

To be precise with establishing convergent validity, Average Variance Extracted (AVE) is considered to be reported to validate if the grand mean value of the squared loadings of the indicators is associated with the factor loading construct.

The lowest loadings are in 1, 6, and 7 factors which could be considered to be pruned, but the overall reliableness shows an extreme level to recommend being left as is. As the covariance structure fits the model nearly mediocre, the model converges successfully.

### 3.6.2. Structural Equation Modeling

SEM with CFA tackles a conservative way to check the model fit because it helps to understand latent variables relations. On the one hand, tackling CFA enables model adjustment on



modification indices if some endogenous variables indicate a bad fit. On the other hand, it distinguishes factors that do not work.

Looking more closely at these factors' workaround, understanding why the model did not work and why the respondents did not respond ideally was respected. As a result, factorizing addresses the validation for regression testing, variance extraction, and confidence interval explanation.

SEM has been used in exploring complex relationships between independent and dependent variables. The autotelic personality traits model is connected and validated in a given reference frame (see Tse *et al.* 2018). As a result, the observations were fitted with a SEM for the given model that can be viewed in Figure 2.

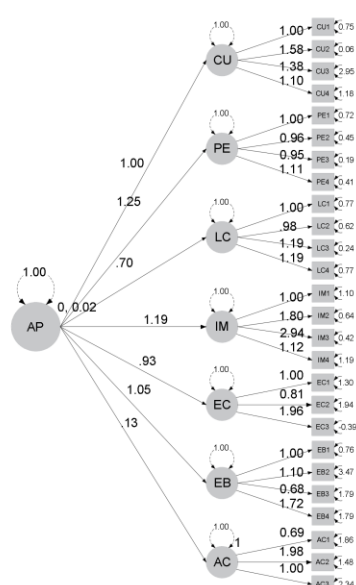


Figure 2: CFA 7 first-order factors modeling for autotelic identity (n = 76)

Note: Rectangularly Single-headed vector-arrows manifests latent variables and arranged values represent factor loadings. All loadings are normalized and statistically valid. AP = Autotelic Personality; CU = Curiosity; PE = Persistence; SC = Low Self-Centeredness; IM = Intrinsic Motivation; EC = Enjoyment and Transformation of Challenges; EB = enjoyment And Transformation of Boredom; AC = Attentional Control (Tse *et al.* 2018).

The autotelic personality model forms a popular background frame (Tse *et al.* 2018). The model has a hot psychologic model background that should indicate given sampling traits very reliably.

As a result, the SEM model fit was miserable. The poor fit was expected because the small sample size can be insufficient and can result in a low Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy test value (it was .534).

The general rule is not to factor 0.00 to 0.49 KMO characterized sample as the degree of common variance is too low (Friel 2021). However, the miserable data was essential to test and document as Friel (2021) framework barely suggest factorizing it. The respondents' models are significant to consider at this stage to uncover explanation and recognition of what kind of patients we have had during measurement timing.

In addition, model indices and Barlett's Sphericity Test (significant) for applying factorizing and overall model fit was ( $\chi^2(21) = 100.26$ ,  $p \geq .001$ ,  $\chi^2/df = 4.77$ , RMSEA = .195).

There have been controversial scientific discussions about the study sampling that McNeish (2018) argued. A well-saturated sample consisting of less than 0.07 RMSEA, model fit is generally excellent. Sometimes as low RMSEA is criticized as the opposite for a good model.

Under high factor loading circumstances, even a 0.20 RMSEA model can be an excellent model. In this case, the study uses a validated meter, and the factor loads are very high. The study can accept the model's suitability for analysis.

Nevertheless, considering High RMSEA fit indices predict problematic fit for many factors with low or high magnitudes. There may be many critical opinions against models and methods but using and developing the meter is the responsibility of Tse et al. (2018).

You should check source data at this stage at the latest before judging this case study. I must emphasize that study cannot be generalized to a sample number with current evidence. Consider the study observations as an unidealized claim to seek remedial action toward investigated phenomena.

Now, by considering the high factor loadings, observations conclude high factor correlations for the phenomena. As the covariance structure is strongly positive for the given validated instrument, the responded group's very high-quality information is well-felt and responded (McNeish 2018).

Nevertheless, the study argues that the model is error sensitive and its forming sample size is miserable. Poor sampling means that the covariance structure does not work perfectly according to the cross-tabulated model.

The relationships between core variables are not being examined in this study, as they should be independent variables in a sense per se. The study results derive a conclusion of similarities and differences in magnitudes.

On the one hand, small sampling makes the model meaningful to study. There are rare situations in the field that cannot be learned and influenced by positive psychology, good self-esteem, and attitude without discriminating nonideal characteristics. This spectrum, as mentioned earlier by respondees, is a scientifically very informative case.

