

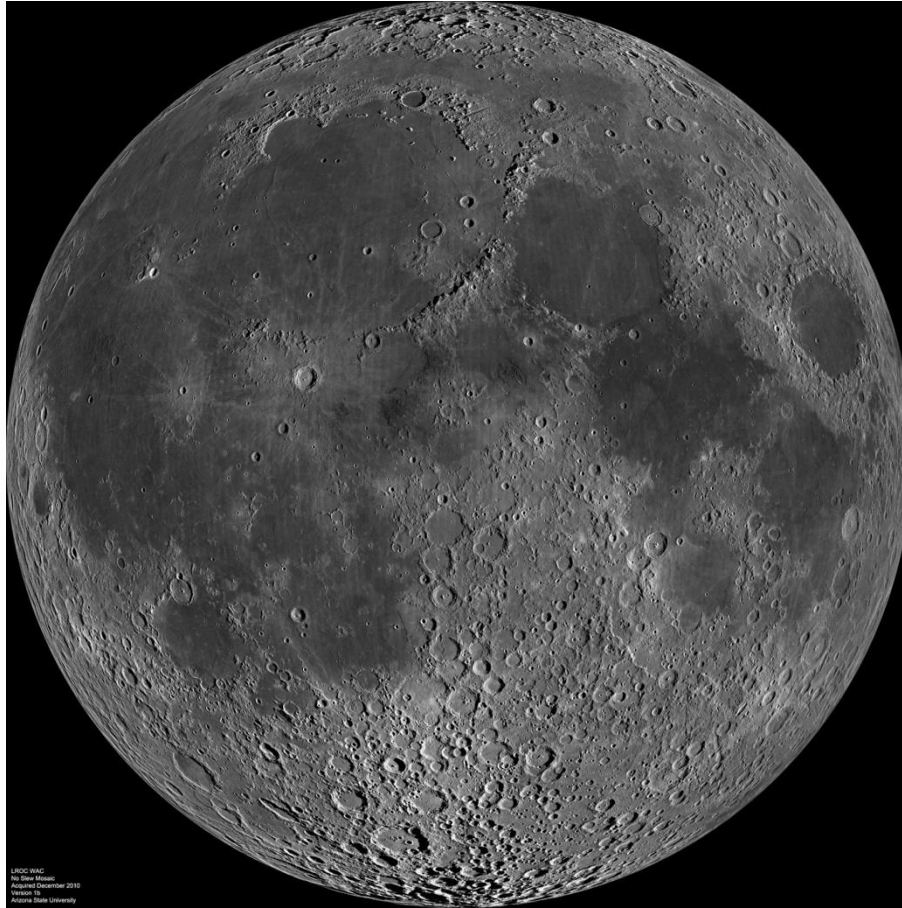
# **Far sides of the Moon: Reflexive characteristic adaptations**

Sergei Shchebetenko

Perm State University, Russia

Oral presentation at the 2<sup>nd</sup> World  
Conference on Personality (Buzios, Brazil,  
April 4, 2016)

# The Moon





# Different standpoints on... personality traits



# Lots of premises. The crucial ones

- The five-factor theory (McCrae & Costa, 1996, 2013)
- The theory of planned behaviour (Ajzen, 1991, 2015)
- The self-discrepancy theory (Higgins, 1987)
- Self-consciousness research (e.g., Fenigstein, Scheier, & Buss, 1975; Trapnell & Campbell, 1999)
- Personality architecture (Cervone, 2004)
- Self-memory system (Conway, 2005; Conway & Pleydell-Pearce, 2000)
- Hot intelligence (Abelson, 1963) and personal intelligence (Mayer, 2009)
- Metacognitions (Efklides, 2008; Nelson & Narens, 1994; Schraw & Moshman, 1995)

# Lots of premises. The crucial ones

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# The five-factor theory: traits as basic tendencies

Empirical and Theoretical Status of the Five-Factor Model

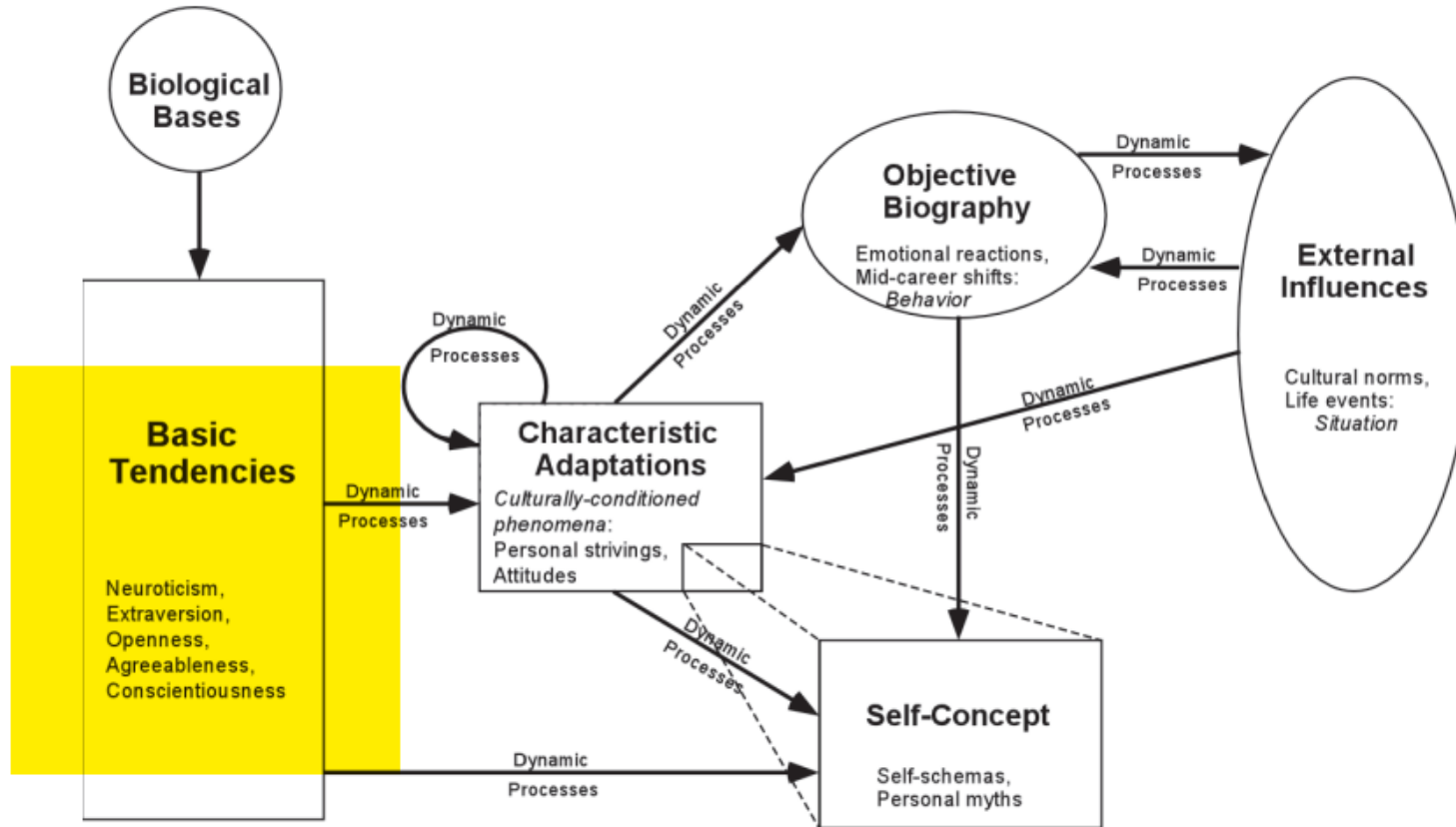


FIGURE 2.1. A schematic representation of the personality system. Adapted from *Can Personality Change?* (p. 22), by T. Heatherton and J. Weinberger (Eds.), 1994, Washington, DC: American Psychological Association. Copyright 1994 by the American Psychological Association.

# Questionnaires present people with abstract, universal ideas

## APPENDIX 4.1. BIG FIVE INVENTORY RESPONSE FORM AND INSTRUCTIONS TO PARTICIPANTS

**Instructions:** Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1	2	3	4	5
Disagree strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly

*I see myself as someone who ...*

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. ___ Is talkative</li> <li>2. ___ Tends to find fault with others</li> <li>3. ___ Does a thorough job</li> <li>4. ___ Is depressed, blue</li> <li>5. ___ Is original, comes up with new ideas</li> <li>6. ___ Is reserved</li> <li>7. ___ Is helpful and unselfish with others</li> <li>8. ___ Can be somewhat careless</li> <li>9. ___ Is relaxed, handles stress well</li> <li>10. ___ Is curious about many different things</li> <li>11. ___ Is full of energy</li> <li>12. ___ Starts quarrels with others</li> <li>13. ___ Is a reliable worker</li> <li>14. ___ Can be tense</li> <li>15. ___ Is ingenious, a deep thinker</li> <li>16. ___ Generates a lot of enthusiasm</li> <li>17. ___ Has a forgiving nature</li> <li>18. ___ Tends to be disorganized</li> <li>19. ___ Worries a lot</li> <li>20. ___ Has an active imagination</li> <li>21. ___ Tends to be quiet</li> <li>22. ___ Is generally trusting</li> </ul> | <ul style="list-style-type: none"> <li>24. ___ Is emotionally stable, not easily upset</li> <li>25. ___ Is inventive</li> <li>26. ___ Has an assertive personality</li> <li>27. ___ Can be cold and aloof</li> <li>28. ___ Perseveres until the task is finished</li> <li>29. ___ Can be moody</li> <li>30. ___ Values artistic, aesthetic experiences</li> <li>31. ___ Is sometimes shy, inhibited</li> <li>32. ___ Is considerate and kind to almost everyone</li> <li>33. ___ Does things efficiently</li> <li>34. ___ Remains calm in tense situations</li> <li>35. ___ Prefers work that is routine</li> <li>36. ___ Is outgoing, sociable</li> <li>37. ___ Is sometimes rude to others</li> <li>38. ___ Makes plans and follows through with them</li> <li>39. ___ Gets nervous easily</li> <li>40. ___ Likes to reflect, play with ideas</li> <li>41. ___ Has few artistic interests</li> <li>42. ___ Likes to cooperate with others</li> <li>43. ___ Is easily distracted</li> <li>44. ___ Is sophisticated in art, music, or literature</li> </ul> |
|--|---|

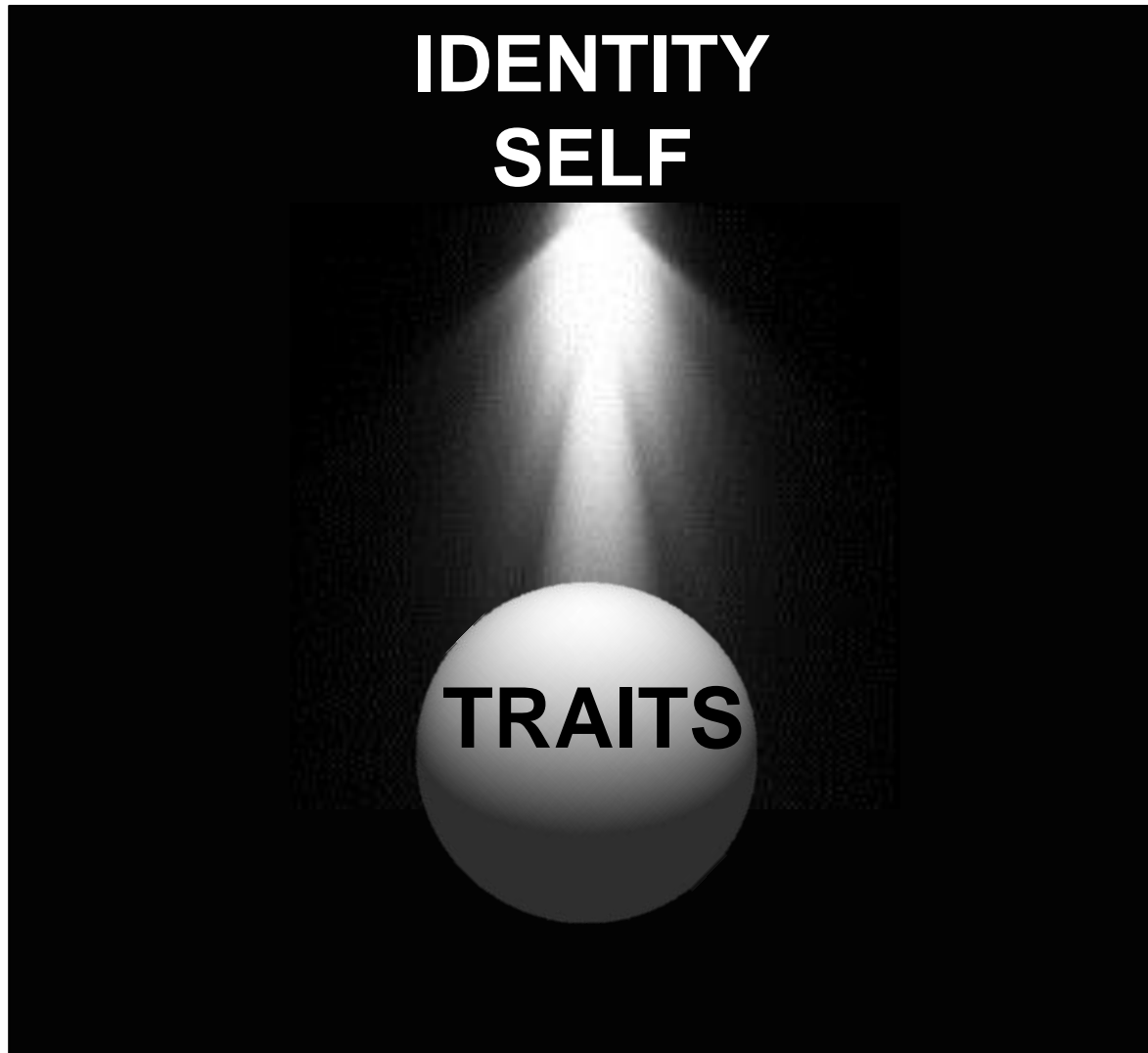
John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 157). New York, NY: Guilford Press.



