

Department of General Psychology

Bachelor's Degree Course in Psychological Science

Final dissertation

Development and validation of a questionnaire within the theoretical frame of the Enneagram

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Abstract

The study attempts to validate a questionnaire within the theoretical frame of the

Enneagram, a personality theory composed of nine personality types. The study was

carried out on a sample of 300 people in Italy, who had to rate on a scale from 1 to 5, a

number of 123 items. The reliability of the questionnaire was analyzed on nine different

factors resulting in an unsatisfactory internal consistency. Finally, the paper ends with

recommendations to improve the present study and for other research conducted on the

Enneagram.

Keywords: Enneagram, personality types, questionnaire

2

List of tables:

- Table 1 The Ennegram types
- Table 2 Descriptive statistics of the participants' ages
- Table 3 Educational level; selected choice
- Table 4 Educational level; other
- Table 5 Factor 1 (Personality type One) Cronbach's alpha
- Table 6 Factor 1 (Personality type One) Item-rest correlation
- Table 7 Factor 2 (Personality type Two) Cronbach's alpha
- Table 8 Factor 2 (Personality type Two) Item-rest correlation
- Table 9 Factor 3 (Personality type Three) Cronbach's alpha
- Table 10 Factor 3 (Personality type Three) Item-rest correlation
- Table 11 Factor 4 (Personality type Four) Cronbach's alpha
- Table 12 Factor 4 (Personality type Four) Item-rest correlation
- Table 13 Factor 5 (Personality type Five) Cronbach's alpha
- Table 14 Factor 5 (Personality type Five) Item-rest correlation
- Table 15 Factor 6 (Personality type Six) Cronbach's alpha
- Table 16 Factor 6 (Personality type Six) Item-rest correlation
- Table 17 Factor 7 (Personality type Seven) Cronbach's alpha
- Table 18 Factor 7 (Personality type Seven) Item-rest correlation
- Table 19 Factor 8 (Personality type Eight) Cronbach's alpha
- Table 20 Factor 8 (Personality type Eight) Item-rest correlation
- Table 21 Factor 9 (Personality type Nine) Cronbach's alpha

Table 22 - Factor 9 (Personality type Nine) Item-rest correlation

List of Figures:

Fig. 1 – Enneagram symbol

Fig. 2 – Enneagram Triads

Fig. 3 – Enneagram wings

Table of Contents

Chapter 1 – Introduction	8
Chapter 2 - Exploring the Enneagram	9
2.1 The origins and evolution	9
2.2 Core Principles	10
The Enneagram symbol and personality types	10
Triads	13
Wings	14
2.3 The Enneagram in relation to the DSM and psychotherapy	15
Chapter 3 – Research methodology	16
3.1 Research aim, design and structure	16
Aim	16
Design	16
Components and structure	17
3.2 Ethical considerations	18
3.3 Technical details	19
3.4 Sample	20
Age	20
Gender	20
Educational level	21
Chapter 4 – Results	23
Chapter 5 – Conclusion	33
5.1 Implications	33
5.2 Strengths & limitations	33

5.3 Suggestions for future research	34
References	35
Annex 1	3
Annex 2	4

Chapter 1 – Introduction

Whether the complexities of human personality can be truly captured within a structured framework, and how to ensure its validity and reliability, remains an important question. Many scholars and experts have undoubtedly considered this question when exploring human personality. To answer this question, several hypotheses have been proposed. This paper aims to breifly introduce and explain the Enneagram theory, discuss its importance in psychology, and present a new study on this topic.

The Enneagram is a personality theory attempting to establish a framework and structure personality, by classifying nine distinct manners in which humans develop (Alexander, M., & Schnipke, B., 2020). By undertanding the Enneagram, individuals comprehend how others behave, their way of interpreting the world and what drives them. It is also a great tool for self-discovery; it behaves as a mirror that reflects our own strenghts and weaknesses and also our motivations connected to our personality type (Blose, T. M., et al., 2022).

Undertanding the Enneagram needs to extend mere curiosity. General knowledge of the Enneagram oftem comes from experiences or stories, but an empirical research plays a crucial role in deepening the understanding. Sutton (2012) suggest some reasons why empirically studying the Enneagram is necessary. Firstly, in understanding personality, research helps to validate the Enneagram as a serious tool, and not just as a trend, and build credibility. Also, it helps specialists in having a commoun ground, based on research, ensuring a good cooperation and comunication, within the Enneagram community. Finally, a commun understanding of the personality types decreases the chances of individual biases which in return is affecting the interpetations (Sutton, 2012).

Chapter 2 - Exploring the Enneagram

2.1 The origins and evolution

The precise beginings of the Enneagram are unknown (Alexander, M., & Schnipke, B., 2020), but experts are inticating to the Babylon or the Middle East to be the starting places, by means of verbal transmission (Hook JN, et al. 2021). George Gurdjieff, a Russian philosopher, first presented the Enneagram at a French conference in 1915 (Bland, A.M., 2010), but the model is believed to be deeply connected to Sufi mysticism (Palmer, H., 1988). Gurdjieff probably came upon the Enneagram while traveling in Afghanistan and Turkey (Hook J.N., 2021). Originally, personality was not seen as a valuable source of information during Gurdjieff's lifetime, and the schools who continued to pass on his techniques, haven't shown interest in the link between personality and one's inner self (Riso & Hudson, 2000). He taught the Enneagram through movement, being also the first to use the Enneagram symbol. Gurdjieff would gather his students in large groups to perform sacred dances, while on the floor, it was represented an interconnected circle with nine points, as he viewed the Enneagram as a "living symbol" (Palmer, 1988).