On the other hand, the model may work flawlessly if the sample size can be raised with hundreds or thousands of responses. In reality, measurement and measurement conditions develop over time, so comparability is challenging to assess.

Overall, this study and its miserable fit indices are essential to understand the initial situation with the small resources available to the study. The future possibilities of influencing, measuring, and increasing sampling are considered during the research lifecycle, forgiving the love of practicing a profession a place to develop and supporting given phenomena measuring and teaching.

### 3.6.3. Convergent and Discriminant Validity

Table 4 shows Pearson R correlation magnitudes between variables, outcoming a significant positive correlation between all concepts. The determinant processed by the Bareiss algorithm is over .0001 (.42); thus, the variables are not collinear, and thus the table acts as a discriminated factor distribution (Friel 2021).

Table 4.

*Construct correlations*

	1	2	3	4	5	6	7
CU	<b>.609</b>						
PE	0.49***	<b>.745</b>					
LC	0.08	0.24*	<b>.669</b>				
IM	0.41***	0.64***	0.27*	<b>.563</b>			
EC	0.17*	0.65***	-0.06	0.62***	<b>.598</b>		
EB	0.38***	0.45***	0.59***	0.57***	0.16	<b>.452</b>	
AC	-0.27*	0.21*	-0.09	0.005	0.06	0.04	<b>.448</b>

The exogenous loadings must factorize individually to measure discriminant validity. Factor analysis and SEM model showed unideal behavior between latent structures and KMO concludes nearly mediocre, but without pruning, miserable.

The current factorized model was wanted to be kept in further analyses to hold its suitability to distinguish its highest correlations with other constructs that may explain the problems that under .5 average variance extracted (AVE), and dependent variables contrasted correlation indicates.

## 4 Empirical Results

### 4.1. Research Question One: Descriptives

Descriptives indicate, on averagely, all respondents either are neutral or agree with the measured statements, as arranged in Table 5. All sum variables are skewed negatively towards an agreement to disagree. Enjoyment and Transformation of Challenge (EC) and Boredom (EB) are near-perfect mesokurtic normal distributions.

The most stimulating sum variables are very negatively skewed ones, like Curiosity (CU), Persistence (PE) (with extraordinary skewness towards disagreements), and Attentional Control (AC). For the distribution structures, kurtoses are mostly negatively flat-peaked and have platykurtic characteristics. For the most part, the excluded set of leptokurtic PE and AC stands out as strikingly sharply peaking distributions.

Table 5.

*Sample descriptive variables*

Variable	Min.	Max	M	SD	Skewness	Kurtosis
Curiosity	1.75	6.75	4.78	1.25	-0.51	-0.11
Persistence	2.50	7.00	5.51	0.99	-1.44	+2.18
Low Self-centeredness	2.00	7.00	4.40	1.29	-0.11	-0.68
Intrinsic Motivation	3.00	7.00	5.01	0.97	-0.18	-0.66
Enjoyment and transformation of Challenge	3.00	7.00	5.38	0.96	-0.01	-0.51
Enjoyment and transformation of Boredom	2.00	6.25	4.00	1.07	-0.01	-0.60
Attentional Control	1.67	6.33	4.41	1.06	-0.46	+0.08

### 4.2. Research Question Two: Regression Path Analysis

Acceptable statistical significances verified research hypotheses in the tests expressing the magnitudes for Autotelic personality latent structures, CU, PE, LS, IM, EC, EB, and AC. The performed test used a confidence interval comparison. Confidence interval comparison provides a detailed description of the effects.

Confidence comparisons of specific  $\beta$ -estimates drawn on the path show the derived impact from personality characteristics. The test looks at the upper and lower limit of the  $\beta$ -means between the variable distributions.

The constructed values of the test sets were in the delimitation of the lowest and highest values. Had the values not hit the delineation, the difference between the sets would not have been statistically significant. You can find the positive and statistically meaningful results for tests in Table 6.

Table 6.

*Confidence interval comparison of autotelic personality traits*

Variable 1	Variable 2	95 % confidence interval			hypothesis
		z	p	$\beta$	
CU	AP	47.00	<.001	0.546	Accepted
PE		54.65	<.001	0.831	Accepted
LS		48.30	<.001	0.559	Accepted
IM		52.50	<.001	0.786	Accepted
EC		35.98	<.001	0.531	Accepted
EB		53.17	<.001	0.784	Accepted
AC		11.65	<.05	0.204	Accepted

The next chapter's readings describe specifically the technical parameters of the confidence interval comparisons between the models that led to the analysis results. Decisions can rely upon if the R<sup>2</sup> explains a substantial amount of sample average variance.

### 4.3. Research Question Three: Explanatory Rates

The previous correlation and confidence interval comparison showed different magnitudes between the autotelic personality characterized attitudes adopted by the respondents.