1. I would be quite bored by a visit to an art gallery.
  2. I plan ahead and organize things, to avoid scrambling at the last minute.
  3. I rarely hold a grudge, even against people who have badly wronged me.
  4. I feel reasonably satisfied with myself overall.
  5. I would feel afraid if I had to travel in bad weather conditions.
  6. I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.
  7. I'm interested in learning about the history and politics of other countries.
  8. I often push myself very hard when trying to achieve a goal.
  9. People sometimes tell me that I am too critical of others.
  10. I rarely express my opinions in group meetings.
  11. I sometimes can't help worrying about little things.
  12. If I knew that I could never get caught, I would be willing to steal a million dollars.
  13. I would enjoy creating a work of art, such as a novel, a song, or a painting.
  14. When working on something, I don't pay much attention to small details.
  15. People sometimes tell me that I'm too stubborn.
  16. I prefer jobs that involve active social interaction to those that involve working alone.
  17. When I suffer from a painful experience, I need someone to make me feel comfortable.
  18. Having a lot of money is not especially important to me.
  19. I think that paying attention to radical ideas is a waste of time.
  20. I make decisions based on the feeling of the moment rather than on careful thought.
  21. People think of me as someone who has a quick temper.
  22. On most days, I feel cheerful and optimistic.
  23. I feel like crying when I see other people crying.
  24. I think that I am entitled to more respect than the average person is.
  25. If I had the opportunity, I would like to attend a classical music concert.
  26. When working, I sometimes have difficulties due to being disorganized.
  27. My attitude toward people who have treated me badly is "forgive and forget."
  28. I often try to be accurate in my work, even at the expense of time.
  29. I am usually quite flexible in my opinions when people disagree with me.
  30. The first thing that I always do in a new place is to make friends.
  31. I can handle difficult situations without needing emotional support from anyone else.
  32. I would get a lot of pleasure from owning expensive luxury goods.
  33. I like people who have unconventional views.
  34. I make a lot of mistakes because I don't think before I act.
  35. Most people tend to get angry more quickly than I do.
  36. Most people are more upbeat and dynamic than I generally am.
  37. I feel strong emotions when someone close to me is going away for a long time.
  38. I want people to know that I am an important person of high status.
  39. I don't think of myself as the artistic or creative type.
  40. People often call me a perfectionist.
  41. Even when people make a lot of mistakes, I rarely say anything negative.
  42. I sometimes feel that I am a worthless person.
  43. Even in an emergency I wouldn't feel like panicking.
  44. I wouldn't pretend to like someone just to get that person to do favors for me.
  45. I find it boring to discuss philosophy.
  46. I prefer to do whatever comes to mind, rather than stick to a plan.
  47. When people tell me that I'm wrong, my first reaction is to argue with them.
  48. When I'm in a group of people, I'm often the one who speaks on behalf of the group.
  49. I remain unemotional even in situations where most people get very sentimental.
  50. I'd be tempted to use counterfeit money, if I were sure I could get away with it.
- Scoring of HEXACO–60 Scales (see Table 1 for Facet-Level Scales):

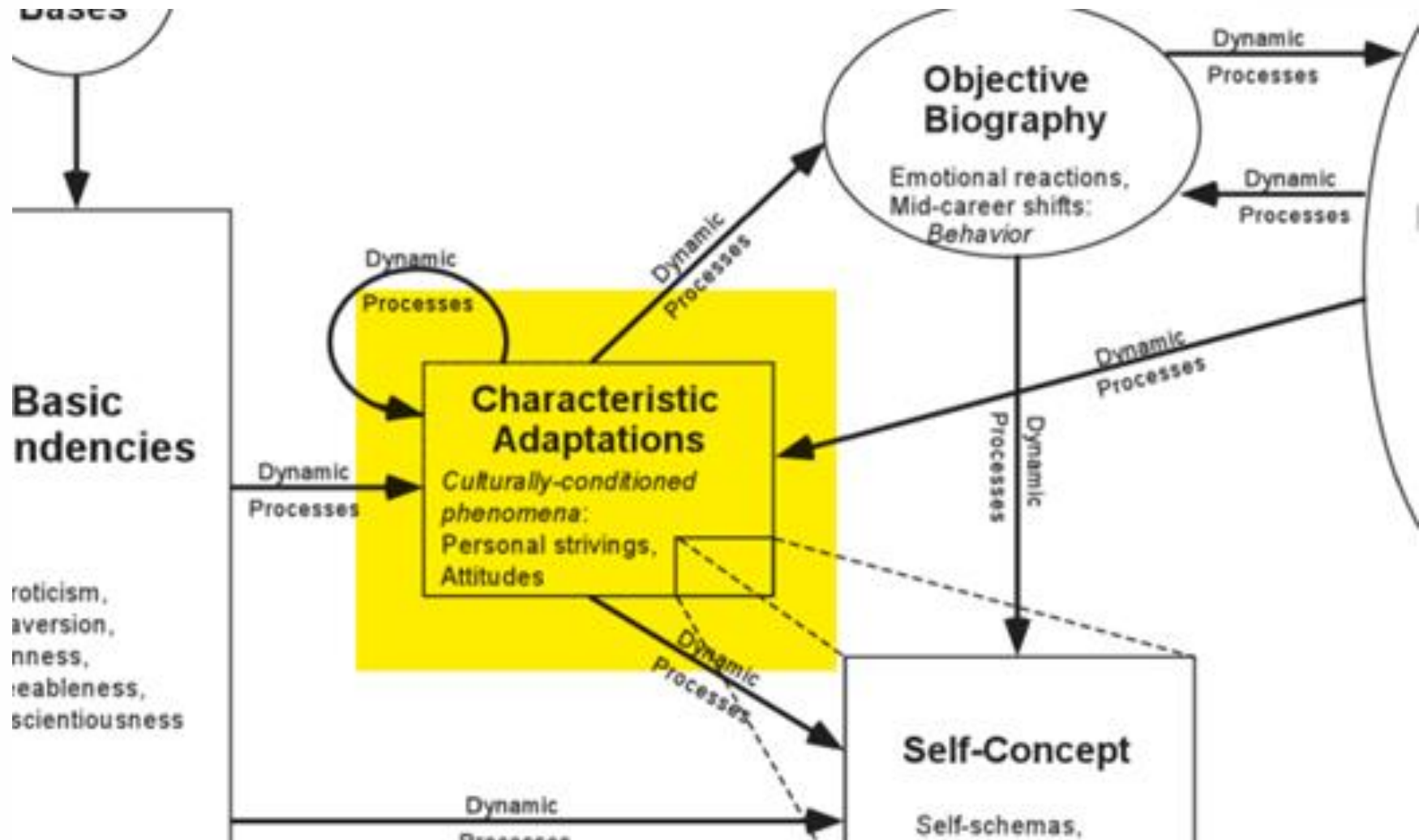
Ashton, M. C., & Lee, K. (2009). The HEXACO–60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*, 91(4), 340–345. <http://doi.org/10.1080/00223890902935878>

# We usually consider traits from a single standpoint



# The five-factor theory: characteristic adaptations

Empirical and Theoretical Status of the Five-Factor Model



# Reflexive characteristic adaptations (RCA)

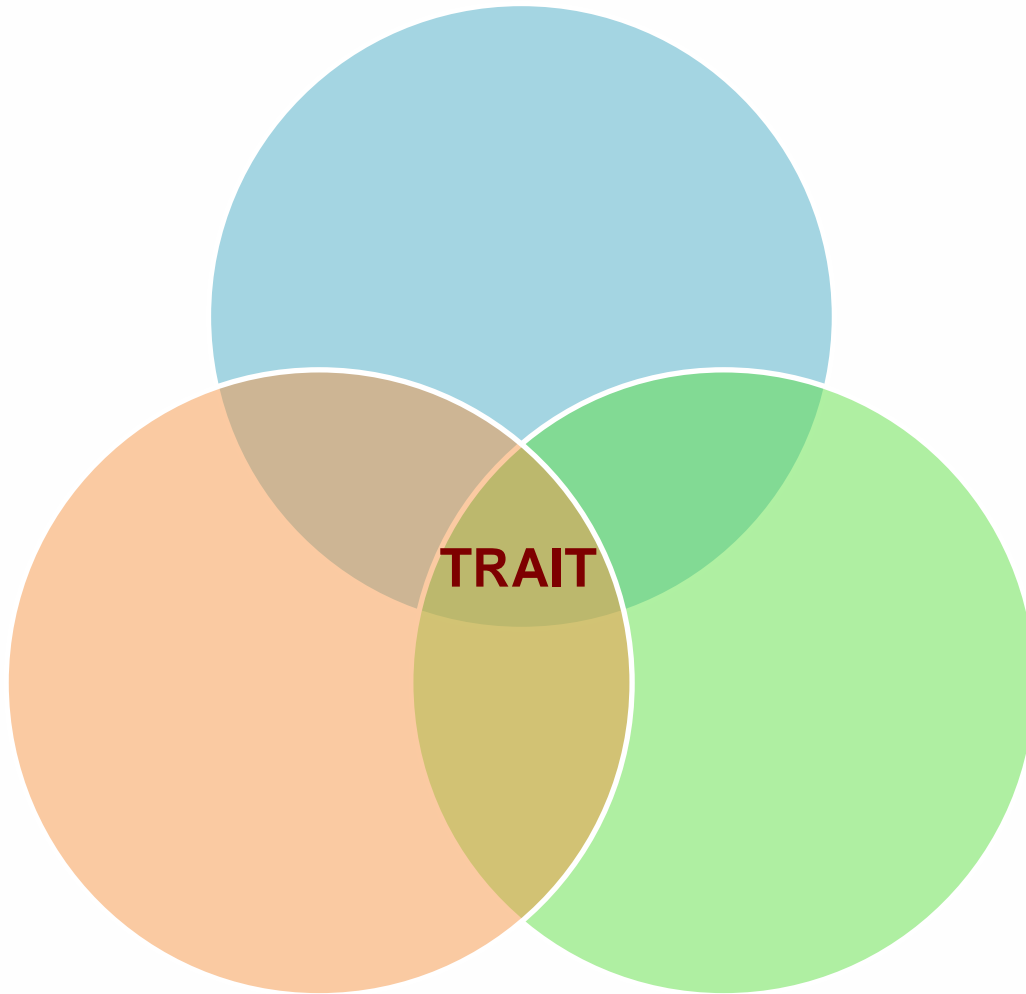
Opinions and interpretations by means of which individuals monitor, and reflect on, their personality traits and the personality traits idea in general.

# Reflexive characteristic adaptations (RCA)

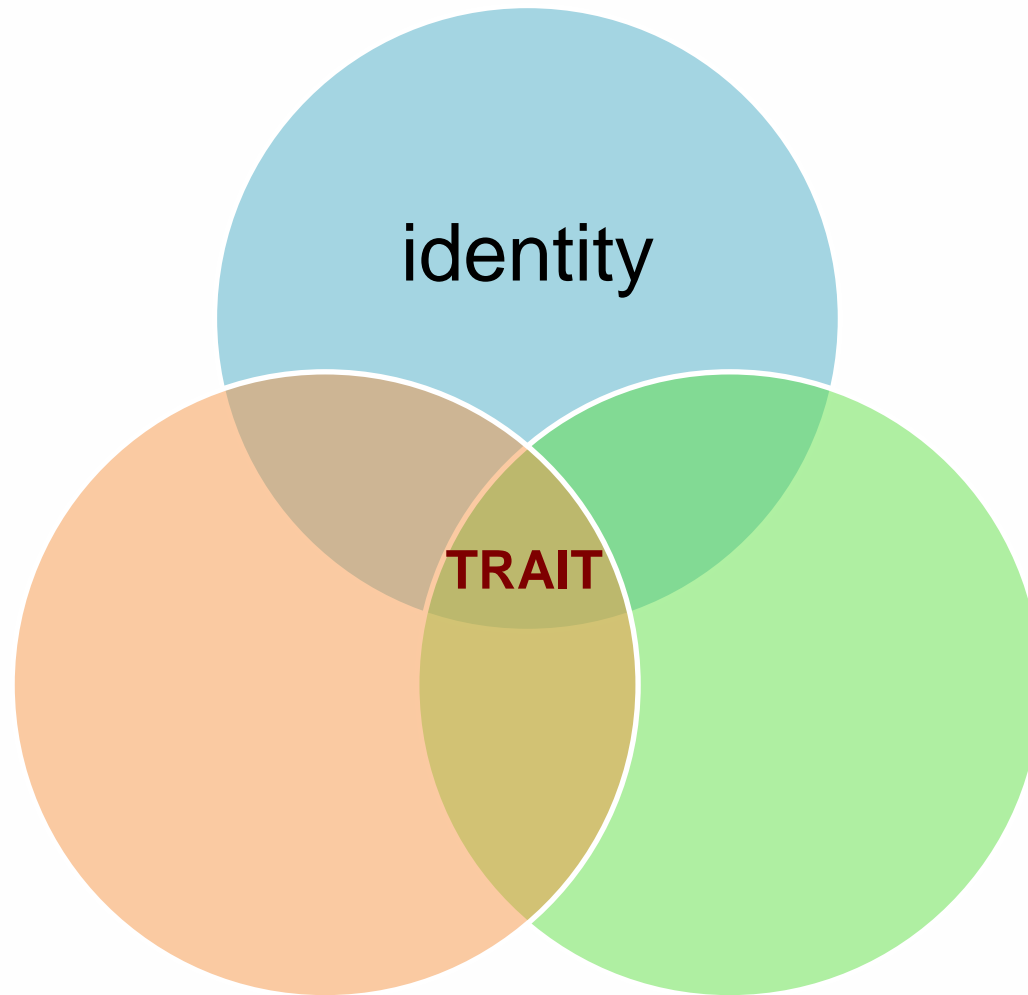
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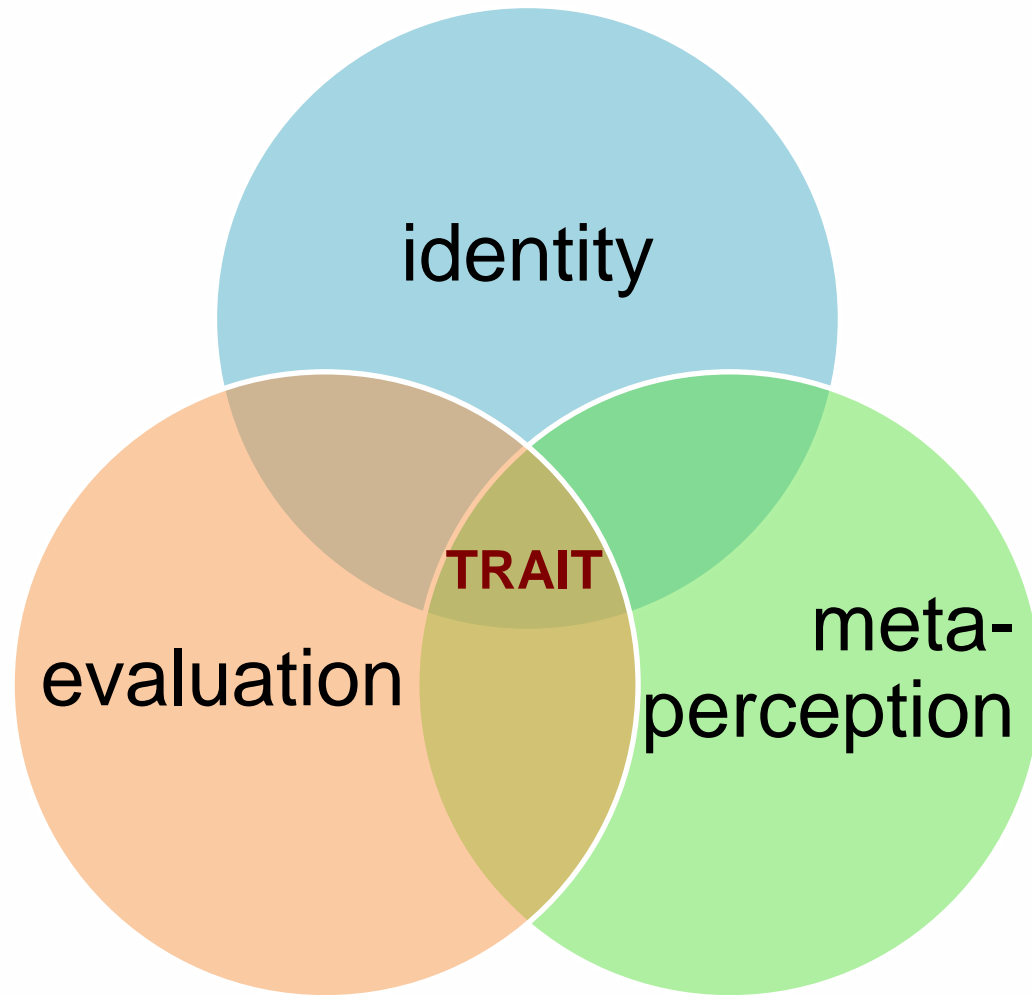
# Reflexive characteristic adaptations: The model