Only later, in the 1950s, personality started to be seen as a valuable source of information. Born in Bolivia, Oscar Ichazo, the founder of the "Arica School", was the first to slowly integrate the Enneagram into contemporary psychology. Ichazo has developed multiple versions of the theory, outlining the characteristics of mental and emotional processes for each personality type as well as the connection between them. (Hook J.N., 2021).

More interest in the Enneagram theory in the United States came from Claudio Nranjo, a psychiatrist originating from Chille, and psychiatrist John Lilly. (Hook J.N., 2021; Alexander, M., & Schnipke, B., 2020). Both have received training from Ichazo, (Alexander, M., & Schnipke, B., 2020) and years later Naranjo started teaching his own version of the theory in small groups. In the 1980s, first publications of his theory were appearing, putting an end to the oral tradition (Hook J.N., 2021). Following that, mental health professionals have become more and more interested in the Enneagram either for their own personality theories or in psychotherapy (Alexander, M., & Schnipke, B., 2020).

2.2 Core Principles

The Enneagram symbol and personality types

The term Enneagram comes from Greek; ennea means "nine" and grammos translates as "points", referring to the nine interconnected points inside the circle (Fig. 1), which represents the Enneagram symbol (Palmer, 1988). Each of the nine points correspond to one personality type. Each type is said to be influenced by a certain emotion, often subconsciously (E. Kaluzniacky, 2004). Additionally, each personality type is described by a fundamental internal desire and a primary fear (Hook J.N., 2021).

The numerical order of the personality types are not made in terms of preference. Also, the system does not evaluate on moral judgements, rather is remains purley descriptive, and does not form evaluations (Hook J.N., 2021). In their study, Alexander, M., & Schnipke, B. (2020), provided a summary of the nine personality types (Table 1). Table 1 is also completed with the primary emotion specified in the study by Hook J.N. et al. (2021).



Fig. 1 – Enneagram symbol

(Source: Alexander, M., & Schnipke, B., 2020.)

Table 1 – The Ennegram types

Enneagram type	Characteristics	Primary desire	Primary fear	Emotion
Type 1: The Perfectionist	Devoted, accountable, organised, diligent and moral. Perceived as judgemental, overly critical and detail-oriented.	Have integrity, to be good	To be corrupt and bad	Anger
Type 2: The Helper	Intuitive, sympathetic and pleasant. Have trouble speaking out for themselves and frequently "give to get" in the hopes of having their own needs adressed as well.	To be loved	To be unwanted or unworthy of love	Pride
Type 3: The Achiever	Hard working, competitive, successful. Perceived as confident, pleasant and dynamic.	To be accepted and treasured	To be unimportant, not valuable and to disappoint	Deceit
Type 4: The Individualist	Emotional, self-observing, private. Perceived as individualistic, withdrawn, moody and creative. Struggle with the feeling of lack with regards to themseves or the world.	To be significant and important	To lack identity	Envy

Type 5: The Investigator	Analytical, sensitive, autonomous, and closed. Perceived as alert, skillful and unconventional. Have trouble with interpersonal relations, expressing emotion and are inclined to isolate themselves.	To be competent and capable	To not be able to do things on their own or to be useless	Avarice
Type 6: The Loyalist	Faithful, well grounded, devoted. Perceived as liable, anxious and careful. Having trouble with paranoia and fear.	To be safe and have support	To lack safety and support	Fear
Type 7: The Enthusiast	Adventurous, cheerful, eager. Seen as active and friendly. Having trouble with oversharing and self-control.	To be satisfied and happy	To be in pain or confined	Gluttony
Type 8: The Challenger	Persistant and self-reliant. Perceived as a leader, dilligent and determined. Having trouble with anggression and fear of vulnerability.	To be in control and protective over themselves and others	To be harmed or controlled by others	Lust
Type 9: The Peacemaker	Relaxed, nonviolent, avoids conflicts. Perceived as agreeable, easygoing and vulnerable. Haveing trouble with finding their own voice, and beign avoidant.	To have peace and stability	To be disconnected, separete or lost	Sloth

(Source: Alexander, M., & Schnipke, B., 2020; Hook J.N. et al., 2021)

Triads

The Enneagram personality types are divided into three Triads (Fig. 2), each focusing on a different information. Each of the Triads is composed of three consecutive types. The Heart Triad is characterized by focusing on the emotional factor, and approaches life as a goal to accomplish. Types Two, Three and Four constitute the Heart Triad. The Head Triad typically tend to understand the world mentally. Types Five, Six and Seven, which form the Thinking Triad, tend to withdraw and think before they take action, and have the tendency to perceive life as a puzzle to unravel, using their experiences as the information to deduce the solution. The Gut Triad relies on instinct and on bodily sensations. Types Eight, Nine and One usually react instinctively, as they view life as a conflict and their vulnerabilities must undergo examination (Hook J.N., 2021). The Three Triads are also known as The Feeling Triad (Heart), The Thinking Triad (Head) and The Instinctive Triad (Gut) (Riso & Hudson, 2000).