The interaction between the supplemented sum variables with latent variables for hypotheses explanation and summarization helps to explain the amount of sampling variance that dependent variable responses perceive explainable proportion by independent variable in a regression model.

All confidence interval comparisons were tested in pairs statistically significantly. The purpose of the third RQ was to find out the explanatory rates in the perceptual level considering the model path analysis. The respective loading factors are squared and equal to autotelic personality model AVE.

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The perceptual levels variedly explained the total effects of 29.8 % of Autotelic Personality for Curiosity ( $R^2 = .298$ ,  $p < .001$ ). In terms of Persistence characteristics showed a striking effect in a total of 69.0 % ( $R^2 = .690$ ,  $p < .001$ ) in the explanatory factor. Low Self-centeredness was explained minority by 31.2 % ( $R^2 = .312$ ,  $p < .001$ ). The Intrinsic Motivation consideration explanatory resulted a major piece of 61.5 % ( $R^2 = .615$ ,  $p < .001$ ). The Enjoyment and transformation of Challenge effects explained a humble portion of 27.5 % ( $R^2 = .275$ ,  $p < .001$ ). The Enjoyment and transformation of Boredom saw explanatory quantity of 61.5% ( $R^2 = .615$ ,  $p < .001$ ). The Attentional Control factor explanatory level were the lowest of all 4.2% ( $R^2 = .042$ ,  $p < .05$ ).

## 5 Discussions and Conclusions

The present studies developed and assessed the reliability and validity of the given research measuring instrument. APQ enjoys a high degree of trust in the psychological research field.

An autotelic personality questionnaire is developed for surpassing validity barriers that previous research concepts have resulted (e.g., Young 2011).

Barriers have included poor fit to measure essential features for autotelic personality. Tse *et al.* (2018) solved autotelic personality factors by observing stepwise regression results and pruning the quantified latent variables. Results acknowledge having collinearity issues.

Questionnaire developers removed weak latent tendencies and finally released the pruned model as a gem of wisdom. Tse *et al.* (2018) assessed model validation with a weak evidential signal on discriminant validity. Results emphasize that the APQ only suggests that highly scored people may have a solid general sense of agency over life events. Remarkably highly enumerated souls may not necessarily hold a specific perceptual level on the malleability of intelligence.

### 5.1. Factorability

As an important observation to the content validity thematics, we concluded earlier that the minimum range for SEM loading from 0.2 to 0.6 to be considered removal, and yet the study found the motivation to continue with the process due to the known low correlations because the used instrument is extrinsically validated by (Tse *et al.* 2018).

As a response for Tse *et al.* (2018) evidential ideal model, our study results in problematization. Studies have processed enough evidence that the measured content has some contradictory issues. First, Curiosity explanatory quantity of  $R^2$  was (.298); Low Self-centeredness explanatory quantity of  $R^2$  was (.312); Enjoyment and transformation of Challenge quantity of  $R^2$  were (.275; and Attentional Control explanatory quantity of  $R^2$ , the value of (.042). Given values are less than a substantial amount ( $R^2 = .4$ ). Therefore, the all-factorization branches should be cut down due to poor criteria to establish construct-level validity (Hair *et al.* 2017, 40).

On the other hand, outer loadings are above the threshold when we consider AVE thematics. We should consider parent factors latent endogenous children previously to be removed by their reflective indicator value and its impact on content validity. By deleting the lowest latent variables (CU3: “*It takes me a while to figure out the entities*”; EB3: “*I like solving complex problems*”; AC3: “*It’s hard for me to stay in just one task*”), with loadings, the AVE approaches to ( $\geq .5$ ), that indicates the construct explains more than half of the variance of its indicators and KMO increases over mediocre (.6).

Those latent structures in which discriminant validity was good raise model misfit problems in terms of content validity. When loadings and extracted average variance are above thresholds, we can accept the model for processing. The coefficient for determination fitment to the dependent autotelic personality variables is lacking due to in-coherent variation to support the autotelic personality model. By investigating the situation, it was found that deleting latent variables: LS3: “*I perform tasks even when they are challenging*“, could result significantly raised to acceptable AVE, while the constructs validity would remain unchanged; but then, by deleting EC2: “*I’d instead be preferring challenging over easy task*“ could have raised the discriminant validity of the proportion of  $R^2$  respective AVE in overall, but decreases the minimum coverage of a minimum of three variables of the constructs theoretical domain (Hair *et al.* 2010, 676).

Less than .5 AVE reflects, on average, more variance remains in the error of the items than in the variance explained by the construct (Hair *et al.* 2017). High correlations demonstrate discriminant validity for the extracted variance among variables outside latent variables' autotelic personality parent factor. I.e., different factors would rather explain the phenomenon



instead of their observed variables. This is because the square root of each latent variable in the measurement model is higher than AVE and confirms the discriminant validity criterion.