# Reflexive characteristic adaptations: The model



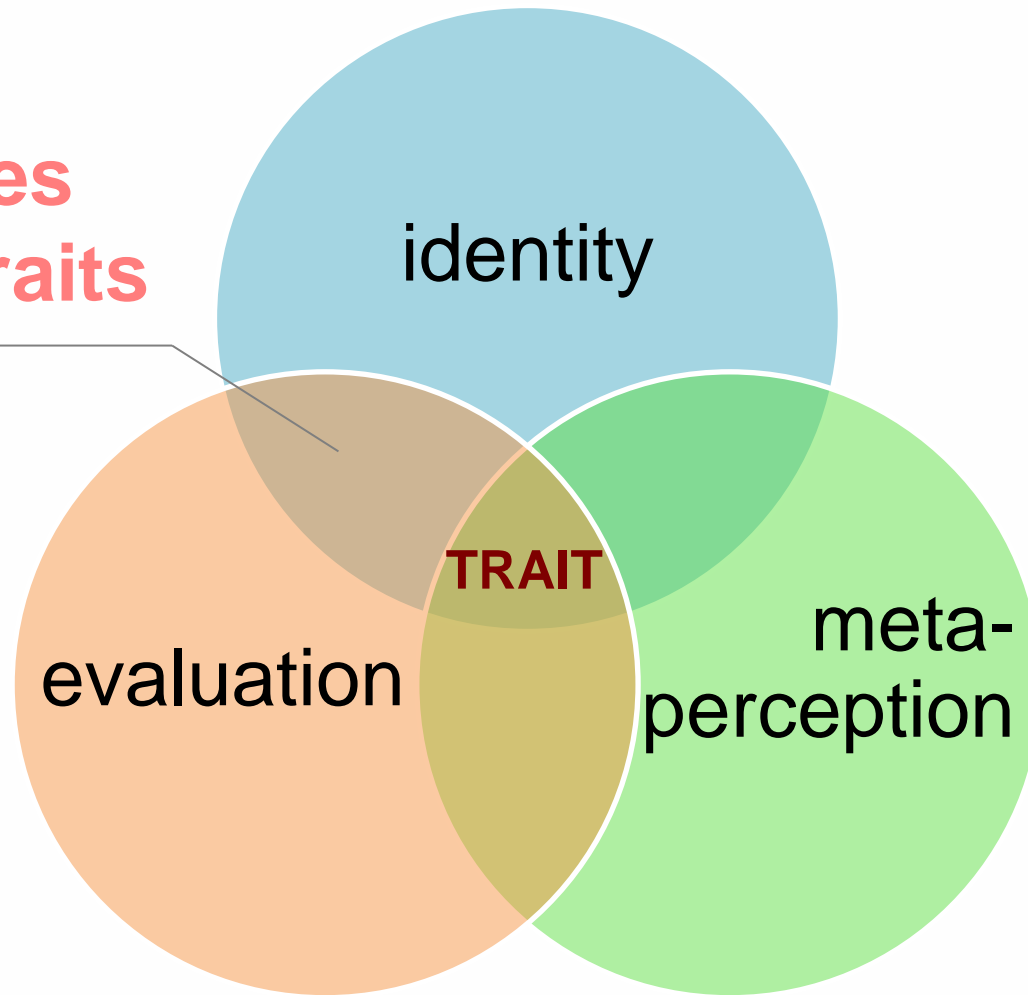
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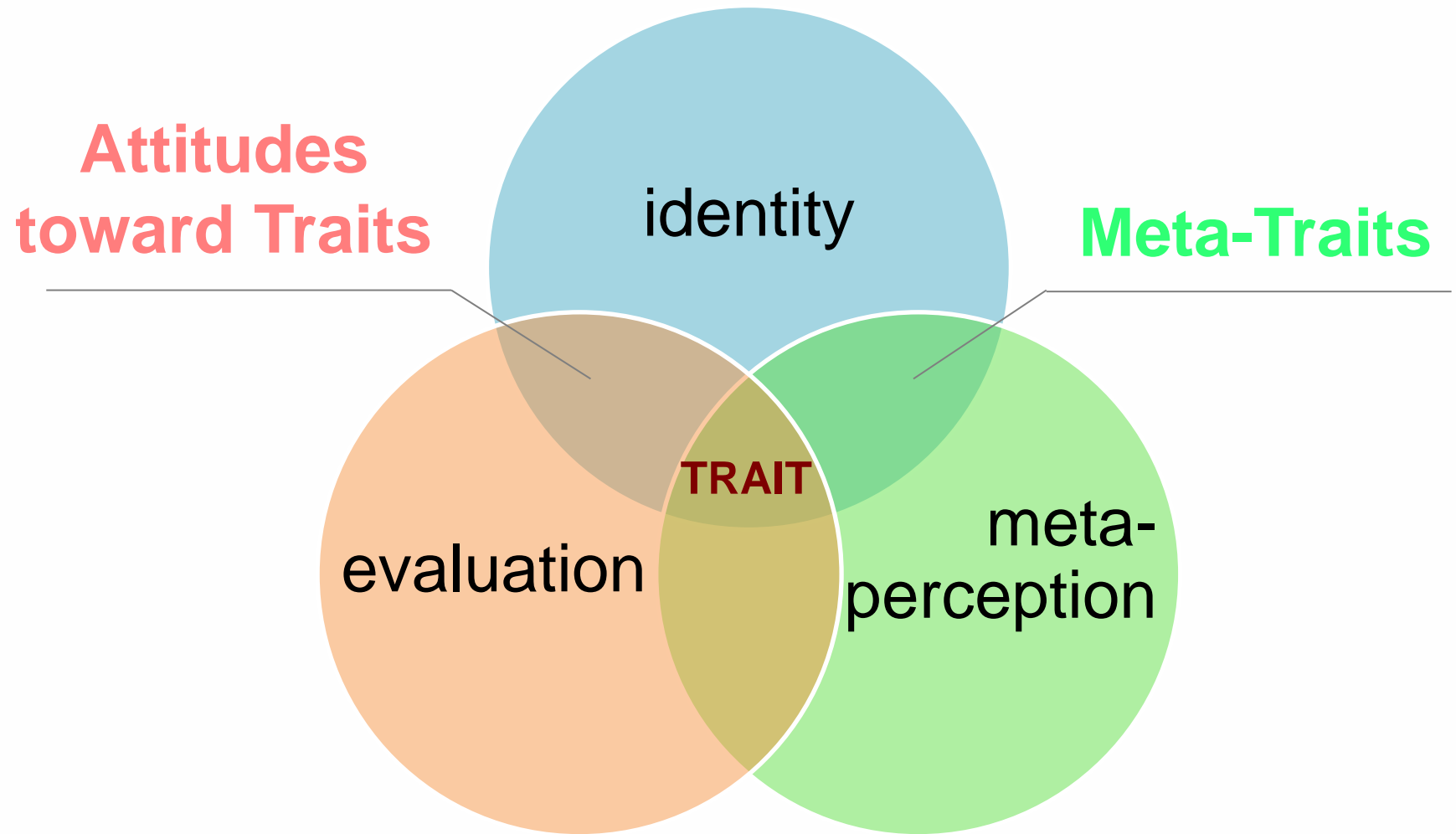


# Reflexive characteristic adaptations: The model

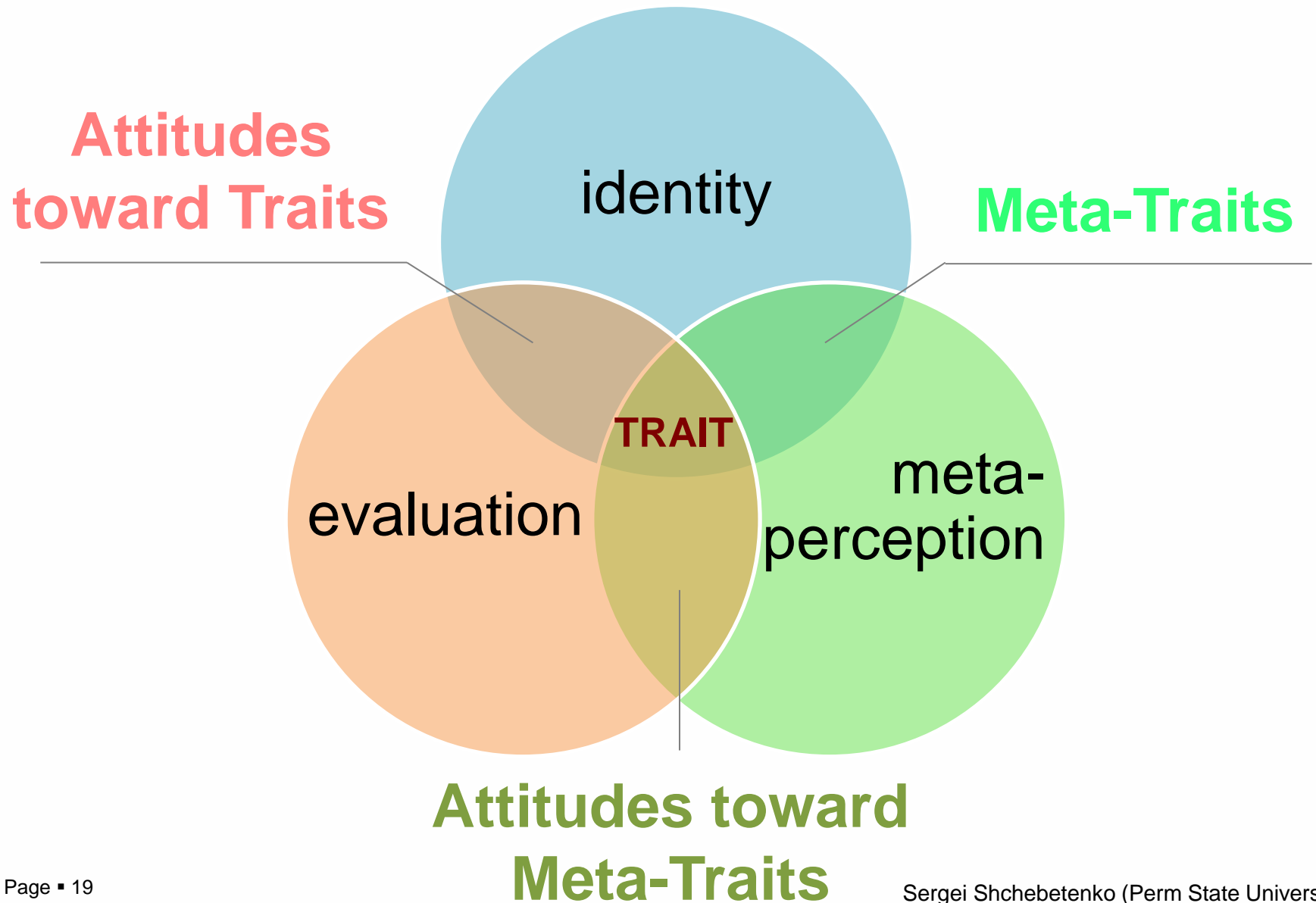
**Attitudes  
toward Traits**



# Reflexive characteristic adaptations: The model



# Reflexive characteristic adaptations (RCA): The model



# Attitudes toward traits

- Bipolar evaluations of a given trait, without direct reference to any person, including the individual her/himself.
- Premises:
  - attitudes toward emotions (Harmon-Jones et al., 2011), positive and negative valency in the Big Seven model (Almagor et al., 1995; McCrae & Costa, 1995), general evaluative aspect (Bäckström & Björklund, 2014; Peabody, 1970), personal values (Parks-Leduc et al., 2015; Schwartz, 1992).

## Test instructions:

Please indicate what you think about the personality characteristics listed below. Do you find the characteristic in question to be positive or negative? It does not matter whether you have this particular characteristic or not: simply *evaluate* it as it is.

# Meta-traits

- Metaperceptual opinions on how significant others see one's personality
- Premises:
  - meta-insight (Carlson et al., 2011); positions and perspectives of others in the self (Felson, 1985; Gillespie, 2012; Higgins, 1987; Mead, 1934)

## Test instructions:

This time, you are asked to indicate what your parents think of you. Do they believe you are a person who possesses a given trait or not? If you think they disagree regarding a given trait, please use an “average value method”.

# Meta-attitudes toward traits

- Metaperceptual opinions on what attitudes toward traits significant others have
- Premises:
  - reflected appraisals (Cooley, 1902), ought self (Higgins, 1987)

## Test instructions:

This time please indicate what you think *your parents think (or thought) about the* personality characteristics listed below. Do you believe they find (found) the characteristic in question to be *positive* or *negative*? Don't question whether your opinion is correct: simply make your guesses.