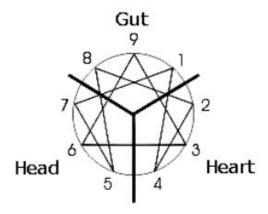


Fig. 2 – Enneagram Triads (Source: Hellany, A., 2006.)

Wings

While a main personality type can be determined, no individual can perfectly fit the description of a personality type. Personality types are affected by the neighboring types, called "wings", creating a unique blend in each person (Kale, S.H., & Shrivastava, S., 2001).

Types Three, Six and Nine as depicted in *Fig. 1*, create the only triangle present in the Enneagram symbol. Furthermore, these Types are the center of their respective Triads, because they are considered core personalities. The surrounding points are variations. For example, Type Three has two wings: Type Two and Type Four. These types are concerned with their image and with figuring out their feelings. Types Five and Seven are the wings of Type Six, and they are constantly covered in fear and paranoia. Nine's wings, Types Eight and Types One (see Fig. 3), share a tendency towards anger, and are prone to neglecting priorities (Palmer H., 1988). In Enneagram terminology, the abbreviation of a Type Nine with a Type One wing, is "9w1" (Hook J.N., 2021).

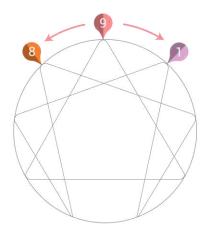


Fig. 3 – Enneagram wings

(Source: enneagramuniverse.com)

2.3 The Enneagram in relation to the DSM and psychotherapy

The Enneagram has been utilized by many to support personal growth, but it has also been used by therapists in more conventional psychotherapy settings (Alexander, M., & Schnipke, B., 2020). Similar to the DSM, the Enneagram classifies personality traits into types according to sets of criteria that have distinguishing characteristics (Cohen, M. C., 2007), but also diverges significantly, notably through its strong connection to developmental theory. This means that rather than simply categorizing individuals based on their symptoms, we can delve into the underlying causes and origins when observing specific symptoms, thus potentially identifying unique paths towards healing (Chestnut, B., 2008).

The idea that various personality types may call for a distinct therapeutic modalities is further highlighted by the Enneagam system of personality analysis. The Enneagram gives therapists a precise and helpful picture of various groupings of symptoms and organizational principles by outlining the fundamental components of each personality type. It also serves as a reminder to therapists that various personality types call for various strategies. This implies that the interaction with a Type Five individual, may need adopting a different strategy than a Type Two, for which other thechniques are more effective (Chestnut, B., 2008).

In a more recent study, Alexander, M., & Schnipke, B. (2020) argue that under stress, the nine diferent Enneagram personality types correlate to one of the 10 DSM-defined personality disorders. For instance, an unhealthy person with a Type Three personality may display symptoms of narcissistic personality disorder. Also, it is plausible that some personality types are predisposed to specific disorders, while the oposite might not be true. A person who satisfies the criteria for narcissistic personality disorder might not recognize themselves as having a Type Three personality.

More research on the topic must be conducted in order to validate this hypothesis, which might lead to more effective therapy for personality disorders (Alexander, M., & Schnipke, B., 2020).

Chapter 3 – Research methodology

This chapter serves to introduce and elaborate upon the methodological approach utilized in the present survey-based research study. It encompasses a thorough discussion of various components essential to the study, including the chosen research design, ethical considerations, validation procedures and other related aspects.

3.1 Research aim, design and structure

Aim

The aim of the study is to validate a test within the theoretical framework of the Enneagram, an area relatively under-researched in psychology. The primary objective is to assess the reliability and validity of the test. By addressing this gap in research, the study aims to contribute to a better understanding of the Enneagram model's applicability in personality assessment.

Design

This study adopts a mixed-methods approach to validate the test. The mixed-methods design allows for the integration of quantitative and qualitative data collection and analysis methods to provide a comprehensive assessment of the test's reliability and validity.

Quantitative variables are the primary type of data collected in the study, as the participants were instructed to assess each item in the survey using a scale from 1 to 5. On this scale, 1 corresponds to 'completely disagree'. A rating of 2 represents 'disagree'. A rating of 3 indicates a neutral stance representing 'neither agree nor disagree'. A rating of, 4 represents 'agree' and strong agreement is indicated by number 5 'completely agree'. Participants' responses were statistically analyzed to assess the reliability of the test. Some demographic data was also collected quantitatively, namely the age of the participants. The qualitative data collected focuses on the demographic aspects of the sample, including gender and educational level.

Components and structure

The study consists of three distinct sections intended to gather comprehensive data relevant to the study's objective. These sections include: demographic data, control items and the Enneagram items.

The demographic data collected in this study is composed of three questions aimed at understanding the characteristics of the sample. Firstly, participants were asked to indicate their gender, with response options including male, female, non-binary, a preference not to disclose, or to specify "other". Secondly, participants indicated their age, being at least 18 years of age and no maximum limit. Lastly, participants reported their educational level, selecting from options such as, High School, Bachelor's degree, Master's degree, PhD, or specify "other" if their educational background did not fit into these categories.