Thus, the factorability of the correlation matrix that we saw below .6 of substantial KMO suggests that our model factorability indicates weaknesses. However, many statistical researchers have rejected the AVE criterion in the context of variance-based SEM due to insufficient establishment for construct validity (Henseler *et al.* 2015).

The third research question nevertheless indicates the poorest confidence interval threshold for Attention control. We can conclude that the sample lacks discriminant validity for the used Tse *et al.* (2018) idealized model.

Factorability is not as easy to digest with a small sampling. Still, it should not be the source for initial criticism because bias entry is against the content validity compared to the idealized model from Tse *et al.* (2018). The recommended sample size is a minimum of 10 cases for CFA rotation (Pallant 2005). Thus, factorability is granted and reflects sample individuals' perceptual responses and level of autotelic personality maturity excellently.

## 5.2. Limitations

The general rule to approach SEM and FA is a large sampling requirement. Sampling must be sufficiently large to test the model validation reliability suitability. Let us consider the study limitations more thoroughly. If the measurement instruments are valid, then the case for the RMSEA has to be less than 0.07 for a good fit for the model to be ideal as in Tse *et al.* (2018) elaboration.

Let us consider the study limitations more thoroughly. The general rule to approach SEM and FA is a large sampling requirement. Sampling must be sufficiently large to test the model validation reliability suitability. If the measurement instruments are valid, then the case for the RMSEA has to be less than 0.07 for a good fit for the model to be ideal, as in Tse *et al.*'s (2018) elaboration.

Validated measurement instrument significance is the scientific acceptance for its reliableness, and its validation does not require demonstrations separately. It may not be ideal and contradict the Tse *et al.* (2018) discriminated model of Autotelic Personality. However, I think it is more open to publishing the analyses to understand together what a sense of trust sample set had during decision-making.

On the other hand, SEM and FA are valid approaches to experiment whether tests considering sample responses fit into the mold of pre-validated metrics. Instead, in this study, it is a question to publishing the situation. The data fits into already idealized existing metrics to find individuals' personality pain considerations that are contrasting optimal experience toward work and leisure among other characters.

As mold of the pre-structured instrument was used to measure widespread significant five phenomena. This specific measurement considered autotelic personality has been examined. The tool used was a validated instrument; the sampling did not result in a new personality theory but instead tested it. Analyses neither produced scientifically meaningful learning artifacts nor finding during the study due to low sample size.

The given non-ideal phenomena fit only forgiven sampling. Reliability basis on the tables and figures considers the tested population and applies only to the group, and cannot be generalized into a random population. These weights will vary from study to study depending on the different individuals' perceptual level experiences, biological ages, and perhaps gender-dependent, constrained in respondees background organizations, and motives to participate.

For instance, differences in perceiving idealized student characters are already evident. For example, senior co-researchers and teachers have been aware of students' developmental differences, and there is also a variety of reports for the idealized styles measures and analyses present.

However, although the analyzes are enjoyable to read, you probably considered source reliability. The paper is reliable by the statements about the relationships between personality styles emerging based on theoretical sources. Once again, based on tests performed and the sparse sample size, results are generalizable only for a given sample. Thus, the phenomenon is generalizable for the given selection, but it should not be confused with the results of Tse et al. (2018). However, the paper acts as a pilot study that encourages further research exploring personality styles more extensively, being a good starting reference.

Finally, I would like to emphasize that you will focus your potential criticism on issues depending on the sample and analysis, as case study analyzes often result in very individual results. To emphasize and affect your thoughts, I must point out that there have been controversial scientific discussions about study sampling. A well-saturated sample consisting of less than 0.07 RMSEA, model fit is generally excellent. Sometimes as low RMSEA is criticized as the opposite for a good model. Under high factor loading circumstances, even a 0.20 RMSEA model can be an excellent model. By considering the high factor loadings, observations conclude high factor correlations for the phenomena. As the covariance structure is strongly positive, the responded group very high-quality information is well-felt and responded. (McNeish 2018.)

### 5.3. Evidence for Bias Correction

The study reveals the weakest features of the research cohort in part by examining the validity of the content but refined by examining the  $R^2$  variance indication. The cohort pain points were the superficially weak curiosity ( $R^2 = .312$ ); the slightly deeper Enjoyment and Transformation of Challenge ( $R^2 = .29$ ); and the very superficial Attentional Control ( $R^2 = .042$ ). However, the respondees answered with a good touch and hoped for a resolution. By excluding core-3 sum variables, the leftover of 4-core was the most ideal for the autotelic personality model for the given sampling. The research seeks to correct the erroneous model because of its importance to influence students' perceptual levels by supporting their weaknesses with an ideal model of autotelic behavior and its teaching.