# Methodology: questionnaires

- The Russian version (Shchebetenko, 2014) of the Big Five Inventory (John et al., 1991, 2008) to measure the traits
- Three modified versions to measure RCA. Were changed:
  - instructions,
  - scale labels (e.g., 1 (“a very bad trait”) – 5 (“a very good trait”) for attitudes)
  - items (1. “...is talkative” => “talkativeness”; 2. “...tends to find fault with others” => “tendency to find fault with others”)

# Methodology: sample and outcome criteria

- 1,030 undergraduate university students aged from 17 to 38 years ( $M = 19.65$ ,  $SD = 1.72$ ) including 691 women (67.1%).
- Two criteria:
  - academic achievement
  - online social networking behavior



# Online social networking source: Vk.com

The screenshot shows a web browser window displaying the VK.com profile of Сергей Щебетенко. The browser's address bar shows 'vk.com/shebetenko' and the search bar contains 'perci'. The page layout includes a left sidebar with navigation options like 'Моя Страница', 'Мои Друзья', and 'Напоминание'. The main content area features a profile picture, a cover photo, and a detailed bio section with fields for birth date (24 мая 1976 г.), hometown (Пермь - Старый Оскол), and education (ПГУ '98, Faculty of Psychology). Below the bio are sections for 'Подарки', 'Друзья' (474 friends), and 'Личная информация' (hobbies, books, and games). The bottom of the browser window shows the Windows taskbar with various application icons and the system tray displaying the date and time as 11:46 PM on 03/03/2016.

Facebook x Сергей Щебетенко x +

vk.com/shebetenko

Из Google Chrome

В контакте Поиск люди сообщества игры музыка помощь выйти

Моя Страница ред. Сергей Щебетенко Online

Мои Друзья +1

Мои Фотографии

Мои Видеозаписи

Мои Аудиозаписи

Мои Сообщения

Мои Группы

Мои Новости

Мои Ответы

Мои Закладки

Мои Настройки

Приложения

Документы

**Напоминание**

Сегодня день рождения Анны Телюкено, Светланы Мальцевой, Екатерины Сорокиной.

**Новый Nissan X-Trail**  
nissan.ru

Специальное предложение на мощный внедорожник.

**Сайт для педагога**  
pedrazvibe.ru

**Диплом**

Редактировать страницу

Фотографии со мной 31

Видеозаписи со мной 4

Мои подписчики 44

95%

Заполнить контакты +5%

**Подарки** 20

**Друзья** обновления 474 друга

Алина Треногина Будущее чешской-Психс Кристина Карунц

**Сергей Щебетенко**  
ФГБОУВПО ПГНИУ

День рождения: 24 мая 1976 г.

Родной город: Пермь - Старый Оскол

Место работы: Пермский государственный университет

Скрыть подробную информацию

**Контактная информация** Редактировать

Город: Пермь

**Образование** Редактировать

Вуз: ПГПУ '98

Факультет: Психологии

Кафедра: Теоретической и прикладной психологии

Форма обучения: Дневное отделение

Статус: Кандидат наук

Школа: Школа №95 '93  
Старый Оскол, 1983-1993 (а)

Школа: Школа №124  
Пермь, 1985-1989 (а)

**Личная информация** Редактировать

Любимая музыка: london suede

Любимые фильмы: Разомкнутые объятия, Вчера. Сегодня. Завтра, Cashback

Любимые книги: Уэльбек, Пушкин

Любимые игры: SPSS, StatSoft, R

Группы: БИБЛИОТЕРАПИЯ, RUTRACKER.ORG, ПГНИУ Организация работы с молодежью, Movies in English Фильмы на английском, Первые выпускники факультета психологии ПГПУ, ANASTASIA KOR фотограф пермь стб москва, Онлайн кино фильмы сериалы, Партия народной свободы, Васаби Доставка суши и роллов., ИСТОРИЯ ПЕРМИ, Я выступаю против Путина и Единой России., Эхо Москвы Пермь 91.2 FM, Пермский гос универ ПГУ ПГНИУ неоф группа, Басаргина в отставку, Центр психологического

RU 11:46 PM 03/03/2016

## ■ Two criteria:

– academic achievement --> conscientiousness

- meta-analyses (McAbee & Oswald, 2013; Poropat, 2009; Richardson, Abraham, & Bond, 2012; Trapmann, Hell, Hirn, & Schuler, 2007)

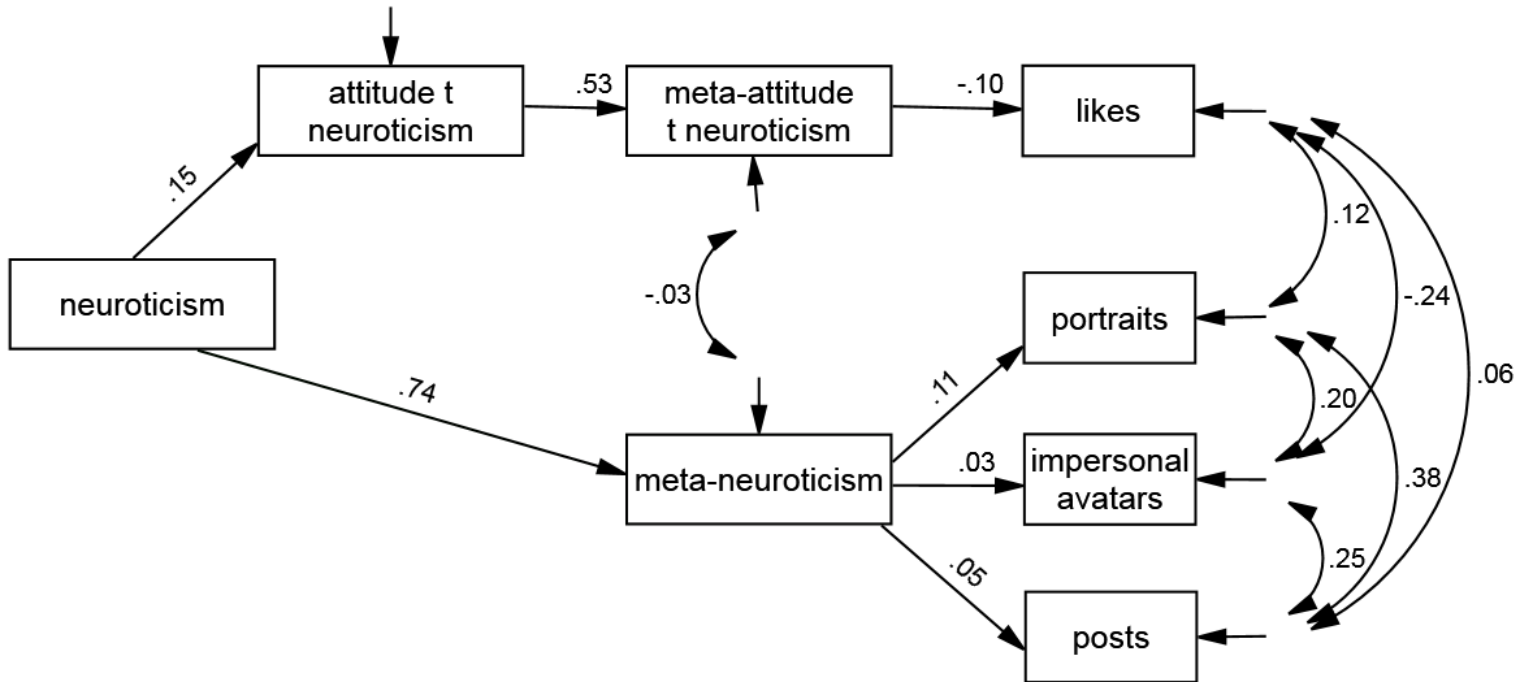
– online social networking behavior --> extraversion

- empirical findings (Gosling et al., 2011; Muscanell & Guadagno, 2012; Ross et al., 2009)

- Two criteria:
  - academic achievement --> all five traits – via RCA
  - online social networking --> all five traits – via RCA

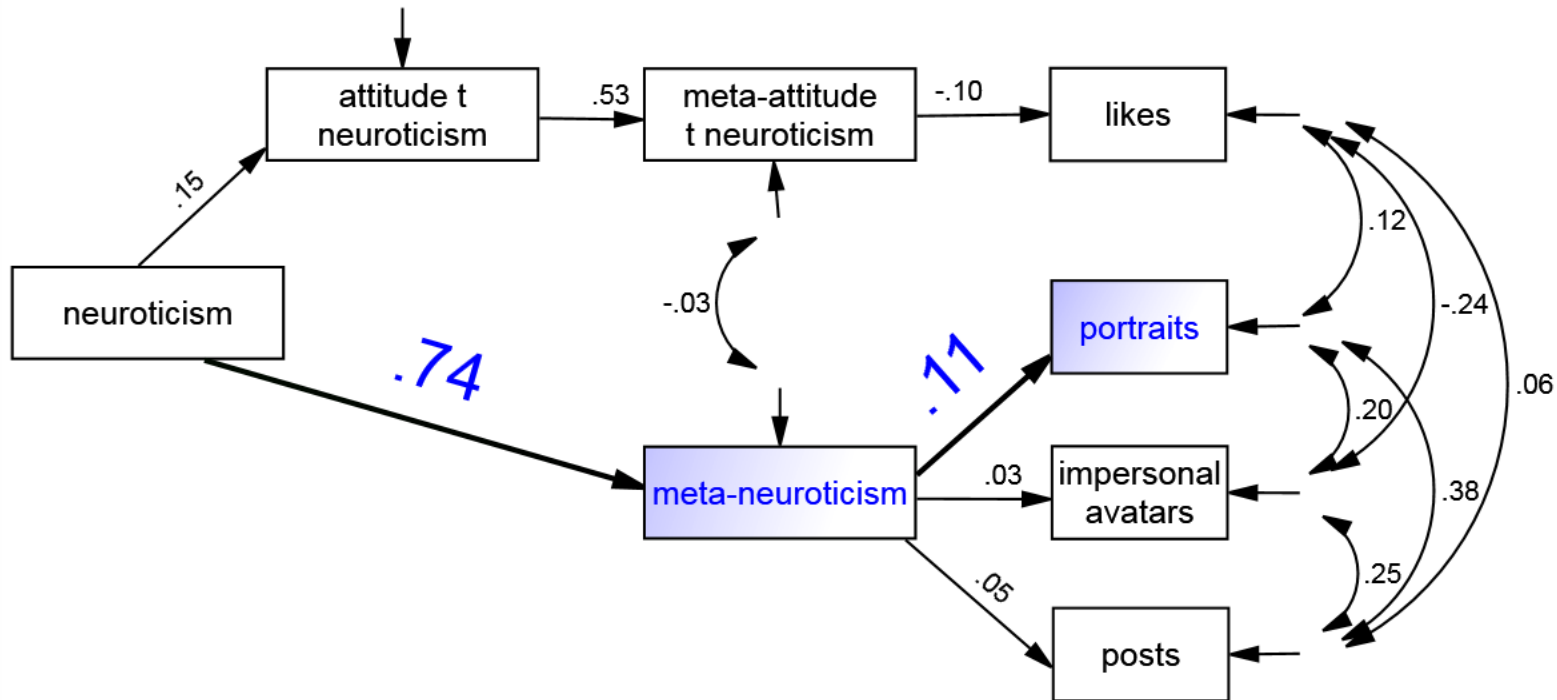
# Results

# Example 1: Neuroticism and online social networking behaviour



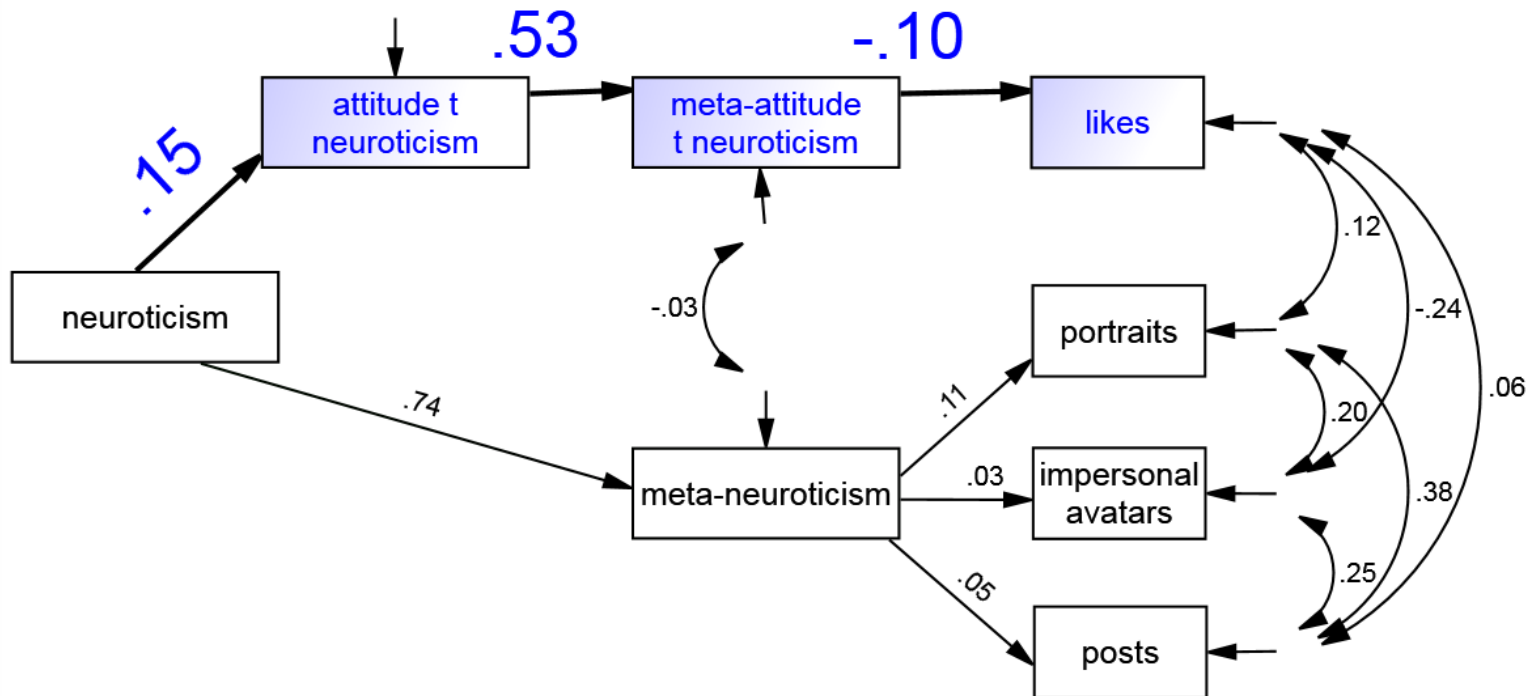
N = 830;  $\chi^2(14) = 15.77$ ,  $p = .328$ , CFI = .999, RMSEA [90% CI] = .012 [.000; .037]

