Направление: «250. Психология»

Треки:	
«Когнитивные науки и технологии»	Код – 250.1
«Консультативная психология. Персонология»	Код – 250.2
«Позитивная психология»	Код – 250.3
«Прикладная социальная психология»	Код – 250.4

Время выполнения – 240 мин.

Максимальный балл – 250.

Уважаемые участники! Задание по направлению «Психология» состоит из инвариантной и вариативной частей. Задания инвариантной части являются обязательными, вариативная часть (задания по трекам) выполняются по желанию участника.

При выборе треков «Консультативная психология. Персонология» и «Позитивная психология» язык решения задач инвариантной части – русский. При выборе треков «Когнитивные науки и технологии», «Прикладная социальная психология» язык решения инвариантной части – английский.

ИНВАРИАНТНАЯ ЧАСТЬ

Задание 1 (25 баллов).

Прочитайте представленный пререгистрационный протокол (preregistration protocol) исследования. Предложите улучшения исследования в части его методов, дизайна или исследовательских процедур. Укажите, с какими ограничениями может столкнуться данное исследование и предложите варианты, как возможно преодолеть какие-либо из этих ограничений.

Preregistration protocol

Title

Brilliant Thinkers, Empathic Therapists: What Explains the Gender Gap in Philosophy versus Psychology?

Description and hypotheses

1) In this pilot survey study, we expect that items of each a priori scale will load onto single factors (or a primary factor and reverse coded "artifactor" for scales with many reverse coded items) in exploratory factor analyses of each scale. We will also provide a tentative test of the following hypotheses, which have been forwarded as explanations for the gender imbalances across philosophy and psychology. The Brilliance explanation is that philosophy, but not psychology, is viewed as requiring brilliance and that both men and women believe men have more innate brilliance than women.

2) Philosophy will be viewed as requiring more innate brilliance than psychology.

3) Men will view themselves as having more innate brilliance than women.

4) Women will hold stronger fixed (vs. growth) mindset beliefs compared to men. The Combativeness explanation is that philosophy is compatible with or requires argumentativeness and men tend to be more argumentative than women.

5) Philosophy will be viewed as benefiting from a combative (vs. cooperative) nature, more than psychology.

6) Men will view themselves as more combative (vs. cooperative) than women. The Interest explanation is that women are more interested in people versus things—or are more empathizing versus systematizing—and vice versa, and psychology provides opportunities to empathize whereas philosophy provides opportunities to systematize.

7) Men will view themselves as more systematizing (vs. empathizing), compared to women. The Status vs. Family-Focus explanation is that women versus men value having a career that allows for having flexibility and a family and men value a career that garners social status; that psychology, versus philosophy, allows for flexibility for a family; and philosophy, versus psychology, garners social status.

8) Women will score higher on prioritization of a career that allows for a family, compared to men.

9) Psychology will be viewed as better allowing for a family, compared to philosophy.

10) Men will score higher on prioritization of a career that allows for social status, compared to women.

11) Philosophy, compared to psychology, will be viewed as garnering more social status for women versus men. We will also explore how desire for monetary wealth is associated with gender and perceptions of philosophy versus psychology. We tentatively expect no differences on average, but that preference for monetary wealth may lead to career choices outside of psychology and philosophy.

12) Do men versus women prioritize monetary wealth from a career more?

13) Do people perceive psychology versus philosophy as providing monetary wealth?

14) Prioritization of monetary wealth from a career may be associated with preference for a career other than in philosophy, and perhaps other than psychology.

Finally,

15) Factors for which there is a gender difference will predict academic major choice differences.

Design Plan

Survey, not randomized. The only experimental aspect is to test whether people rate men and women's attractiveness differentially depending on their field of study. Participants read a vignette about a recent college graduate, who is a man or woman, studied philosophy or psychology, and is brilliant or empathetic. Hence, this is a 2 (gender) x 2 (field) x 2 (characteristics) design.

Randomization

Participants are randomly assigned to one of the 8 vignette conditions, but all participants respond to the same survey.

Sample size and data collection procedures

Participants will be students in psychology and philosophy classes at two large universities in Montreal, Quebec, CA and Tallahassee, Florida, USA completing an online survey. Psychology students will be compensated with credit toward introductory classes. Participants must be at least 18 years of age. Our target sample size is 350 participants. There will be 150 signup opportunities posted to the American university's psychology department subject pool sign up system, to which all students in psychology classes have access. 350 students in philosophy and psychology at the Canadian university will be provided with the link to the online survey via class announcement online.

Measured variables

Age, Gender identity, Race/ethnicity, Family income, Major, Second major, Minor, Year of study, Grade point average upon admission to university, Expected grade in course.