Most students seem to have lost their curiosity toward the content matter, for the learning itself. Curiosity is proposed to be heavily affected by self-awareness at the perceptual level: whether learners may decide on their own, with free will, or is the teacher as a leader having a direct impact on the individuals' choice.

#### 5.3.1. Curiosity Bias

Curiosity has dialectical action: *Stretching*, where human naturally seeks out knowledge and new experiences and *Embracing*, indicates a willingness to *embrace* the uncertain, the novel, and unpredictable nature of everyday life (Kashdan 2009).

Curiosity is heavily affected by strongly correlating ( $\beta = .41^{***}$ ) intrinsic motivation side, excluding problematized connection of motivation. Excluding has the support of psychologists who have justified the construct of curiosity being fraught with inconsistent operational definitions and misuses with psychological concepts that closely relate to intrinsic motivation. (Kashdan et al. 2009.) thus, curiosity views as a critical motive that influences human behavior by stimulating the pursuit of novel and growth opportunities.

Supporting individuals' novel and growth opportunities through curiosity must consider individuals' positive psychology aspect: personal growth, openness to experience, autonomy, meaning in life, self-acceptance, psychological flexibility, idealized influence, and social relations as Item Response Theory (IRT) characteristics suggest (Martarelli et al. 2021; Kashdan et al. 2009; Kashdan 2009).

### 5.3.2. Low Self-Centeredness Bias

Flow is hard to achieve with low self-consciousness. Low self-consciousness results in shyness and being an embarrassment in social relations. Trait theories quantify shyness or courage as the continuous dimension of personality that prepares learners to take different situations. In continuum, character can be seen as being dynamic and changing over time.

High self-consciousness is a dialectical concept, as it includes two-sided, permanent, and fragile self-esteem. Narcissistic personalities are weak in many ways because of their inflated sense of their importance; request for excessive attention and administration is very artificially produced and maintained. Implicitly, by intrinsic motivation driven, respondents had a firm belief in themselves, that is, that they would be able to carry out the tasks and carry on the responsibilities they had begun to the end.

Low self-consciousness is contrasted by superfluously extraordinary high quantified levels of self-consciousness (reverse-scored,  $M = 4.40$ ), relating highly to incomprehensibly high and intrinsic solid motivation levels ( $\beta = .27^{***}$ ), recognized as never giving up attitude ( $\beta = .24^*$ ). Respondents agreed to take on averagely, neutrally or instead skewing towards disagreeing attentional control, struggling in the repetitive tasks, and having a hard time focusing their attention. Narcissistic souls are interested in new things and new relationships rather than staying in boring routines.

High self-consciousness correlates positively ( $\beta = .59^{***}$ ) on enjoyment and transformation of tedious challenges ( $M = 4.00$ ), indicating respondents representing possibly a little bit of narcissism. Overt narcissistic souls are mostly correlated with an unpleasant relationship with boredom (Wink & Donahue 1997). A large sample connects with slightly negatively skewed from the neutral axle with transforming boredom into enjoyment.

Boredom proneness is emphasized in narcissistic' chronic preoccupation study. Measures of narcissism and boredom showed converted (implicit) low-level narcissists souls having the greatest boredom proneness ( $\beta = .54^{**}$ ) and highest intrinsic motivation levels ( $\beta = .26^{**}$ ). On the other hand, overt (explicit) indicated a slightly negative regressor for boredom proneness ( $\beta = .18^*$ ) and intrinsic motivation ( $\beta = -.07^{**}$ ). (Wink & Donahue 1997, 138; Morf *et al.* 2000)

Previous theoretical and deductive reasoning divides the crowd into explicitly ( $R^2 = .073^{**}$ ) and implicitly ( $R^2 = .348^{**}$ ) having narcissistic personalities. Narcissistic personal characters were not directly measured, and resolution only remains just a (nice-to-know) estimate that may not correspond to reality as is but justifies the low levels of bias among statistically significant relations in covariance structure with variables that should not have such meaningful relationships.

### 5.3.3. Enjoyment and Transformation of Challenge Bias

Experienced enjoyment can be supported and produced using mind-games, etc. in interaction, to build a socially connected learning environment. Learning for children is biologically the same as adolescent learning, identified appropriate anecdotes for more wholistic meanings. Designing a playfield that encourages and motivates to participate in learning with enthusiasm

gives more optimistic outcomes for challenge transformation and enjoyment of learning. (adaptation from Lucardie 2014)

Weakly perceived **Enjoyment and Transformation of Challenge** is reflected from the fun and enjoyment concerning in-depth, problem-based learning. Empirical findings have justified the overall experience, namely engagement, social relationships, and safety, influencing how learners perceive fun and enjoyment. The mechanism should be strongly supported from both weakest structures, Curiosity ( $\beta = .17^*$ ) and attentional control ( $\beta = .06$ ), indicating that the regressor magnitudes are not resulting joyfully in the covariance structure.