# Neuroticism positively related to users' activity via meta-neuroticism



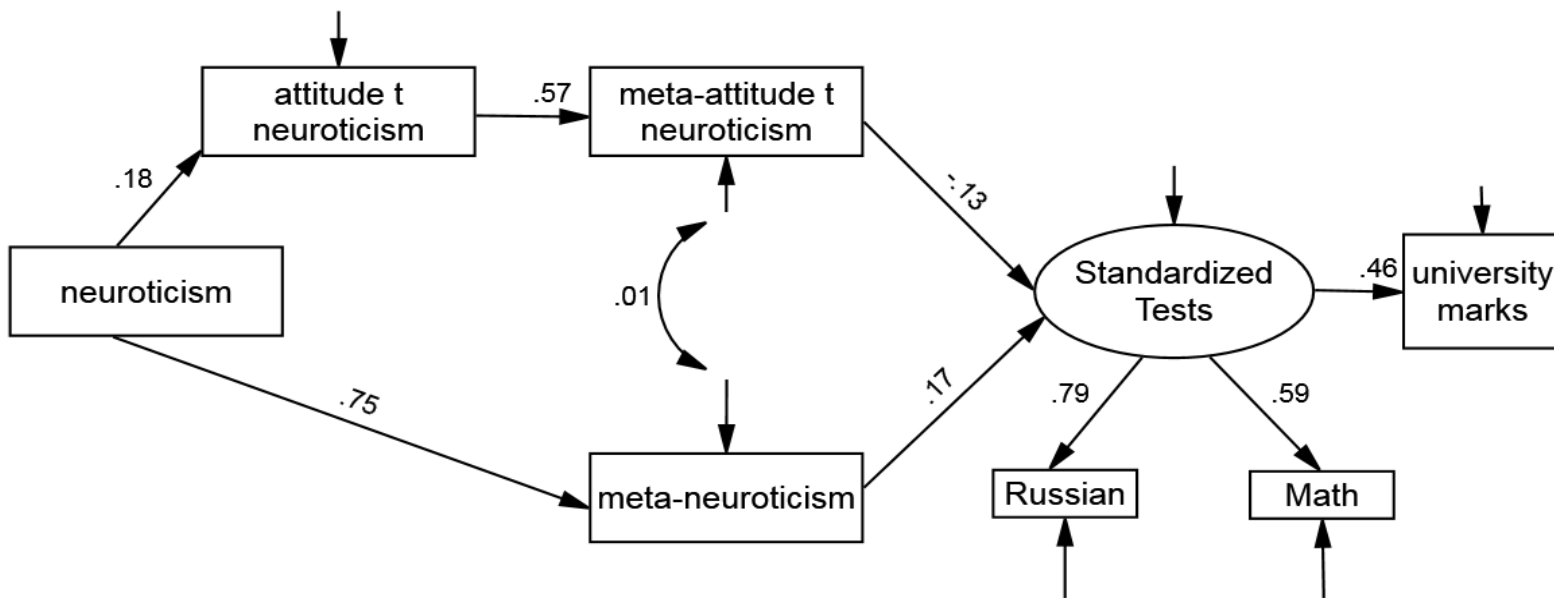
N = 830;  $\chi^2$  (14) = 15.77, p = .328, CFI = .999, RMSEA [90% CI] = .012 [.000; .037]

# Neuroticism negatively related to the number of likes via attitudes toward neuroticism



$N = 830$ ;  $\chi^2 (14) = 15.77$ ,  $p = .328$ ,  $CFI = .999$ ,  $RMSEA [90\% CI] = .012 [.000; .037]$

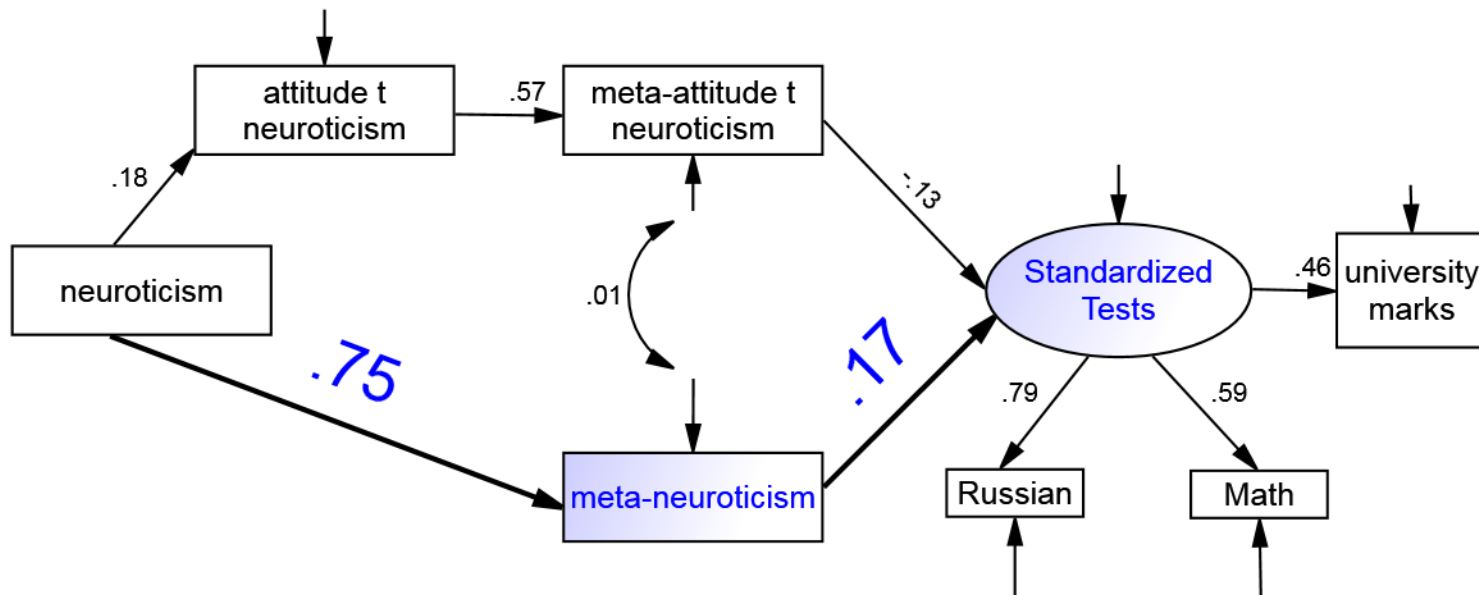
# Example 2: Neuroticism and academic achievement



N = 739;  $\chi^2(12) = 24.70$ ,  $p < .05$ , CFI = .990, RMSEA [90% CI] = .038 [.016; .059]

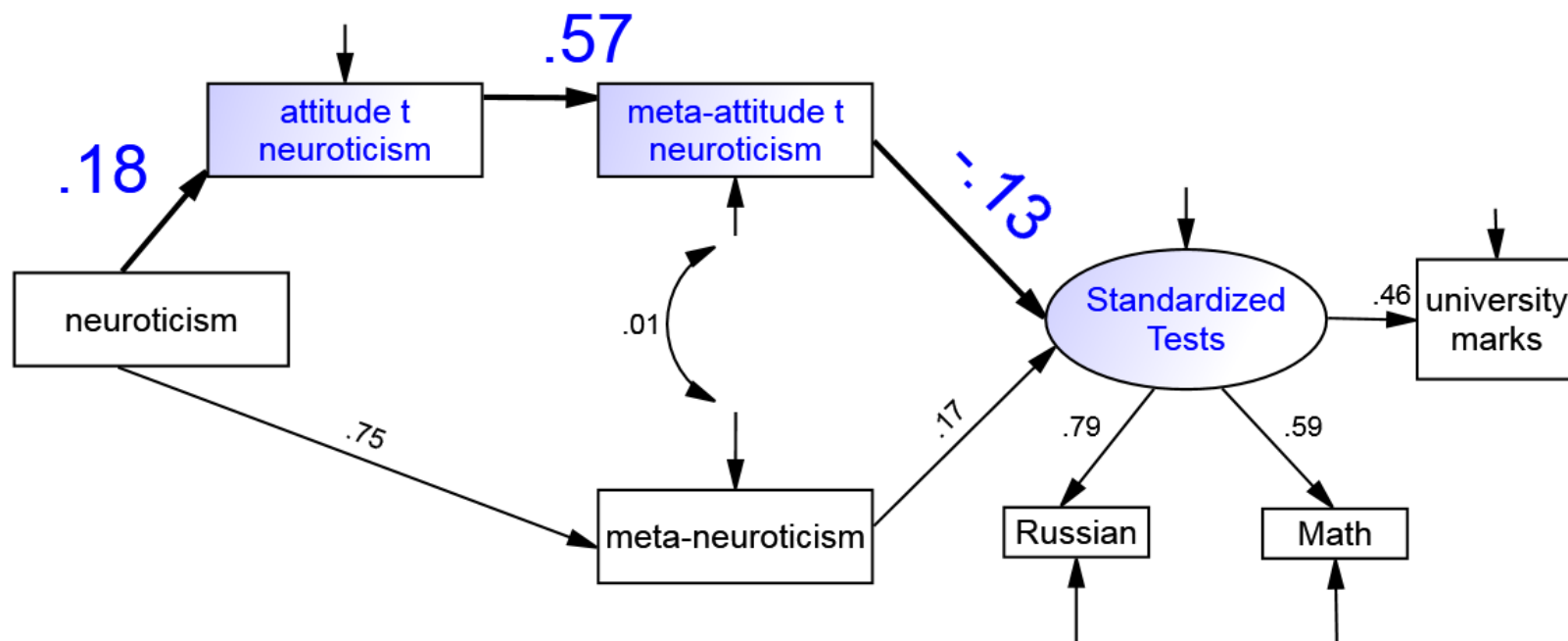


# Neuroticism positively related to standardized tests via meta-neuroticism



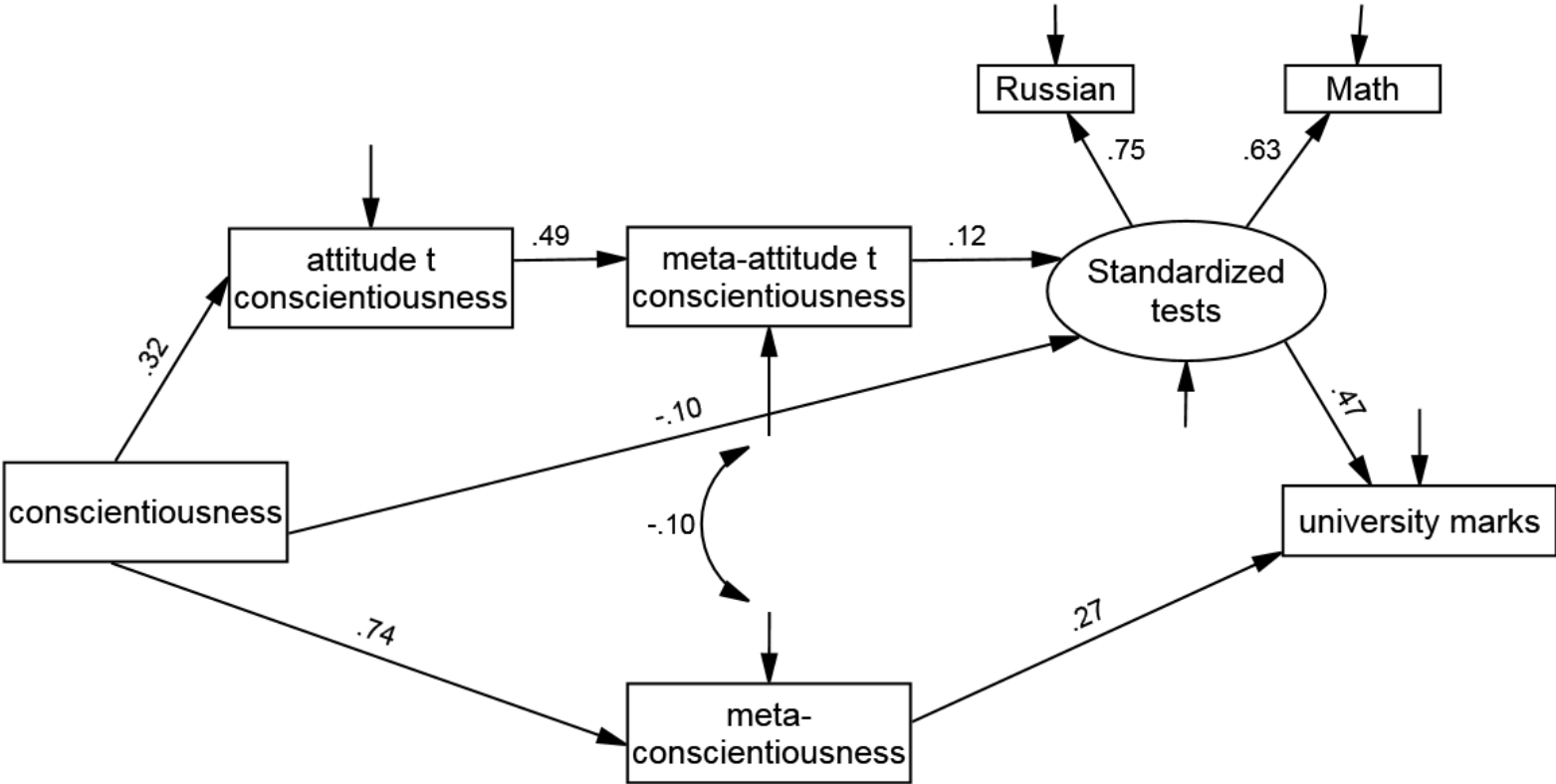
$N = 739$ ;  $\chi^2(12) = 24.70$ ,  $p < .05$ ,  $CFI = .990$ ,  $RMSEA [90\% CI] = .038 [.016; .059]$