Prior to the test items, the survey includes a set of 60 control items, extracted from Costa, P. T., & McCrae, R. R., (2006). *NEO five factor inventory*. These items ensure the reliability of the subsequent data. The entire list of items can be found in Annex 1.

The last section of the survey includes the Enneagram items, which were developed by professionals in the field of psychology. The total of 63 items are the subject of testing, in order to evaluate the test reliability. All items in the questionnaire were systematically divided according to the Enneagram personality types and primary emotions. The first three items pertain to the Instinctive (Gut) Triad, focusing on the emotion of anger. The subsequent three items address the Feeling (Heart) Triad, concentrating on the emotion of shame. Items seven, eight and nine are dedicated to the Thinking (Head) Triad, focusing on the emotion of fear. Following this items, starting from Type One with item ten to fifteen, and each set of six items measure one specific personality type sequentially through Type Nine. For a detailed list of the items, please refer to Annex 2.

3.2 Ethical considerations

Ethical considerations are extremely important in conducting research with human participants. Respecting ethical norms preserves the integrity and legitimacy of the research process while guaranteeing the protection of participants' rights, welfare, and privacy. In this regards, participants were informed that all the information collected will be treated in compliance with the current laws, and the Code of Ethics of Italian Psychologists. Furthermore, participants were ensured of their maximum confidentiality, as all the data will be analysed anonymously, and no personal information about the respondents was collected (e.g. names, e-mail addresses, phone numbers). To proceed with the study, participants were required to explicitly indicate their agreement to the informed consent, by declaring the following:

- To be of age (at least 18)
- To voluntary take part in the research as a participant
- To be aware that the data obtained, in absolute anonymity, will be processed exclusively for educational and research purposes
- To be aware that the raw data will be returned once sent

The study would have automatically ended if the participant did not agree. Moreover, participants were free to withdraw from the study at any time, without providing a reason or facing any consequences.

3.3 Technical details

In addition to the previously mentioned elements, there are further details to be mentioned about the present study. These include aspects as the language used and target population, the necessary time to complete the survey, the software used to develop and administer the questionnaire, and any other methodological aspects that need to be addressed.

The survey was completely written and administered in the Italian language. The control items were translated from English to Italian before introducing them in the survey, while the Enneagram items (test items), the demographic questions, the informed consent and all instructions were written directly in Italian.

The initial estimation for survey completion was set at 15 minutes. However, upon conduction the research, it was found that the average time required for completion was 13 minutes.

The study was conducted solely electronically. The survey was created using Qualtrics, an online tool designed for survey creation. It was administered with the help of Prolific, an online tool for conducting research, which recruited the participants anonymously. The data was then analyzed using a statistical software. JASP was the chosen program to compute the analysis.

In the survey, participants were given the flexibility to choose whether or not to respond to each item, ensuring that they can skip any item they preferred not to answer without encountering any issues or being required to provide a response. This approach was adopted to enhance participant comfort and honesty in their responses. However, demographic questions were mandatory to complete in order to gather essential information about the sample, which was critical for understanding the characteristics of the study population.

3.4 Sample

The study was conducted on a sample totalizing 300 participants. All participants recruited are located in Italy. As previously indicated, the demographic data collected was composed of the age, gender and the educational level. The following demographic data was collected:

Age

Despite the minimum age required for participating in the survey was set at 18, none of the participants of this age took part in the study. The survey's youngest participants were aged 19, while the oldest respondent indicated the age of 67, resulting a range of 48. For more details, see *Table 2*.

Table 2 – Descriptive statistics of the participants' ages

Mode	Median	Mean	Std. Deviation	Minimum	Maximum	Range	Total
28	30	33.917	10.859	19	67	48	300

Gender

Among the 300 participants in the sample, all have chosen one of the provided multiple-choice options, and none provided an alternative response, by selecting the "other" option. The vast majority of the sample, composed of 290 individuals, was almost equally divided between male and female, with 147 respondents identifying as male, and 143 participants selecting the female option. Other 8 respondents are identifying themselves as non-binary individuals, while 2 people preferred not to disclose their gender identity.

Educational level

When analysing the educational background of the respondents, the sample was divided into various different categories. As previously mentioned, the participants had four options to select the best description of their current level of education such as: High School, Bachelor's Degree, Master's Degree or PhD. For a detailed picture of the participants' educational level please refer to *Table 3*.

Table 3 – Educational level; selected choice

Educational level	Frequency	Percent	Valid percent	Cumulative Percent
ievei				reicent
Other	5	1.667	1.667	1.667
PhD	3	1.000	1.000	2.667
Bachelor's	73	24.333	24.333	27.000
Degree	_			
Master's	101	33.667	33.667	60.667
Degree				
High School	118	39.333	39.333	100.000
Total	300	100.000		

In addition, the option "other" was included for the respondents that did not see fitting one of the options specified. As mentioned in *Table 3*, there was a number of five respondents who indicated a different educational level. Out of the five participants, two of them declared to have completed secondary school studies, two having different types of University Degrees such as a second level Master's Degree and a Graduate school with a specialization respectively. One other participant indicated the "soon to graduate" status ("Laureando"). See *Table 4*.