Questionnaires: Psychologist stereotype, Philosopher stereotype, Questionnaire about selfmeasuring, Questionnaire about psychology and philosophy measuring, Attractiveness rating of hypothetical target, Ranking of philosophical disciplines for personal interest, Ranking of psychological disciplines for personal interest.

Задание 2 (25 баллов).

1) Прочитайте фрагмент статьи и предложите на основе него несколько исследовательских проблем в области психологии. В проблематизации Вы можете также апеллировать к другим релевантным текстам и авторам.

2) Выберите одну из исследовательских проблем и предложите ее развернутое обоснование и план разработки.

<...>

Individual differences: can someone feel good alone?

The widespread negative bias regarding the experience of being alone is easily understandable: true, the distressing experience of loneliness is a universal phenomenon. A positive attitude towards being alone is not common; rather, it is a minority viewpoint. This is why "with few exceptions, psychotherapists have omitted to consider the fact that the capacity to be alone is also an aspect of emotional maturity" (Storr, 2005, p. 18).

A psychological state essentially equivalent to loneliness in its objective conditions but radically different in how it is subjectively experienced is called by a different word: solitude. The hermits and wanderers mentioned above reveal a non-typical attitude to being alone: for them it is an emotionally positive state, a valuable resource of self-cognition, creative activity, and inner dialogue. Indeed, many outstanding people – spiritual teachers, writers, painters, philosophers, scientists, political and military leaders – have valued solitude highly as a resource of creativity and self-development, while not suffering from a lack of relatedness. This was highlighted in A. Storr's study (2005) devoted to the importance of the capacity of creative people to be alone as "a valuable resource when changes of mental attitude are required" (p.290).

It follows that a positive attitude to being alone is to be anticipated especially in mature people, rather than in everyone. C.G. Jung (<u>1954</u>) seems to be the first person to have explicitly conceptualized loneliness as a high but acceptable price for personality development, and A. Maslow (<u>1970</u>) listed a positive attitude to solitude among the characteristic peculiarities of self-actualizing persons. D. Winnicott wrote a special paper on the capacity to be alone as an important dimension of emotional maturity (see Storr, <u>2005</u>, pp. 18–20).

Another indication that solitude is not just the result of poor social ties and communicative skills was provided by Leary, Herbst, and McCrary (2003), who compared two possible explanations of individual differences relating to the amount of social vs. solitary activities. It turned out that the frequency and enjoyment of solitary activities were more strongly related to a higher desire for solitude than to low sociotropism; such activities meant approaching a desired state rather than avoiding an undesired one.

Positive vs. negative attitudes to being alone can be confused with the introversion vs. extraversion polarity, a construct introduced by C. Jung (1971) and included among the "Big five" personality dimensions. Jung, however, described introversion vs. extraversion in terms of

predominantly directing of psychic energy inwards vs. outwards rather than in terms of approaching vs. avoiding social contacts. The general feeling of loneliness is typically negatively correlated with extraversion (e.g. Mund & Neyer, 2019), but the two constructs do not merge, especially when considering individual attitudes toward aloneness, as it will be shown below.

Clark Moustakas: existential theory of loneliness

C. Moustakas (<u>1961</u>) went further still, stating that loneliness is one of the human conditions, a human experience that helps a person to maintain, develop and deepen their humanness (p. IX). His contribution was so important that the *Journal of Psychology* published a special, slightly belated, issue in 2012 to commemorate 50 years of the appearance of this small but very weighty book (Moustakas, <u>1961</u>) that retains its significance today. Ironically, most papers in that special issue on loneliness had nothing to do with Moustakas' existential views. His views presented a comprehensive theory that seems to cover the important issues relevant to the existential view on loneliness.

Moustakas drew an important distinction between morbid loneliness anxiety and existential loneliness; the latter makes a person more humane, holistic and sensitive rather than isolating them from the world. "In existential loneliness man is fully aware of himself as an isolated and solitary individual while in loneliness anxiety man is separated from himself as a feeling and knowing person" (ibid., p. 24). Attempts to escape loneliness and its experiencing only produce self-alienation.

In his later book (Moustakas, <u>1972</u>), without substantially modifying his views Moustakas drew more precise distinctions and definitions. The first is the distinction of being physically alone ("simply the objective reality of being without others, without company") vs. the feeling of being alone "even in a crowd, among a group of friends, or even in a relationship with one other person") (ibid., p. 17–18). Being alone, in either sense, is not the same as the feeling of being lonely; loneliness is one of a number of ways of being alone (ibid., p.19). "To say 'I feel lonely' adds a quality to being alone, a unique, isolated state that is unlike any other way of being alone. To be lonely means to experience the agony of living, of being, of dying as an isolated individual or to know the beauty and joy and wonder of being alive in solitude. Being alone is usually a 'between state', a bridge to the past or the future, while being lonely is always an immediate, here-now engagement with life at the extremes. To be alone means to be alone with one's self – but to be lonely means to be beside and beyond oneself, to live intensely in the moment by creating a new self" (ibid., p. 20).