# Neuroticism negatively related to standardized tests via attitudes toward neuroticism



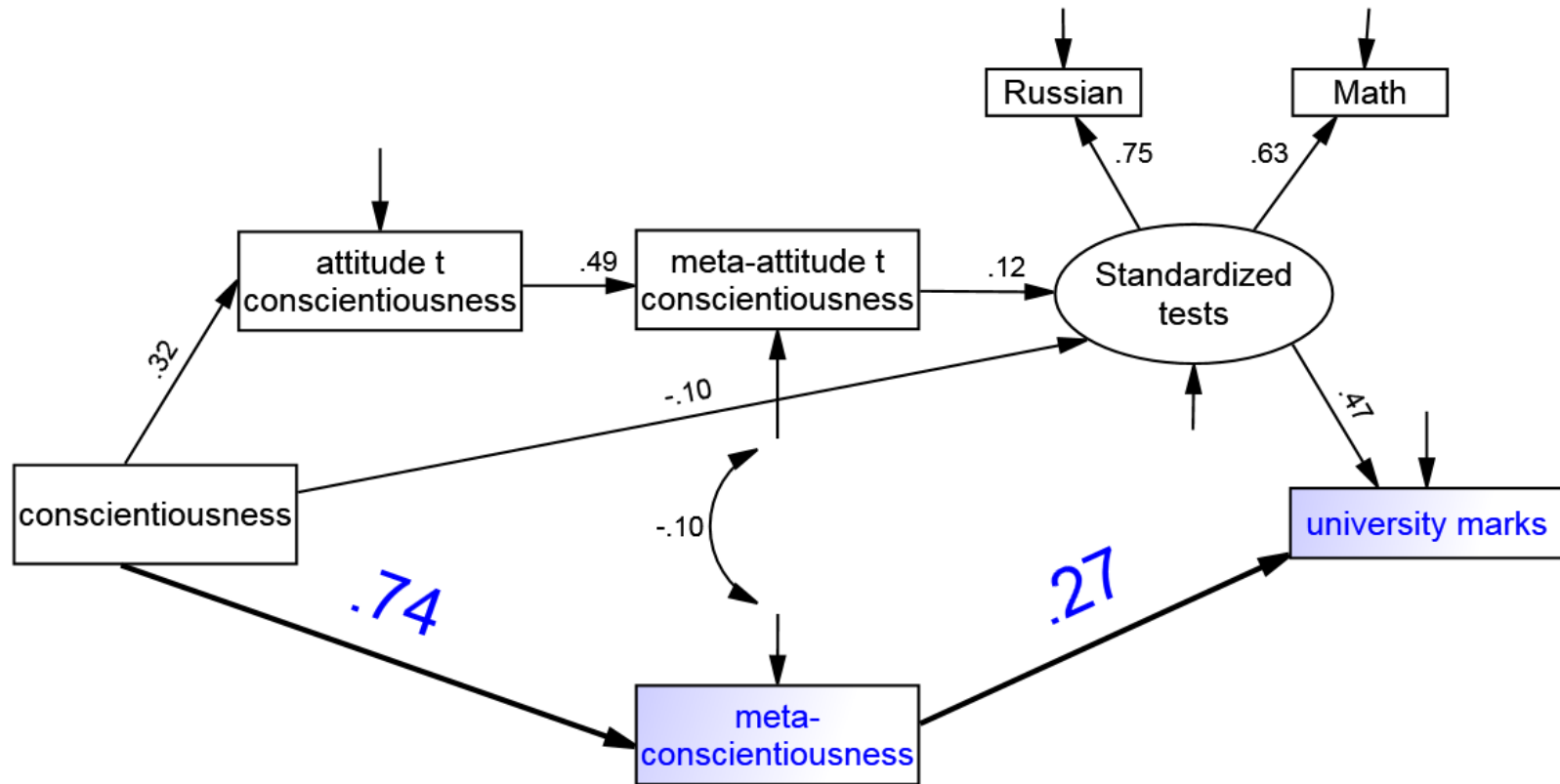
N = 739;  $\chi^2(12) = 24.70, p < .05, CFI = .990, RMSEA [90\% CI] = .038 [.016; .059]$

# Example 4: Conscientiousness and academic achievement



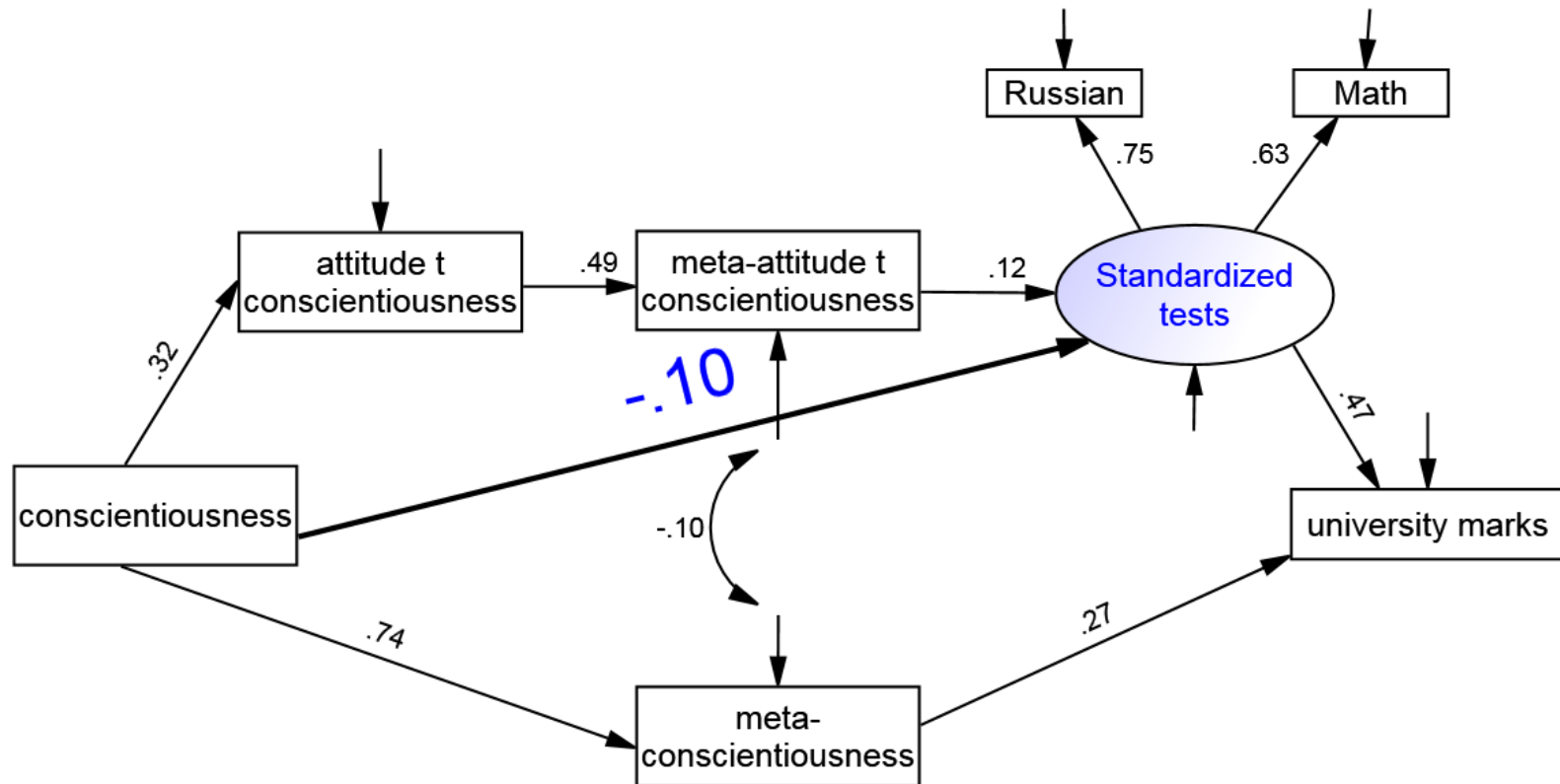
N = 739;  $\chi^2(11) = 15.48, p = .162, CFI = .996, RMSEA [90\% CI] = .023 [.000; .048]$

# Conscientiousness positively related to university marks via meta-conscientiousness



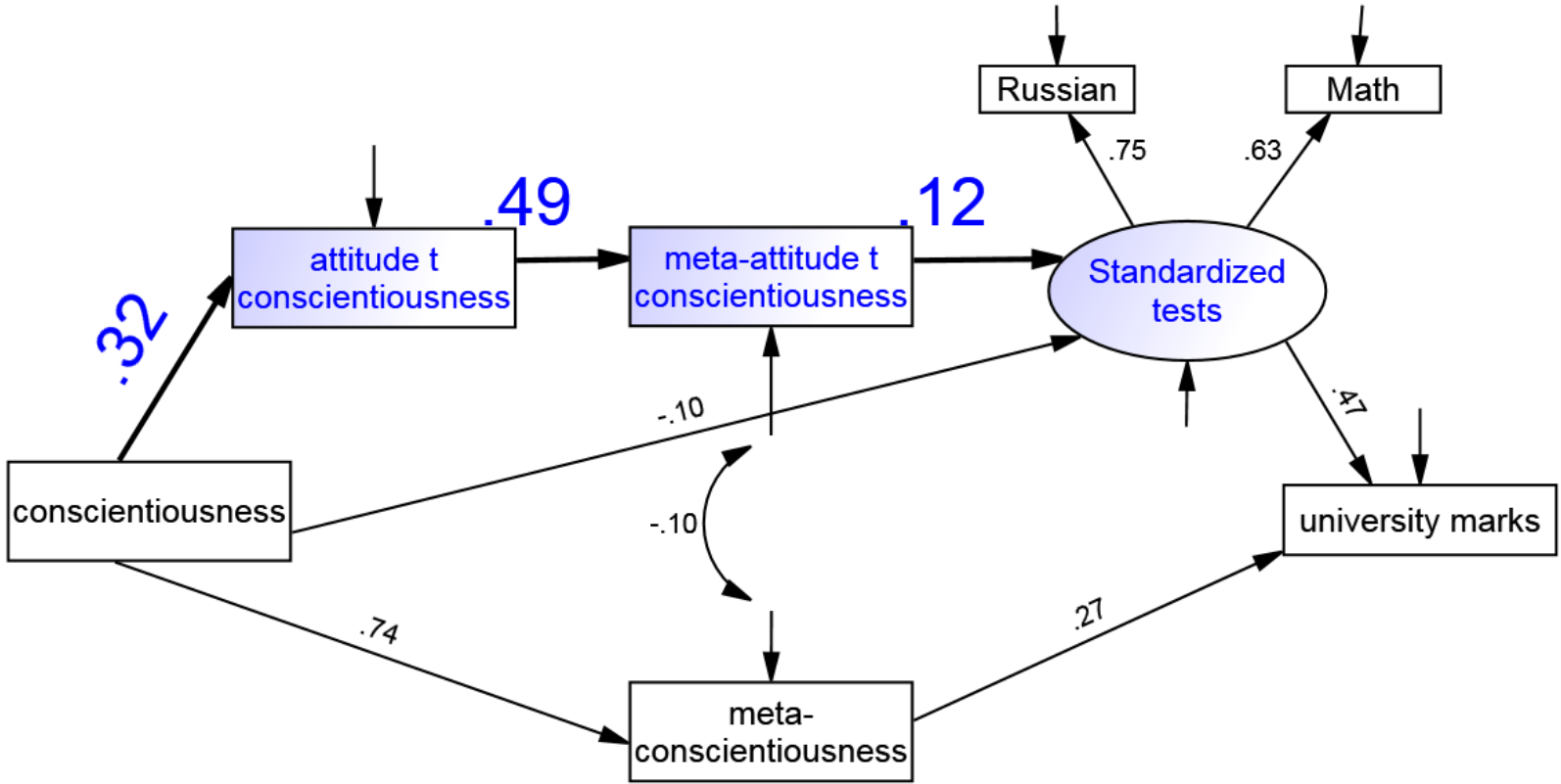
N = 739;  $\chi^2(11) = 15.48$ ,  $p = .162$ , CFI = .996, RMSEA [90% CI] = .023 [.000; .048]

# Conscientiousness negatively related to standardized tests, directly



N = 739;  $\chi^2(11) = 15.48$ ,  $p = .162$ , CFI = .996, RMSEA [90% CI] = .023 [.000; .048]

# Conscientiousness positively related to standardized tests, via attitudes toward conscientiousness



N = 739;  $\chi^2(11) = 15.48, p = .162, CFI = .996, RMSEA [90\% CI] = .023 [.000; .048]$

# Hallelujah, a quick summary!

- An individual may have several standpoints on personality;
- These standpoints may be termed *reflexive characteristic adaptations* in terminology of the five-factor theory
- Reflexive characteristic adaptations provided incremental contributions to external criteria – over personality traits
- These contributions were either compensatory or amplifying

**Thank you for your attention!**

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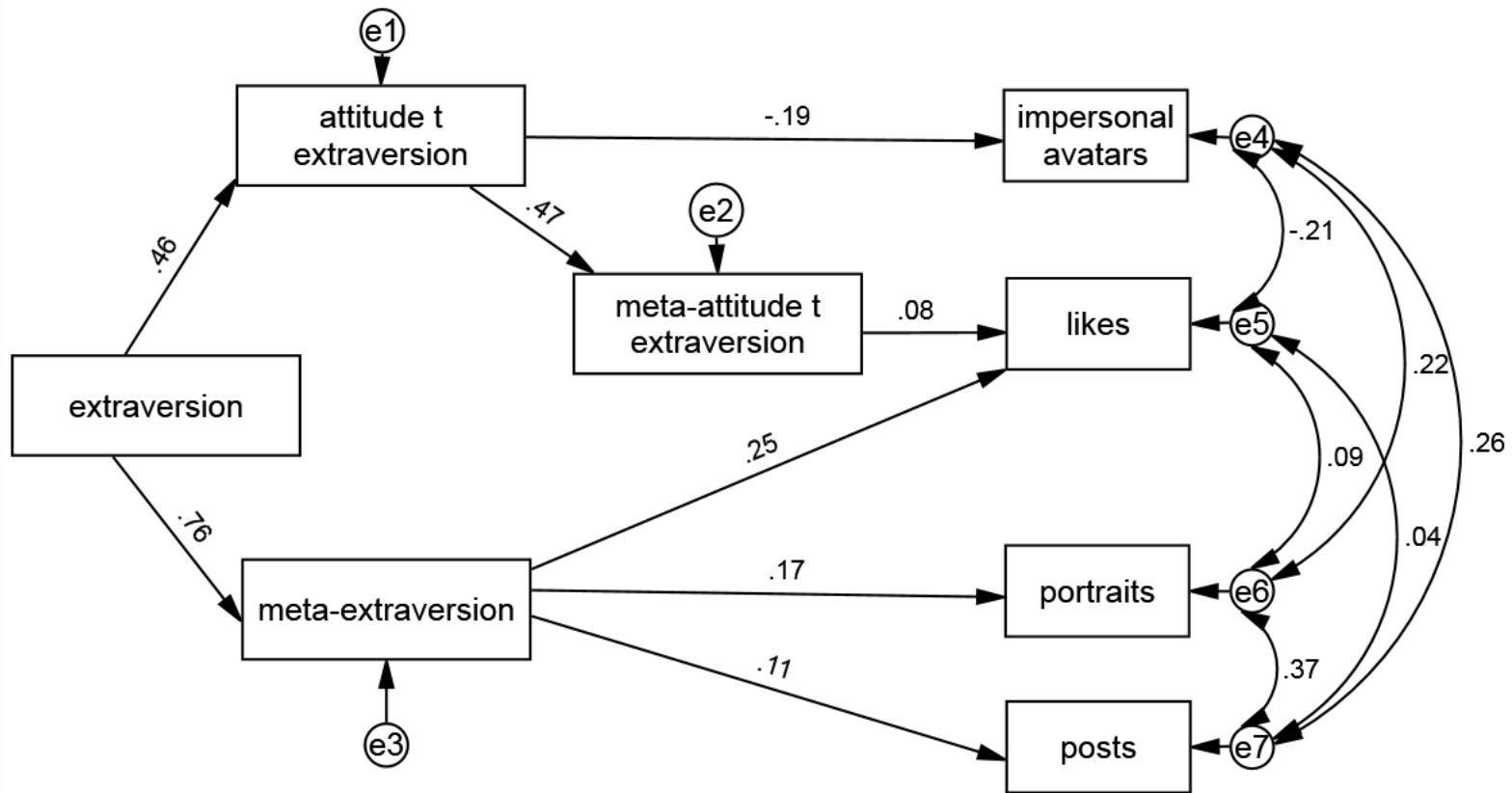
**Thank you for your attention!**