Table 4 – Educational level; other

Educational level	Frequency	Percent	Valid Percent	Cumulative Percent
"Laureando"	1	0.333	20.000	20.000
Master's Degree second level	1	0.333	20.000	40.000
Secondary School	2	0.667	40.000	80.000
Graduate school with specialization	1	0.333	20.000	100.000
Missing	295	98.333		
Total	300	100.000		

Chapter 4 – Results

To ensure the integrity of the data collected, an assessment of the internal reliability was conducted on the questionnaire, specifically, Cronbach's alpha was calculated to assess the reliability. An excellent score of this index would be at least 0.9. In order for the study to have an acceptable internal consistency, Cronbach's alpha has to be at least 0.7. Anything below 0.7 is an unsatisfactory result, and more refinement of the questionnaire has to be done. The following section presents the calculated internal consistency of the study items and the item-rest correlation for their respective factor (personality type).

The first analysis was done considering items designed to measure personality type One. The point estimate for Cronbach's alpha was 0.499, with a 95% confidence interval (CI) ranging from 0.411 to 0.577 (see Table 5). This indicates an unacceptable low level of internal reliability.

Table 5 – Factor 1 (Personality type One) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.499
95% CI lower bound	0.411
95% CI upper bound	0.577

Further analysis of the item-rest correlation revealed that several items (10 - 15) had particularly low correlations with the total score (see Table 6), suggesting that these items do not correlate well with the overall scale.

Table 6 – Factor 1 (Personality type One) Item-rest correlation

Item number	Item-rest correlation
1	0.429
2	0.378
3	0.250
10	0.118
11	0.062
12	0.111
13	0.255
14	0.125
15	0.152

The low Cronbach's alpha and the item-rest correlations suggest that some items may not be effectively measuring the intended personality type. This warrants a detailed review of the problematic items to identify potential reasons for their poor performance.

Following the first analysis, factor two which represents Personality Type Two was tested to further examine the internal reliability of the questionnaire. The point estimate for Cronbach's alpha for this factor was 0.532, with a 95% confidence interval ranging from 0.446 to 0.607 (see Table 7). While this represents a slight improvement over the previous factor, the result falls short of the acceptable threshold for internal consistency.

Table 7 – Factor 2 (Personality type Two) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.532
95% CI lower bound	0.446
95% CI upper bound	0.607

The item-rest correlations (see Table 8) for this factor revealed that only Item 16 had a relatively high correlation (0.454) with the total score, whereas several other items like Item 5 (0,127) and Item 20 (0,066) do not correlate well.

Table 8 – Factor 2 (Personality type Two) Item-rest correlation

Item number	Item-rest correlation
4	0.224
5	0.127
6	0.318
16	0.454
17	0.261
18	0.282
19	0.231
20	0.066
21	0.225

Although some improvement can be noticed in internal consistency, significant issues remain. The low Cronbach's alpha and several weak item-rest correlations indicate that many items may not effectively measure Personality Type Two.

In addition, factor three was analysed to evaluate the internal consistency. The point estimate for Cronbach's alpha for this factor was found to be 0.249, with a 95% confidence interval ranging from 0.111 to 0.370 (see Table 9). This very low alpha value indicates extremely poor internal consistency, significantly below the acceptable threshold.

Table 9 – Factor 3 (Personality type Three) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.249
95% CI lower bound	0.111
95% CI upper bound	0.370

Moreover, the item-rest correlation for this factor revealed several items with low correlations, such as Item 5 (0.042) and Item 22 (-0.094), suggesting that the items are not correlating well with the overall scale (see Table 10).

Table 10 – Factor 3 (Personality type Three) Item-rest correlation

Item number	Item-rest correlation
4	0.139
5	0.042
6	0.179
22	-0.094
23	0.078
24	0.146
25	0.086
26	0.147
27	0.068

The presence of a negative item-rest correlation for Item 22 and generally low correlations for other items highlight serious issues with this factor's reliability. These findings suggest that many items within this factor may not be effectively measuring the intended personality type.

When examining the internal reliability of factor four, the point estimate for Cronbach's alpha was found to be 0.569, with 95% confidence interval ranging from 0.492 to 0.637 (see Table 11). While this represents a higher reliability compared to previous factors, it is still insufficient as 0.7 is considered an adequate internal consistency score.

Table 11 – Factor 4 (Personality type Four) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.569
95% CI lower bound	0.492
95% CI upper bound	0.637

Analysis of item-rest correlation revealed that several items, notably Item 32 (0.005) and Item 29 (0.135) displayed very low correlations (see Table 12), indicating they may not be effectively measuring Personality Type Four.

Table 12 – Factor 4 (Personality type Four) Item-rest correlation

Item number	Item-rest correlation
4	0.433
5	0.336
6	0.408
28	0.250
29	0.135
30	0.171
31	0.422
32	0.005
33	0.174

With a Cronbach's alpha point estimate of 0.434 and a 95% confidence interval ranging from 0.335 to 0.521, factor five's internal consistency is once again extremely poor (see Table 13).

Table 13 – Factor 5 (Personality type Five) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.434
95% CI lower bound	0.335
95% CI upper bound	0.521

Several items, notably items 34 (-0.131) and 35 (-0.064), showed negative correlations with the total score, according to the item-rest correlation analysis results (see Table 14). These results suggest that the reliability may be negatively impacted by these elements. Additionally, the extremely low correlations of items such as Item 36 (0.091), Item 37 (0.060), and Item 39 (0.062) suggest weak alignment with the overall construct.