For the first beta, Curiosity itself is a relevant factor for maintaining enjoyment for the long term because fulfilling Curiosity releases fewer enjoyment hormones than long-term Curiosity and anticipation of something expected to come. Therefore, relatively low loading is reflected as not correlating, but the relationship is meaningful because our sample size is relatively small. (adaptation to research results from Lucardie 2014.) Thus, the proportion of the sample positioned out of the interval due to unnatural variation should be comforted and encouraged to understand how enjoyment can be harnessed as a resource connected for well-being.

On the other hand, the unforgiven beta value indicates, attentional control is unexpectedly out of correlation bounds, meaning that challenges are not being taken and transformed seriously into an enjoyable manner, instead not giving single care for the phenomenon due to non-correlated and non-significant relation to each other.

Undertaking activities for low challenge transformation to enjoyment and action, teaching-studying-learning-process must enable interacting with others, the method can use humor, generate discussions of achievements or set them, benefit for using emotions, and raising well-being. When learners and teachers both have fun, the mutual experience acts as a motivator to attend classes and learn the knowledge and skills of each other.

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#### 5.3.4. Attentional Control Bias

**Weak Attentional Control** elucidates forming from complex qualitative concept space. Learning itself is accomplished when students have their motivational and attentional variables positively engaged with the didactic content, and competencies are developed accordingly and result in academic performance. (Pereira et al. 2021.)

There is little information on how to learn to improve the attentional control of students. Theories suggest that education should be intentional for self-regulated learning strategies that promote autonomous action and reduce selective attention. Young adults share similar learning capabilities as children in the general processing system structural and developability level.

Age differences show in levels of maturity and fulling capacity gaps that children's brains cannot process and lose the opportunity to attach meaningful new entities as previous knowledge to long-term memory. Learning pains are due to relatively weak internal authority, and it is well known that, indeed, teachers are aware of differences in the levels of students has long been a problem that needs to be addressed. (Pereira et al. 2021.)

Many learners address a complex and diverse variety of diagnosed or latent ADHD, autism or anxiety disorders, etc. These are all normal for today's classroom due to inclusion and equality. As a teacher, We should focus on learning students' functioning skills.

Competencies can be used/developed to deliver the learning packages thoroughly for the customer. Students certainly have a cognitive need to capture supporting structures to build better intuition of the slowing disabilities.

Avoiding uncertainty states out of curiosity has been shown as a risk factor for anxiety disorders. Interest is negatively correlated ( $\beta = -.27^{**}$ ) for attention control and fulfills Dugas *et al.* (1997) theorem. Harmful curiosity with attention control may be present as an anxiety disorder among students.

## 5.4. Positive Evidence

The study also produced positive evidence revealing positive relationships among Autotelic personalities attributes among responding individuals.

### 5.4.1. Persistence

Persistence ( $R^2 = .690^{***}$ ) showed positive relationship for Autotelic personality. Squared identifies that individuals had spent a large amount of time highly skilling themselves with highly challenging conditions, which is ideal for coping with present and future (working) life.

To persist at anything, human nature requires a mechanism in the brain that initiates and maintains effort. Without this fluidic mechanism, we cannot start or sustain action (Sutton 2021 cited Ryan & Deci 2017). Human, as a learner, requests curiosity and interactivity driven by persistency ( $\beta = .49^{***}$ ) associated with a perceived flow state empowered heavily by intrinsic motivation ( $\beta = .64^{***}$ ).

Persistence motivation assumes that human learners are naturally active, motivated and interested, and eager to succeed because success is personally satisfying and rewarding. (Ackerman 2021.) However, exceptional cases can leave learners alienated and mechanized or passive and disaffected. (Deci & Ryan 2013; Deci & Ryan 2021; Sutton 2021.)

Leftover emerging out of the confidence interval threshold indicates somewhat failures, "*but we can change them for better ones*" (Sutton 2021) through satisfying each one. To promote those who are struggling, we can lead change—change-management respects strategically sharing inspirational thoughts to activate motivation areas. There are numerous ways to influence, ideally, by swallowing learners into engaging activities. Methods as storytelling, information strikes can result in increased intrinsic interest. Engaging, passionate learners enhance internal requests for attention for learning to strive better in school assessments and core domains to persist.

### 5.4.2. Intrinsic Motivation

A relatively highly striking intrinsic motivation portion of given substantial variance ( $R^2 = .615^{***}$ ) causes long-term, highly-maintained persistencies correlated strongly with intrinsic motivation levels ( $\beta = .64^{***}$ ). From all measured factors of sampling respondees' observations, the inherent motivation predicts monotonously flow proneness positively.