Then, Moustakas reproduced his earlier distinction of existential loneliness and loneliness anxiety, specifying that the latter was "not true loneliness but a defense that attempts to eliminate it by constantly seeking activity with others or by continually keeping busy to avoid facing the crucial questions of life and death" (ibid.). Existential loneliness, in turn, was now subdivided into the loneliness of solitude – a peaceful, harmonic state of facing the ultimate mystery of life – and the loneliness of a broken life – a life-changing, painful crisis. The experience of existential loneliness involves a confrontation or an encounter with oneself. "By 'confrontation' I mean the direct challenge of facing a conflict, the willingness to experience fear, anger, sorrow, pain, intensely and deeply, when these feelings are caused by a sense of urgency, loss, and disillusionment. The confrontation shakes up the individual, puts him in a turbulent state, and forces him to use new energies and resources to come to terms with his life – to find a way to himself' (Moustakas, 1972, p.21). The encounter, on the contrary, "is a joyful experience of selfdiscovery ... It includes a sense of harmony and well-being" (ibid.) It is not easy: it takes courage to face one's existential loneliness, but doing so repays this price. "Solitude is a return to one's own self when the world has grown cold and meaningless, when life has become filled with people and too much of a response to others. Solitude is as much an intrinsic desire in man as his gregariousness. Hermits, solitary thinkers, independent spirits, recluses, although often stigmatized in the modern world, are healthy expressions of man's dialogue with himself" (Moustakas, 1972, p. 40–41).

Dialogue with oneself: the positive mechanisms of the existential solitude

Moustakas' words on dialogue with himself were the key to understanding the association between a positive attitude to loneliness and personality development. This association is based on the phenomenon of auto-communication – communication with oneself based on the polyphony (multi-voicedness) of human consciousness (Bakhtin, <u>1973</u>) which serves as an important resource of development. One of the most elaborated cultural tools of such auto-communication is poetry, so it is little wonder that in classical poetry solitude is highly appreciated (see Spurr, 2013).

Indeed, only a person who has not overcome symbiotic attachments, has not discovered personal identity, has not acquired autonomous causality in relating to the world, and has not learned to detach from oneself and look at oneself from outside, suffers from a lack of relations with other human beings because he or she cannot find an interesting partner in one's own self. "Loneliness is not living alone, loneliness is the inability to keep someone or something within us company; it is not a tree that stands alone in the middle of a plain but the distance between the deep sap and the bark, between the leaves and the roots" (Saramago, <u>1992</u>, p.193).

Auto-communication requires a pause between activity and communication for the processing and integration of "downloaded" impressions and interactions with the world. Such a pause can best be provided in solitude. "In [existential] loneliness, man seeks the fulfilment of his inner nature. He maps new meanings, and perceives new patterns for old ways and habits. Alone, the life of man passes before him. His philosophy, the meanings he attaches to his work and his relations, each significant aspect of his being comes into view as new values are formed, as man resolves to bring human significance, to bring life to each new day, to each piece of work, to each creation" (Moustakas, <u>1961</u>, p. 54). In a later book, Moustakas stressed the role of meditative silence in a dialogue with oneself: "I create an atmosphere for my own growth when I meditate in silence in a special place that welcomes me; a room that invites me and feels my presence and rejoices in it. Thus, I create an atmosphere of solitude that opens awarenesses and encourages me to talk to myself. These dialogues with myself are essential for me to know who I am being, what I am moving toward, what is basic, and what is unfinished" (Moustakas, <u>1977</u>, p.97).

Without such a pause even extreme experiences may fail to produce corresponding personality changes and stay unprocessed, undigested, unintegrated with personality structure. The more a person resides in a dialogue with oneself, the more deeply these experiences are processed. Sensation seeking is not necessary; incessant seeking for new sensations is a symptom of malfunctioning experience processing (Cszikszentmihalyi, <u>1990</u>; Rheinberg, <u>1987</u>). On the contrary, the case of Immanuel Kant reveals that even very limited sensations and impressions may be more than enough for construing a whole world if the self-reflective activity of experience processing is highly developed. This can come true, however, only with some presuppositions: one is not to be frightened or bored by oneself.