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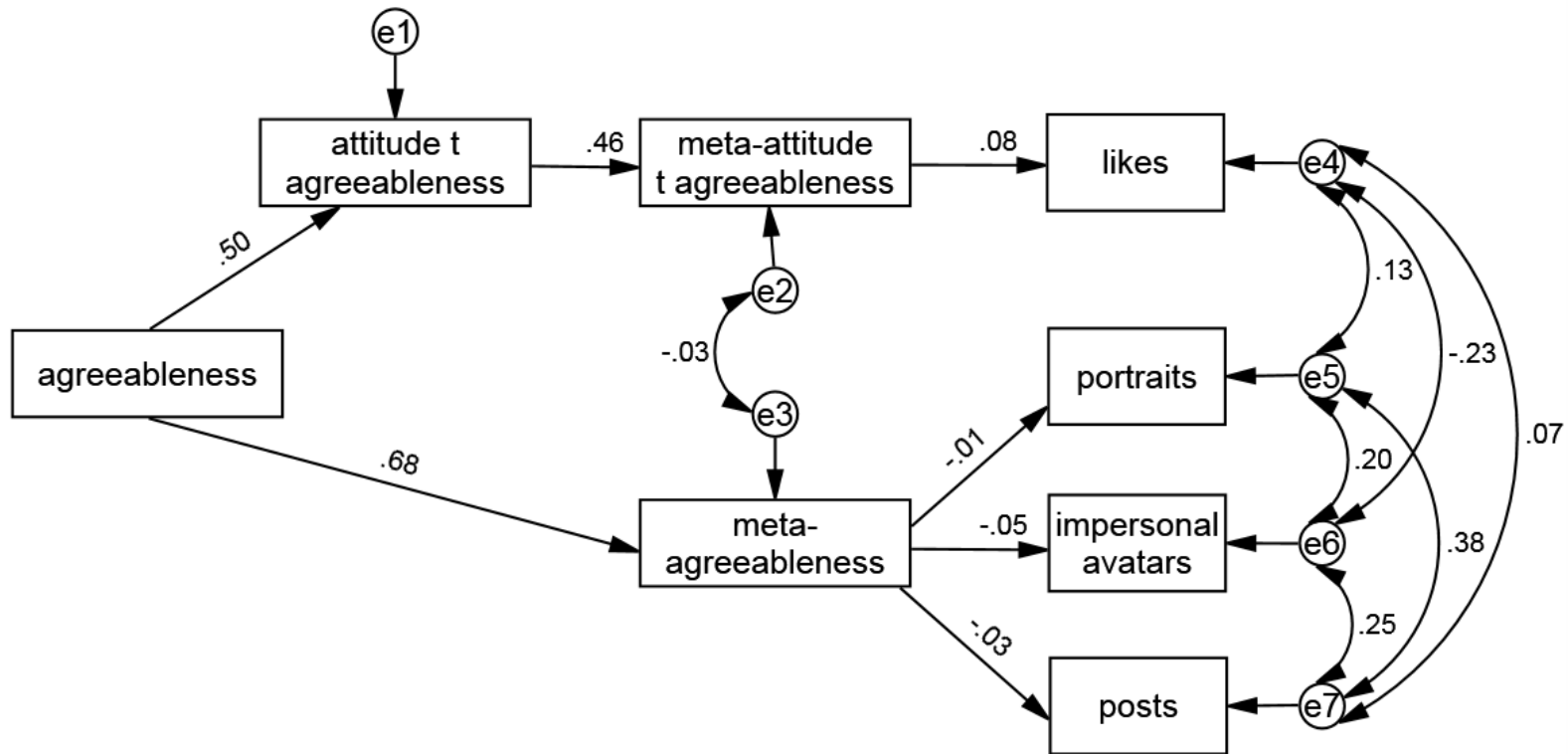
Sergei Shchebetenko  
shebetenko@gmail.com

# Extraversion and online social networking behavior



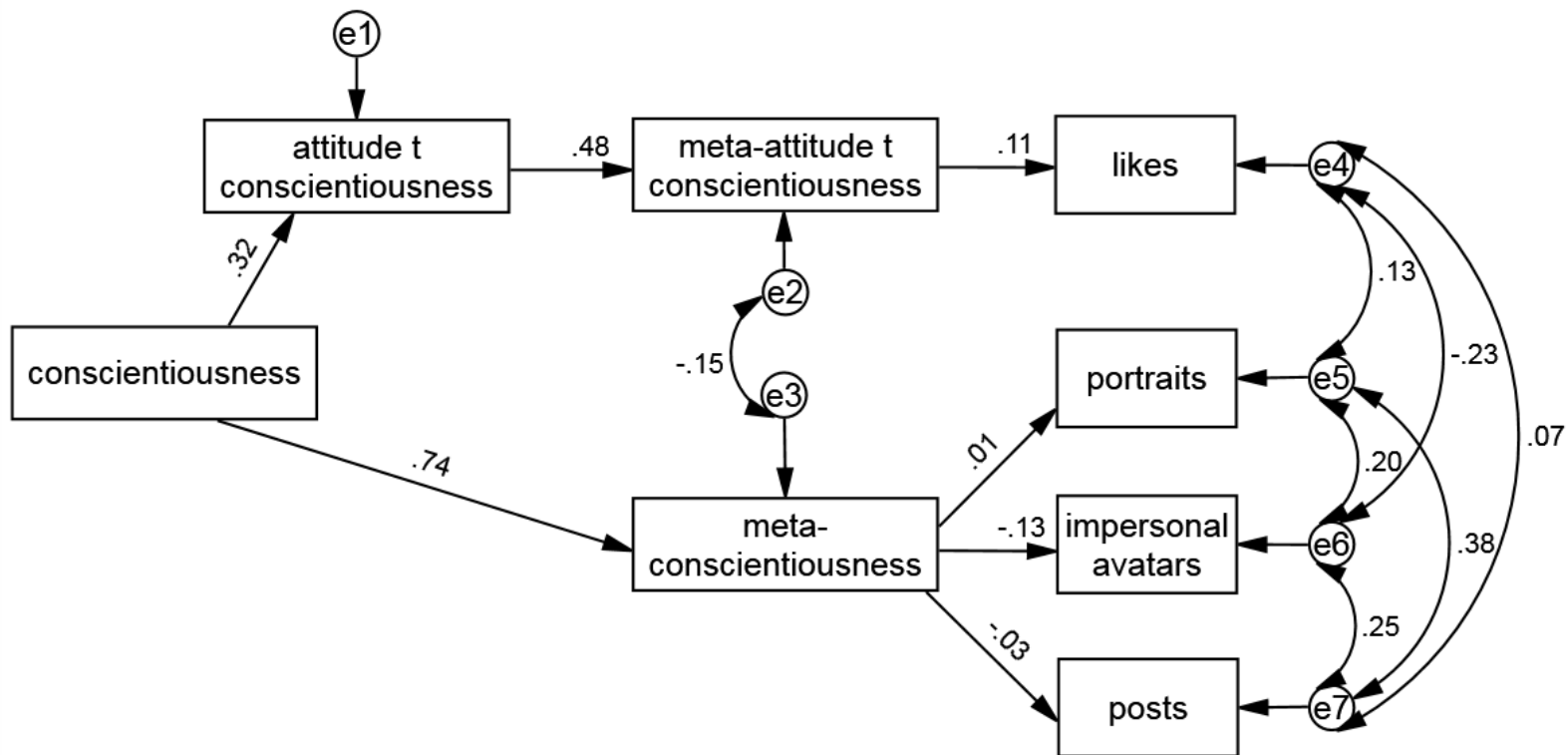
$\chi^2 (14) = 30.21, p = .007, CFI = .989, AGFI = .977, RMSEA [90\% CI] = .037 [.019; .056]$

# Agreeableness and online social networking behavior



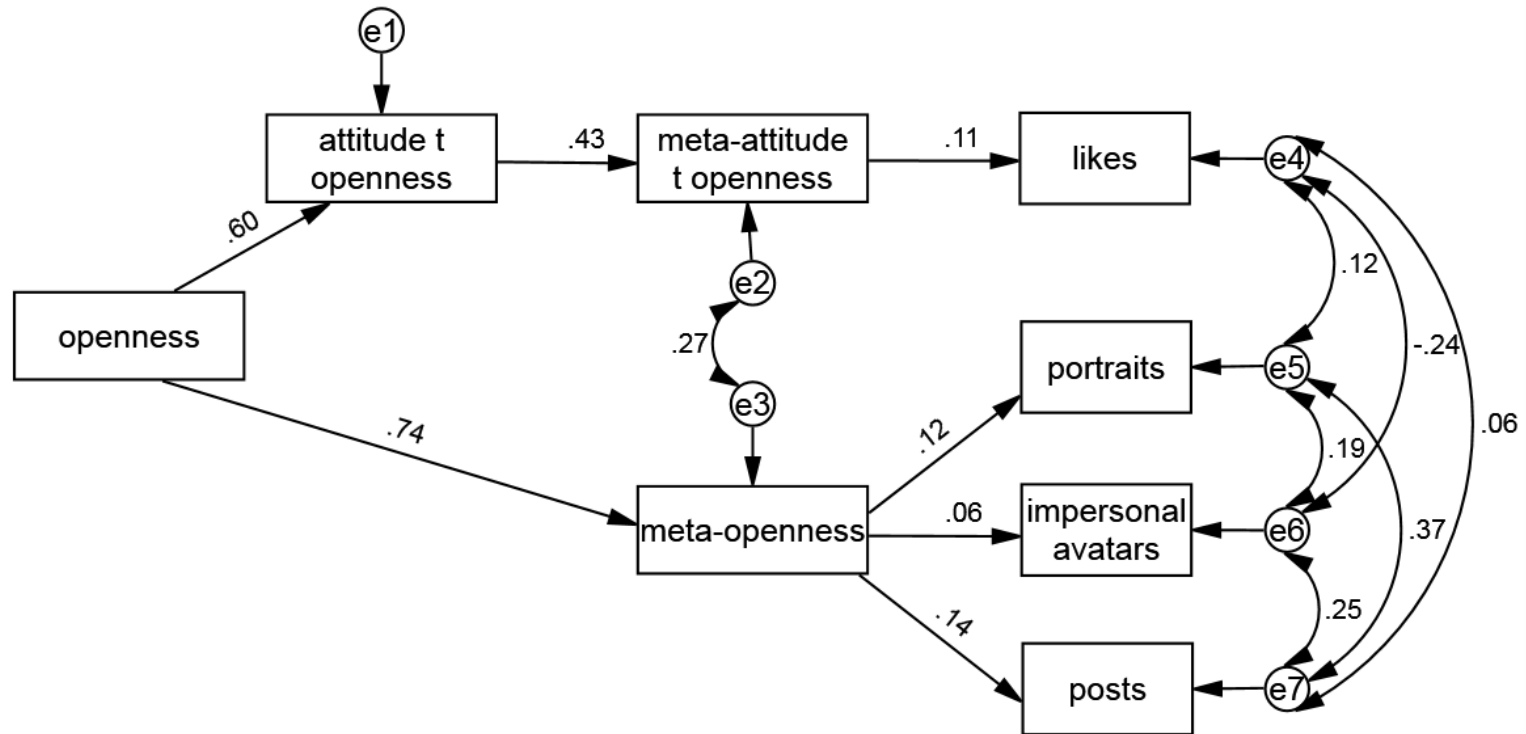
$\chi^2 (14) = 49.02, p < .001, CFI = .972, AGFI = .963, RMSEA = .055 [.039; .072]$

# Conscientiousness and online social networking behavior



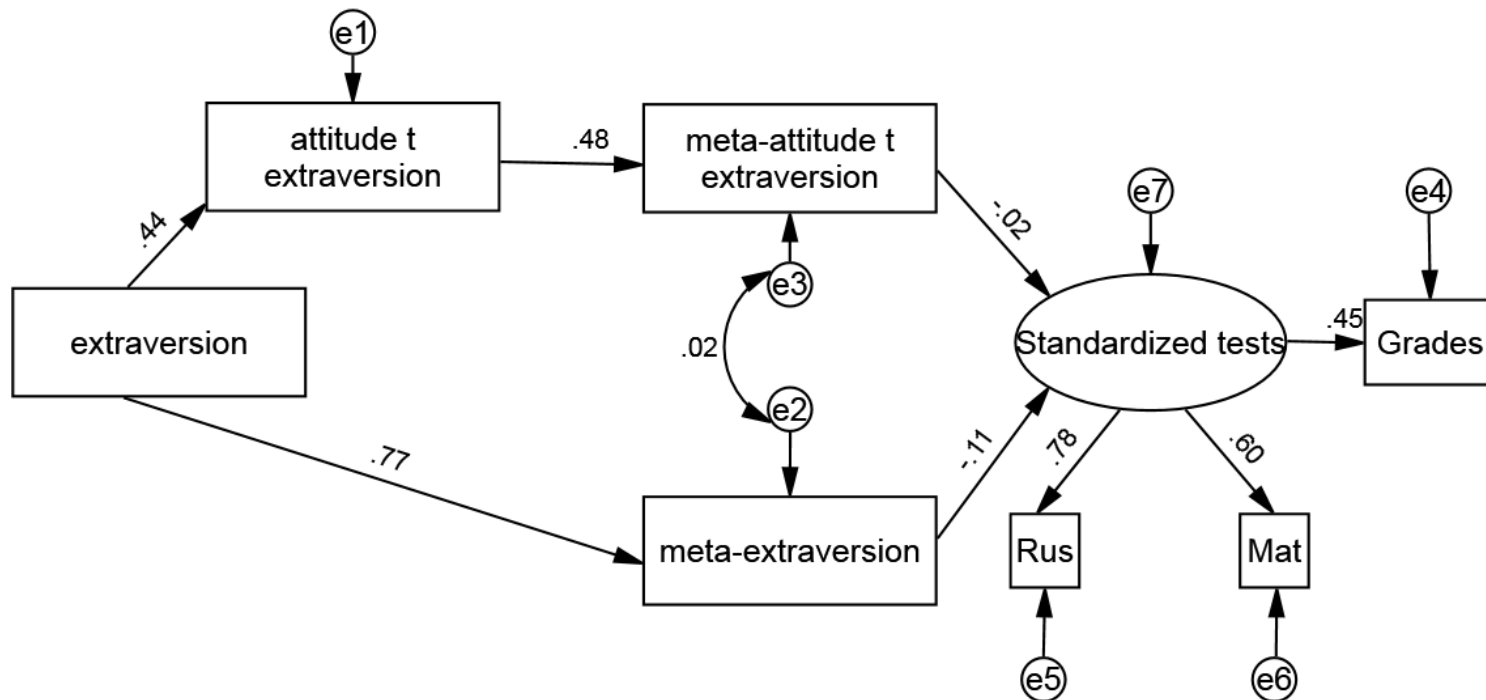
$\chi^2 (14) = 22.10, p = .077, CFI = .988, AGFI = .987, RMSEA = .026 [.000; .046]$