Table 14 – Factor 5 (Personality type Five) Item-rest correlation

Item number	Item-rest correlation
34	-0.131
35	-0.064
36	0.091
37	0.060
38	0.424
39	0.062
7	0.369
8	0.397
9	0.383

Analyzing an additional factor, factor six, helped to further evaluate the questionnaire's internal reliability. The 95% confidence interval ranging from 0.630 to 0.734 and a Cronbach's alpha point estimate of 0.685 (see Table 15). Approaching the generally accepted threshold point of 0.7, this shows a moderate degree of internal consistency.

Table 15 – Factor 6 (Personality type Six) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.685
95% CI lower bound	0.630
95% CI upper bound	0.734

Compared to the previous factors, when analysing the item-rest correlation, some items showed quite high correlations with the overall score (see Table 16), namely item 7 (0.531), item 8 (0.471) and item 9 (0.486), indicating that they are in good alignment with Personality Type Six. However, some items such as item 42 (0.016) showed very low correlations, indicating potential issues with the items' relevance.

Table 16 – Factor 6 (Personality type Six) Item-rest correlation

Item number	Item-rest correlation
7	0.531
8	0.471
9	0.486
40	0.305
41	0.247
42	0.016
43	0.372
44	0.416
45	0.340

Factors' seven results are similar to the previous analysis, with a Cronbach's alpha point estimate of 0.377 and a 95% confidence interval ranging from 0.265 to 0.476 (see Table 17) where the internal consistency is below acceptable scores.

Table 17 - Factor 7 (Personality type Seven) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.377
95% CI lower bound	0.265
95% CI upper bound	0.476

The item-rest correlation analysis (see Table 18) revealed concerning items like Item 46 (-0.034), which had a negative correlation, and other items such as Item 47 (0.042), Item 50 (0.018), and Item 51 (0.081), which showed very low correlations.

Table 18 – Factor 7 (Personality type Seven) Item-rest correlation

Item number	Item-rest correlation
7	0.266
8	0.323
9	0.317
46	-0.034
47	0.042
48	0.075
49	0.229
50	0.018
51	0.081

The reliability of factor eight is also below an acceptable threshold. A Cronbach's alpha point estimate of 0.480 and a 95% confidence interval ranging from 0.384 to 0.564 shows a very low internal consistency of this factor (see Table 19).

Table 19 - Factor 8 (Personality type Eight) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.480
95% CI lower bound	0.384
95% CI upper bound	0.564

Item-rest correlation (see Table 20) revealed that Item 52 (0.112) and Item 2 (0.099), exhibited very low correlations with the total score, indicating that they may not be effectively measuring the intended construct.

Table 20 – Factor 8 (Personality type Eight) Item-rest correlation

Item number	Item-rest correlation
52	0.112
53	0.291
54	0.126
55	0.204
56	0.227
57	0.220
1	0.314
2	0.099
3	0.279

The last factor analysed, factor nine, revealed once again a low internal consistency. A Cronbach's alpha point estimate of 0.479 and a 95% confidence interval ranging from 0.390 to 0.558 are way below the standard accepted point of 0.7 (see Table 21).

Table 21 - Factor 9 (Personality type Nine) Cronbach's alpha

Estimate	Cronbach's alpha
Point estimate	0.479
95% CI lower bound	0.390
95% CI upper bound	0.558

When analysing the item-rest correlation (see Table 22), a few items correlate negatively with the score, notably, item 58 (-0.166) and item 62 (-0.183), indicating potential issues with the items.

Table 22 – Factor 9 (Personality type Nine) Item-rest correlation

Item number	Item-rest correlation
1	0.472
2	0.450
3	0.334
58	-0.166
59	0.076
60	0.175
61	0.453
62	-0.183
63	0.192

Chapter 5 - Conclusion

5.1 Implications

The results of this study have important implications for theoretical understanding within the field of personality assessment, particularly in the context of the Enneagram framework.

As the study's reliability is below acceptable levels, it raises questions about its validity; whether the study is effectively measuring the intended constructs. A low reliability also limits the generalizability of the study.

5.2 Strengths & limitations

Strengths

The study has several important features with respect to its design, which boost its overall quality.

Firstly, the questionnaire was designed to be user-friendly, with clear instructions and an easy-to-understand format. This design possibly contributed to higher response rates and better data quality.

A notable strength of the present study in the randomization of the test items. By presenting the questions in a randomized order, the study minimizes potential biases related to the sequence of items, such as order effects. This approach ensures that participants' responses are not influenced by the placement of any particular item. Randomization also prevents respondents from developing a response patterns based on the order of the items, contributing to more authentic and unbiased responses (Goodhue, Dale & Loiacono, Eleanor, 2002).

Participants were allowed to skip items they were uncomfortable responding to, which likely increased their willingness to participate and provided more honest responses.

Limitations

Despite the strengths of the study, several limitations should be acknowledged.

The sample size, while diverse, may not be large enough to generalize the findings to the broader population. In addition, the sample my not fully represent all cultural backgrounds, and the results may not apply outside Italy.