High flow proneness addresses levels indirectly attached to the study because the study did not directly measure it. The study cannot conclude superior flow proneness with the measurement data but consider an intrinsic weight that may predict a dispositional measure of flow propensity with the engaging activities I planned, executed, and taught.



Reduced flow connects an intrinsic motivation variable that is somewhat weighted and skewed to the negative side of the horizontal axle for a range of 1-3 in a 7-point Likert scale. (Tse et al. 2018 cited Asakawa, 2004; Nakamura & Csikszentmihalyi, 2002).

Flow is an optimal psychological state by the deep self-directed absorption in what one is performing. Experiencing flow motivates individuals intrinsically to engage, identify with, that be conducive to the nearest learning environment. (Nakamura et al. 2019.) Constructive activity for raising one's understanding, trust, and self-image form a famous one sentence to clarify learners' life purpose (Sutton 2021). The defining sentence can sum up our lives. Rewarding for ideal behavior aptly with a clause, for instance: "Well hit the target, a real professional without safety-net underneath," which encourages the learner to focus in the skilling area approaching mastery, or "hit and miss in style, you're not there yet" to try again.

### 5.4.3. The Enjoyment and Transformation of Boredom

Characteristics of disorders often rely upon the experienced barrier that hinders learners from achieving personal learning goals—insight into determinants that influence the experience of the specific obstacles of boredom and enjoyment. Research has shown that anxiety disorders significantly impact motivation, support, social context and time, and technical and online-related competencies. (Henderikx *et al.* 2019.)

Enjoyment and transformation of Boredom measurement saw an explanatory quantity of ( $R^2 = .615^{***}$ ) support for autotelic personality structures. A minority of respondees are likely to struggle to represent anxiety disorders for ordinary learning assignments. Although the group supporting the network is significant, as a teacher, one may wonder whether the teacher should make learning more meaningful or whether students should be taught more inspiring tasks? Even in working, you come across boring jobs, so I would see that encouraging and educating students to take and perform boring assignments as an inspirational and gamified position helps.

Enjoyment indicates weak and random correlation signals toward the barriers, contrasting, e.g., an anxiety disorder. The study ends up arguing how influential emotions are really for the experience of obstacles (Henderikx *et al.* 2019.). Exceptio probat regulam, researcher of the study received one direct complaint from a student who emphasized that author should learn to be more empathetic.

Exceptionally, teachers are scanning a student identity through homework to identify learning process difficulties at a correspondingly level with corrective feedback respecting talents. Students' responses reveal how enjoyment and transformation of disorders may mind monotonous barriers of guidance. (Csikszentmihalyi & Csikszentmihalyi 1988, 32.)

Students' response, subjective flow experience, is engaged with high enjoyment, full involvement, and high concentration to approach the learning goals, assessment, and skills competencies. Eudaimonistic personality theory posits a link between activity and identity, where self-defining activity promotes the strength of a person's social identity, which is made up of personality. Sought study implicates increasing social identity via participation in self-defining group activities that could facilitate the flow. (Mao *et al.* 2016)

Responding by email for creatively learned artifact monotonous, inspirational, and supportive toned, by erroneous toned feedbacks are students' normal behavior. After all, anyone can see from a returned learning task whether the student returned the task well-structured and whether the effort has been put into it. Discriminating those who struggle from learning process being successful are spanning for doing teaching job well (Morin 2021). Positioning social interaction first to employ flow across each of the above considered subject matter should have more

substantial implications for building social identities via participation in recommended group activities (Mao *et al.* 2016).

A variety of anxiety disorders acts as a disabler for learners to process and structure requested, e.g., learning assignments. Many projects have found students who are behind academically or behaviorally challenging. Keeping in mind, there can be numerous reasons behind students' traumatic behavior against, e.g., justifying final assessment as incorrectly assessed. There is always a reason for student behavior, and teachers should not simply react to or correct the behavior itself. (Morin 2021.)

A variety of disorder-based and not transformational-based responses lack the motivation to learn teacher's feedback. Thus, teachers should not respond to students by email or learning management tools; instead, I suggest discussing learning matters in the classroom. Answering and directing students' actions through electronic posts raises the lack of students' participation. Non-responsiveness encourages interaction against social disconnection and could facilitate enhanced flow upon requesting the learner's internal agency. (Fort 2014; Mao *et al.* 2016.)

The assessment is also professionally and pedagogically valid in facilitating learners into social (private) interaction (if necessary) because agency requires action to approach social appreciation publicly for the title (: course assessment) earning. I would say that only it is the way turning boredom into love and enjoyment through durability, showing a solid likeness for persistence ( $\beta = .45^{***}$ ), by returning to the very beginning of the *Positive evidence* chapter.

## 5.5. Summary

Invariance measurements (as Wang *et al.* 2017) indicate statistical survey qualities support validated constructs (Tse *et al.* 2018).