# Openness and online social networking behavior



$\chi^2 (14) = 50.90, p < .001, CFI = .977, AGFI = .962, RMSEA = .056 [.040; .073]$

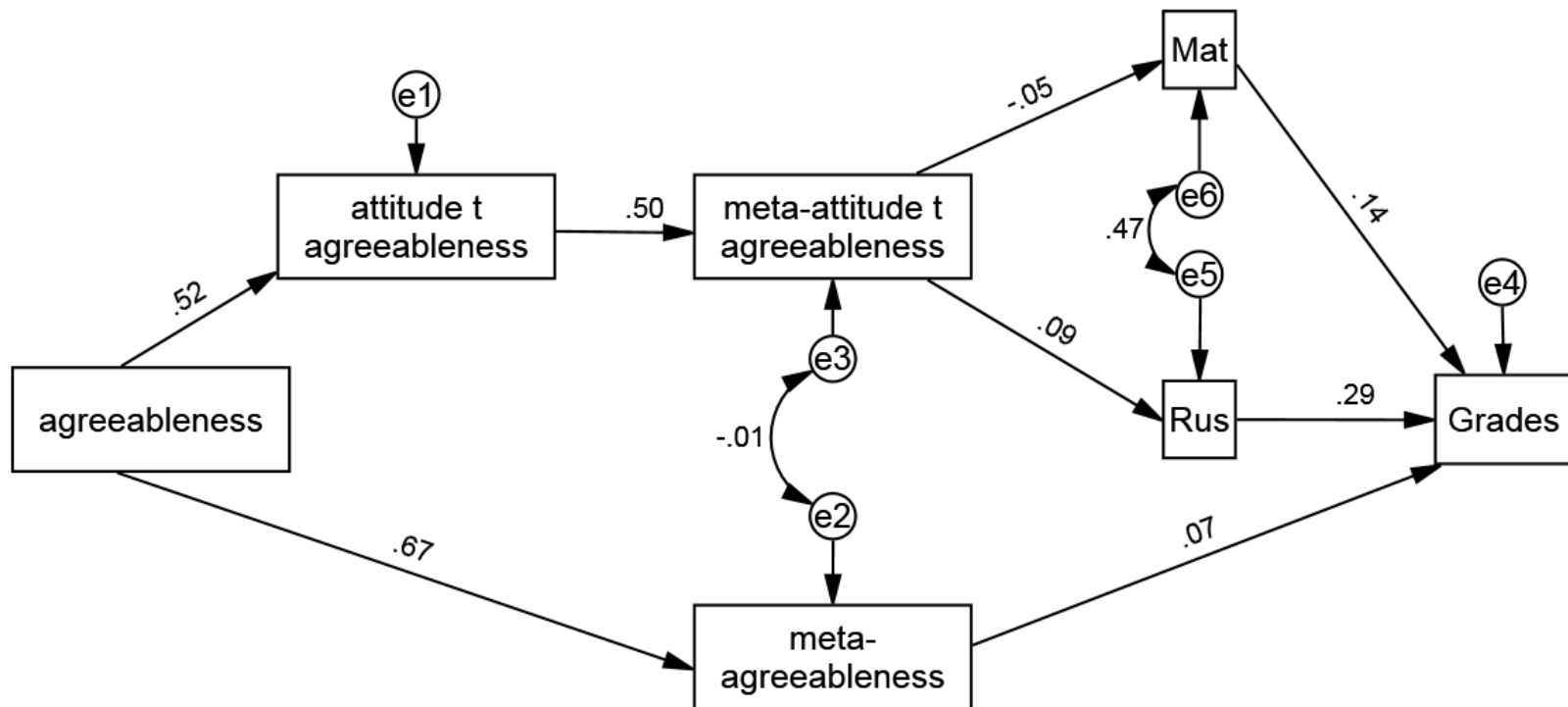
# Extraversion and academic achievement



$\chi^2(12) = 19.12, p .086, CFI = .995, AGFI = .983, RMSEA = .028 [.000; .051]$

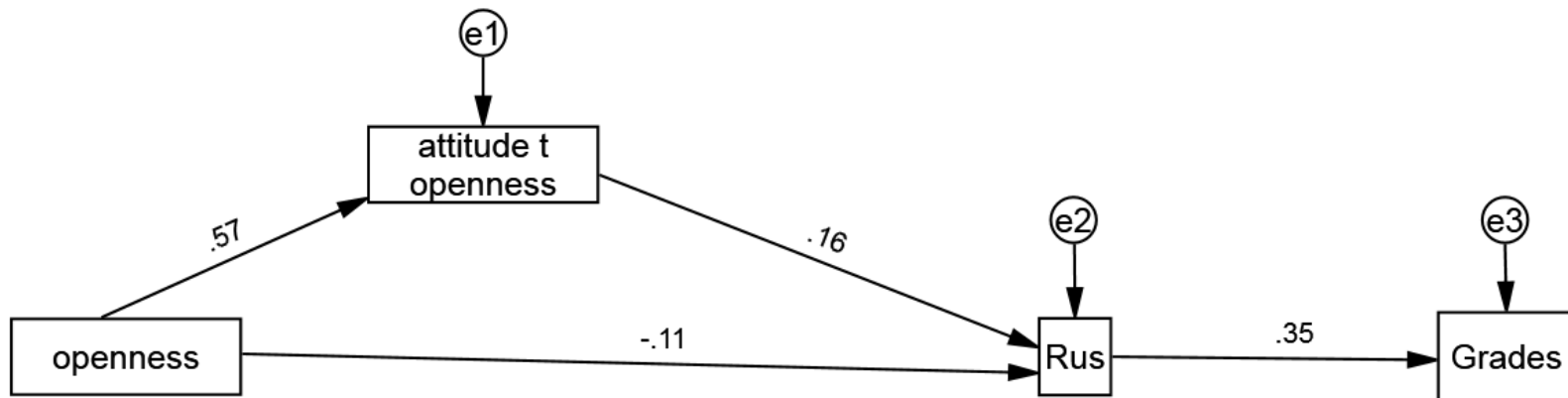


# Agreeableness and academic achievement



$\chi^2 (11) = 43.12, p < .001, CFI = .974, AGFI = .958, RMSEA = .063 [.044; .083]$

# Openness and academic achievement



$\chi^2(2) = 1.58, p = .453, CFI = 1.00, AGFI = .995, RMSEA = .000 [.000; .068]$

# Personality characteristics and online social network behavior: correlations ( $n = 830$ )

	Extraversion	Agreeableness	Conscientious.	Neuroticism	Openness
			Traits		
Portraits	.178***	.025	.071*	.092**	.120**
Impersonal	-.090*	-.019	-.129***	-.002	.034
Posts	.093**	-.009	.028	.048	.142***
Likes	.246***	.021	.097**	.077*	.098**
			Attitudes toward traits		
Portraits	.087*	.027	.053	-.013	.087*
Impersonal	-.214***	-.094**	-.088*	-.003	-.001
Posts	.001	.046	.017	-.055	.094**
Likes	.203***	.122***	.096**	-.001	.109**
			Meta-traits		
Portraits	.169***	-.007	.017	.117**	.124***
Impersonal	-.062	-.050	-.145***	.018	.057
Posts	.107**	-.035	-.030	.058	.134***
Likes	.266***	.016	.080*	.054	.084*
			Meta-attitudes toward traits		
Portraits	.015	.035	.056	-.046	.039
Impersonal	-.149***	-.082*	.003	-.006	-.022
Posts	.014	.022	.037	-.047	.047
Likes	.141***	.112**	.122***	-.112**	.124***

# Personality characteristics and academic achievement

	Extraversion	Agreeableness	Conscientious. Traits	Neuroticism	Openness
Math test	-.085*	-.015	-.080*	-.016	-.069
Russian language test	-.102**	.005	-.083**	.179***	.049
University grades	-.038	.037	.236***	.122**	.015
			Attitude toward traits		
Math test	-.094**	-.048	-.010	-.063	-.019
Russian language test	-.089**	.077	-.018	-.097**	.144***
University grades	-.014	.095**	.074*	-.018	.011
			Meta-traits		
Math test	-.087*	-.011	-.056	.024	-.056
Russian language test	-.113***	-.008	-.042	.209***	.079*
University grades	-.052	.094**	.274***	.164***	.026
			Meta-attitudes toward traits		
Math test	-.053	-.056	.072*	-.049	-.037
Russian language test	-.056	.092**	.084**	-.088**	.009
University grades	.060	.103**	.052	-.082*	.031

*Note.* Math test ( $n = 773$ ), Russian language test ( $n = 985$ ), university grades ( $n = 764$ ).

**Table.** Participants' sex, personality traits, meta-traits and attitudes toward traits as predictors of the participation at Wave 2 (hierarchical logistic regression analysis).

Predictors	Participation at Wave 2 ( <i>n</i> yes = 277)			
	B (SE)	Wald's $\chi^2$ , <i>p</i>	Odds ratio [95% CI]	Cox and Snell R <sup>2</sup>
<b>Step 1, <math>\chi^2</math> (1) = 5.98, <i>p</i> &lt; .001</b>				.006
*Sex (female = 2; male = 1)	.37 (.16)	5.81, .016	1.45 [1.07; 1.97]	
<b>Step 2 <math>\Delta\chi^2</math> (5) = 25.12, <i>p</i> &lt; .001; The model <math>\chi^2</math> (6) = 31.09, <i>p</i> &lt; .001</b>				.030
*Sex (female = 2; male = 1)	.40 (.17)	5.54, .019	1.48 [1.07; 2.06]	
*Extraversion	-.38 (.11)	11.59, .001	0.68 [0.55; 0.85]	
Agreeableness	.12 (.14)	0.69, .406	1.12 [0.86; 1.47]	
*Conscientiousness	.38 (.12)	10.93, .001	1.47 [1.17; 1.84]	
Neuroticism	.02 (.11)	0.02, .893	1.02 [0.82; 1.27]	
Openness	.14 (.12)	1.39, .238	1.15 [0.91; 1.46]	
<b>Step 3 <math>\Delta\chi^2</math> (5) = 17.06, <i>p</i> = .004; The model <math>\chi^2</math> (11) = 48.15, <i>p</i> &lt; .001</b>				.046
Sex (female = 2; male = 1)	.33 (.17)	3.65, .056	1.39 [0.99; 1.94]	
*Extraversion	-.40 (.13)	10.27, .001	0.67 [0.52; 0.86]	
Agreeableness	-.12 (.17)	0.50, .478	0.89 [0.64; 1.23]	
*Conscientiousness	.46 (.13)	13.27, < .001	1.59 [1.24; 2.03]	
Neuroticism	.00 (.12)	0.00, .973	1.00 [0.80; 1.26]	
Openness	.20 (.15)	1.61, .204	1.22 [0.90; 1.64]	
Attitude toward extraversion	.05 (.18)	0.08, .774	1.05 [0.74; 1.51]	
*Attitude toward agreeableness	.60 (.22)	7.55, .006	1.83 [1.19; 2.81]	
Attitude toward conscientiousness	-.47 (.24)	3.82, .051	0.63 [0.39; 1.00]	
*Attitude toward neuroticism	-.45 (.21)	4.55, .033	0.64 [0.42; 0.96]	
Attitude toward openness	-.31 (.23)	1.85, .173	0.74 [0.47; 1.14]	
<b>Step 4 <math>\Delta\chi^2</math> (5) = 22.05, <i>p</i> = .001; The model <math>\chi^2</math> (16) = 70.19, <i>p</i> &lt; .001</b>				.066
*Sex (female = 2; male = 1)	.35 (.18)	3.95, .047	1.42 [1.01; 2.00]	
Extraversion	.06 (.18)	0.09, .761	1.06 [0.74; 1.51]	
Agreeableness	.06 (.20)	0.07, .788	1.06 [0.71; 1.57]	
Conscientiousness	.14 (.19)	0.58, .445	1.15 [0.80; 1.66]	
Neuroticism	.08 (.16)	0.25, .615	1.09 [0.79; 1.49]	
Openness	-.04 (.20)	0.05, .827	0.96 [0.65; 1.41]	
Attitude toward extraversion	.13 (.19)	0.46, .497	1.14 [0.79; 1.65]	
*Attitude toward agreeableness	.76 (.23)	11.03, .001	2.13 [1.36; 3.33]	
*Attitude toward conscientiousness	-.53 (.24)	4.77, .029	0.59 [0.37; 0.95]	
*Attitude toward neuroticism	-.43 (.21)	3.97, .046	0.65 [0.43; 0.99]	
Attitude toward openness	-.39 (.24)	2.69, .101	0.68 [0.43; 1.08]	
*Meta-extraversion	-.58 (.16)	12.93, < .001	0.56 [0.41; 0.77]	
*Meta-agreeableness	-.39 (.18)	4.88, .027	0.68 [0.48; 0.96]	
*Meta-conscientiousness	.42 (.16)	6.92, .009	1.52 [1.11; 2.08]	
Meta-neuroticism	-.13 (.16)	0.64, .425	0.88 [0.65; 1.20]	
*Meta-openness	.36 (.18)	3.91, .048	1.44 [1.00; 2.05]	

Note. *N* = 1,030; The predictors that contributed significantly are in an asterisk.