The questionnaire relies on self-reported data, which can be subject to biases such as social desirability, where the participants may not respond in a manner they perceive to be more favourable rather than truthfully.

The length of the questionnaire may have contributed to participant fatigue, potentially affecting the accuracy of responses towards the end of the survey.

The mode of questionnaire administration, online survey, could introduce variability in responses due to differences in participant familiarity with technology or the environment in which they completed the survey.

5.3 Suggestions for future research

To sum up, this paper is a first step in expanding the limited amount of research done on the Enneagram. Because the results of this study are not satisfactory, the possibility for further research to deepen the understanding of the Enneagram and the personality types opens.

The items used in the present study are the primary aspect that should be further investigated in order to improve the data quality, reliability and validity. Attention should also be focused on the participants selected, and a more diverse sample could improve the overall results.

In conclusion, more investigation into the Enneagram is essential to further advance our understanding of personality dynamics and individual behavior, providing insightful knowledge into the intricacies of human nature. Further study on the Enneagram may help to improve in a variety of domains, including psychology and counseling, by giving empirical confirmation.

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Annex 1

NEO five factor inventory items

Sourse: Costa, P. T., & McCrae, R. R. (2006). NEO five factor inventory.

- 1. I am not a worrier.
- 2. I like to have a lot of people around me.
- 3. I don't like to waste my time daydreaming.
- I try to be courteous to everyone I meet.
- 5. I keep my belongings clean and neat.
- 6. I often feel inferior to others.
- 7. I laugh easily.
- 8. Once I find the right way to do something, I stick to it.
- 9. I often get into arguments with my family and co-workers.
- 10. I'm pretty good about pacing myself so as to get things done on time.
- 11. When I'm under great deal of stress, sometimes I feel like I'm going to pieces.
- 12. I don't consider myself especially "light-headed".
- 13. I am intrigued by the patterns I find in art and nature.
- 14. Some people think I'm shellfish and egotistical.
- 15. I am not a very methodical person.
- 16. I rarely feel lonely or blue.
- 17. I really enjoy talking to people.
- 18. I believe letting students hear controversial speakers can only confuse and mislead them.
- 19. I would rather cooperate with others than compete with them.
- 20. I try to perform all the tasks assigned to me conscientiously.
- 21. I often feel tense and jittery.
- 22. I like to be where the action is.
- 23. Poetry has little or no effect on me.
- 24. I tend to be cynical and skeptical to others' intentions.
- 25. I have a clear set of goals and work towards them in an orderly fashion.
- Sometimes I feel completely worthless.

- 27. I usually prefer to do things alone.
- 28. I often try new and foreign foods.
- 29. I believe that most people will take advantage of you let them.
- 30. I waste a lot of time before settling down to work.
- 31. I rarely feel fearful or anxious.
- 32. I often feel as if I'm bursting with energy.
- 33. I seldom notice the moods or feelings that different environments produce.
- 34. Most people I know like me.
- 35. I work hard to accomplish my goals.
- 36. I often get angry at the way people treat me.
- 37. I am a cheerful, high-spirited person.
- 38. I believe we should look to our religious authorities for decisions on moral issues.
- 39. Some people think of me as cold and calculating.
- 40. When I make a commitment, I can always be counted on to follow through.
- 41. Too often, when things go wrong, I get discouraged and feel like giving up.
- 42. I am not a cheerful optimist.
- 43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
- 44. I'm hard-headed and tough-minded in my attitudes.
- 45. Sometimes I'm not as dependable or reliable as I should be.
- 46. I am seldom sad or depressed.
- 47. My life is fast-paced.
- 48. I have little interest in speculating on the nature of the universe or the human condition.
- 49. I generally try to be thoughtful and considerate.
- 50. I am a productive person who always gets the job done.
- 51. I often feel helpless and want someone else to solve my problems.
- 52. I am a very active person.
- 53. I have a lot of intellectual curiosity.
- 54. If I don't like people, I let them know it.
- 55. I never seem to be able to get organized.

- 56. At times I have been so ashamed I just wanted to hide.
- 57. I would rather go my own way than be a leader of others.
- 58. I often enjoy playing with theories or abstract ideas.
- 59. If necessary, I am willing to manipulate people to get what I want.
- 60. I strive for excellence in everything I do.

Annex 2

The list of the Enneagram items (test items)