Given APQ is used estimating factor for flow proneness and life satisfaction in the Big Five model.

APQ positions itself among other Big Five characters as one important physiological measure positively correlating with many complex psychometric variables (Tse *et al.* 2018).

As a result, on average, somewhat highly positive APQ scores predict raised flow state among responders.

The pilot study reveals the weakest features of the research cohort in part by examining its validity. Content validity is acceptable for the autotelic personality model. Discriminant validity, on the other hand, has problematized average variance  $R^2$ -indications. Crosstabulation of autotelic personality meta-skills and receptive-active models variables variances does not indicate a problematized content or discriminant validity.

Results provide resolution for construct and criterion validity. The cohort pain points were the superficially weak curiosity ( $R^2 = .31$ ), the slightly deeper Enjoyment and Transformation of Challenge ( $R^2 = .29$ ), and the very superficial Attentional Control ( $R^2 = .042$ ). By excluding these core-3 sum variables, the leftover of 4-core was the most ideal for the autotelic personality model for the given sampling.

Csikszentmihalyi (2002) discusses that autotelic individuals have a specific goal-setting strategy (intrinsic motivation), curiosity and interest in life, and low-self-centeredness due to flow-blocking narcissism characteristics. The prerequisites of flow experience, attention, and energy are spent protecting the self, indicating that respondees were worried about what others think of them.

However, the respondents answered with a good touch and hoped that responding result in a sufficient resolution. The research paper seeks to correct the erroneous model with idealized impact. It is crucial to influence students' perceptual levels by supporting their weaknesses with an ideal model of autotelic behavior and lifelong learning.

A pilot study in the light of present knowledge with suggested bias correction would seem to have fulfilled its meaning by sparking a debate.

## 5.6. Approaches and Directions in Scientific Futures Studies and Research

For future research prospective, enjoyment of challenges in the context of leadership and management correlates positively with passion for change management (mainly idealized influence), transaction management (management-by-exception), and mastery-goals orientation toward full range leadership. (Farley 2014, 117-129.)

For further studies, self-centeredness or self-consciousness is often taught as being selfless (incorrectly). Self-centeredness is controlled by selflessness and results as positive ( $\beta = .33^{**}$ ) subjective authentic-durable happiness (being happy is an uncountable condition of enjoying). Self-consciousness results from a conditioned enjoyment state by fully mediating by afflictive affections. Positive egocentrism predicts positively ( $\beta = .40^{***}$ ) intrinsic subjective fluctuating happiness (SFHS) and negatively ( $\beta = -.20^{**}$ ) intrinsic subjectively authentic-durable happiness (SA-DHS). (Dambrun 2017.)

Data for the mentioned analyzable phenomenon was collected from the crowd simultaneously and takes the relationship for future research investigation.

In terms of future research and teaching, I could see many opportunities. One of my suggestions is future studies can intentionally focus on students' personalities at the beginning and end of the degree, allowing us to see how ideas have evolved over a period (follow-up research).

My second suggestion is to set off with additional information from this study and not conduct a follow-up study from the perspectives of teachers. Initial mapping of students' personalities has a lot to do with teaching planning at the individual level. It is also beneficial for the students to understand the concept of Big Five, autotelic personality to evolve for (working) life, for social sustainability.

A huge bias in the results appears as a lack of sustainability, especially in social dimensions. When individuals achieve mastery learning outcomes, it is emphasized that ego orientations could be interesting to study. From the Finnish Ministry of Education's (2022) side, educational outcomes are more emphasized for sustainability on its concept broadness. To this end, sustainability teaching is an important aspect of future development. The responsibility of attraction through personality traits is a key component of sustainability and permanence (adapted to Lander 2017), so teachers should be tested accordingly to conclude the sustainability development goals from the educational side in a crucial moment for Y-generation adult learners.

## 5.7. Acknowledgment

### 5.7.1. Declaration of Conflicting Interest

The author declared no potential conflicts of interest concerning this paper's research, authorship, and/or publication.

### 5.7.2. Pedagogical Development Project

This paper is an output of the scientific, pedagogical development project supported by Tampere University, in the researcher's home institution, with an agreed resource agreement. The agreement permits to sharing of research resources (library e-access and e-mail).

### 5.7.3. Funding

This study has nonexternal funding or and this has no incentive set by a third party. Paper concludes early teaching measurements. The author received no financial support for this paper's research, authorship, and/or publication. I am submitting and broadcasting this delivery as an independent researcher.

### 5.7.4. Research Data

The study is contracted with two research permits approaching the aims with universities during 2020-2021. A condition approved permits that the data will be anonymized for institutions and participants matter. Results are being stored, kept, and published anonymized until they are destroyed within a period of publication of the research results.

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