- 1. Spesso provo una sensazione di bollire dentro.
- 2. Mi sento spesso frustrato/a dai comportamenti degli altri.
- 3. La mia rabbia mi causa problemi nei rapporti con gli altri.
- 4. Mi sento a disagio quando gli altri mi vedono commettere un errore.
- 5. Evito situazioni in cui potrei essere giudicato/a.
- 6. Mi preoccupo di deludere le persone.
- 7. Mi preoccupo spesso per il futuro.
- 8. Evito determinate situazioni o luoghi per paura.
- 9. Mi sento spesso in pericolo, anche quando non lo sono.
- 10. È importante considerare le prospettive e le opinioni degli altri prima di prendere una decisione.
- 11. La critica costruttiva può aiutare a migliorare le nostre idee e il nostro lavoro.
- 12. Le argomentazioni basate su stereotipi o pregiudizi sono irrazionali e ingiuste.
- 13. Posso esprimere giudizi critici riguardo agli altri quando mi sento frustrato/a.
- 14. Sono una persona che si impegna nella ricerca di soluzioni creative per affrontare le sfide che incontra nel proprio lavoro.
- 15. Penso che sia fondamentale considerare le conseguenze delle mie azioni sugli altri e sulla società.
- 16. Sono una persona affettuosa e premurosa verso gli altri.
- 17. Sono aperto/a nell'esprimere il mio amore e il mio affetto verso gli altri.
- 18. Sono solito/a ascoltare attentamente le persone e dare loro sostegno emotivo.
- 19. Ritengo importante essere l'unico punto di riferimento principale per i miei amici o partner.
- 20. Immagina di essere coinvolto/a in un progetto di gruppo. Non mi sentirei a mio agio se qualcuno assumesse il controllo e prendesse decisioni senza consultarmi.
- 21. In una situazione di conflitto, sono disposto/a a cercare una soluzione di compromesso che sia accettabile per entrambe le parti.
- 22. Ho una buona comprensione delle mie abilità e competenze.

- 23. Sono una persona affidabile e responsabile.
- 24. Sono motivato/a e determinato/a nel raggiungere i miei obiettivi.
- 25. Sono una persona incline a sfruttare le risorse e le relazioni a mia disposizione per ottenere risultati personali, anche a discapito degli altri.
- 26. In generale, sono una persona incline a condividere i miei risultati o esperienze personali sui social media o con altre persone.
- 27. Mi piace creare un'atmosfera romantica o sensuale nelle interazioni con gli altri.
- 28. Sono una persona che si preoccupa profondamente dei sentimenti degli altri.
- 29. Sono abile nel cogliere le emozioni non espresse delle persone intorno a me.
- 30. Sono aperto/a a esplorare i temi esistenziali e le questioni più profonde della vita.
- 31. In generale, credo che le circostanze esterne influiscano negativamente sulla mia vita, senza che sia colpa mia.
- 32. Sono una persona che apprezza l'indipendenza e la libertà di fare scelte personali, anche se possono andare contro le aspettative sociali.
- 33. Non mi sento parte di una comunità o di un gruppo di persone con cui condivido interessi e valori.
- 34. Sono in grado di risolvere problemi complessi in modo efficiente.
- 35. Sono in grado di analizzare situazioni complicate e trovare soluzioni innovative.
- 36. Sono una persona che pone molte domande per cercare di capire meglio le cose.
- 37. Non credo che le mie azioni abbiano un significato o un impatto nella mia vita o nella vita degli altri.
- 38. Sono solito/a preoccuparmi della possibilità che qualcuno possa tradire la mia fiducia.
- 39. Non sono una persona disposta ad impegnarmi in un dialogo costruttivo con persone che hanno opinioni diametralmente opposte alle mie.
- 40. Sono una persona che si prepara in anticipo e considera le possibili conseguenze delle sue azioni.
- 41. Sono solito/a prevedere possibili problemi e adottare misure preventive per evitarli.
- 42. Sono una persona che rispetta gli impegni presi e cerca di onorarli.
- 43. Non mi sento in grado di gestire lo stress e le pressioni della vita quotidiana.

- 44. Sono una persona incline a sospettare degli altri anche in assenza di prove concrete.
- 45. Sono solito/a essere cauto/a e protettivo/a riguardo alle mie emozioni e al mio spazio personale.
- 46. Mi considero una persona piacevole da frequentare.
- 47. Spesso faccio cose che mi fanno sentire giovane e vivace.
- 48. Mi piace divertirmi e scherzare con gli altri.
- 49. Mi sento dipendente dagli altri per soddisfare le mie necessità.
- 50. Ritengo che le mie azioni siano principalmente motivate dal mio interesse personale anziché dal benessere collettivo.
- 51. Ritengo che sia ragionevole delegare le responsabilità a terze persone per evitare di sovraccaricarmi di impegni.
- 52. Di solito sono sicuro/a delle mie decisioni.
- 53. Mi impongo obiettivi ambiziosi e lavoro duramente per raggiungerli.
- 54. Riesco a superare con facilità gli ostacoli che incontro nella vita.
- 55. Ritengo che sia necessario seguire regole rigide e ferme per mantenere l'ordine e la disciplina, anche se ciò potrebbe sembrare inflessibile agli occhi degli altri.
- 56. Credo che sia importante difendere i propri interessi e i propri diritti, anche se ciò potrebbe comportare un confronto o uno scontro con gli altri.
- 57. Ritengo che sia ragionevole aspettarsi un certo grado di esclusività nei rapporti personali, al fine di preservare la sicurezza e la stabilità delle relazioni.
- 58. Tendo ad essere una persona pacifica e tranquilla.
- 59. Preferisco prendere decisioni in modo indipendente anziché seguire l'opinione degli altri.
- 60. Sento il bisogno di essere rassicurato/a dagli altri nelle situazioni difficili.
- 61. Mi sento vincolato/a da circostanze esterne che limitano la mia libertà di scelta.
- 62. Sono convinto/a delle mie capacità e decisioni, indipendentemente da ciò che gli altri pensano.
- 63. Non mi permetto di esprimere apertamente le mie emozioni e pensieri, tendo a nasconderli o tenerli per me.