Many do not want or cannot listen to their inner voice, feeling boredom or fear with themselves. They are suffering from what Moustakas called the fear of loneliness and try to escape from this fear by giving up their individuality and submerging themselves in dependency relations (Moustakas, <u>1961</u>, p. 30) or, at least, by blocking auto-communication through the use of music, video, TV, not to mention modern gadgets, which makes inner dialogue impossible. "Efforts to overcome or escape the existential experience of loneliness can result only in self-alienation. When a man is removed from a fundamental truth of life, when he successfully evades and denies the terrible loneliness of individual existence, he shuts himself off from one significant avenue of his own self-growth" (Moustakas, <u>1961</u>, p. IX). The increasing demand for communication training may be a symptom of this escape; from the viewpoint of existential psychology, solitude training, teaching people to make use of loneliness as a developmental resource, could potentially be more helpful.

<...>

ВАРИАТИВНАЯ ЧАСТЬ

Трек 250.1. «Когнитивные науки и технологии»

Задание 3 (10 баллов).

Prepare an abstract

Oztekin, I., Davachi, L., & McElree, B. (2010). Are representations in working memory distinct from representations in long-term memory? Neural evidence in support of a single store. *Psychological science*, *21*(8), 1123–1133

Задание 4 (10 баллов).

Theoretical interpretation

In Milner's and Nelson's experiments, volunteers - healthy controls and patients with brain lesions - had to perform a very simple task: to sort the response cards matching it to the set of four stimulus cards. Volunteers were presented with response cards which shared some attributes: color, number or shape of the symbols. Each round volunteers were asked to match one response card to one out of four stimulus cards based on only one of these attributes. It followed with the researcher's feedback: "right", if the volunteer guessed correctly, "wrong", if the classification was performed based on the invalid attribute. After 10 correct trials the researcher changed the classification rule without warning, and the volunteer had to guess the new rule based on the researcher's feedback only. The researcher measured how many trials it took for the volunteers to identify the classification rule, i.e. to correctly identify the present classification attribute (color, shape or number), how many categories (color, shape or number) the participant identified and what type of errors were made. Results showed that patients with frontal lobe lesions made more errors, and, in particular, "perseverative" errors - persisted with the answers from the previous category after the switch to the new one despite the information their answers were incorrect. Please provide a theoretical interpretation for these findings.

Задание 5 (10 баллов).

Create an experimental design

Misinformation effect is a phenomenon in which memories about an original event are distorted because of the presentation of new information. People of all ages can have false memories but it increases with advancing age. False memories can be attributed to both: failures during the encoding, that is when we are exposed to the original information; failures during the retrieval, when we try to access it. Among other brain structures, the medial temporal lobes has been associated with new memory formation, whereas the right prefrontal cortex was related with attempts to recall information. The functioning of these two brain structures decline with age. Your task is to investigate the age differences on false memories creation in the brain with the use of a neuro-scientific tool. To do it, please describe an experimental design suitable to the neuro-scientific chosen tool, the stimuli and expected results.

Задание 6 (20 баллов).

Statistics

Consider the following hypothetical scenario of a field of science. The field is about some cognitive problems and people are trying to find treatments for the problems. The field is fully empirical and many experiments are conducted to test potential treatments in the field. However, 80% of the experiments are actually about invalid treatments that do not affect the cognitive problems at all. The other 20% of the experiments are about valid treatments that can cure cognitive problems. People in the field do not know which treatments are valid (or invalid).

For simplicity, let's assume that the significance level of statistical tests used in the experiments is always 5% and that the power of the experiments testing the valid treatments is always 40%.

(1) Compute how much percentage of the experiments report statistically significant results in the field.

(2) Compute how much percentage of these significant results are actually Type-1 error (namely, their tested treatments are actually invalid but their statistical tests suggest the treatments affect the cognitive problems) in the field.

(3) Consider that a replication experiment is conducted for each of the experiments reporting the significant results. Assume that the power of the replication experiments testing the valid treatments is also 40%. Compute how much percentage of the replication experiments report statistically significant results.

Трек 250.2. «Консультативная психология. Персонология»

Задание 7 (20 баллов).

Прочитайте высказывание С.Л. Рубинштейна из книги «Человек и мир» и предложите его разные интерпретации, найдите и сформулируйте как можно больше психологических идей:

«Своими действиями я непрерывно взрываю, изменяю ситуацию, в которой я нахожусь, а вместе с тем непрерывно выхожу за пределы самого себя».

Задание 8 (30 баллов).

Екатерина, 28 лет, замужем, есть ребёнок. Обратилась за консультациями в связи с «неудовлетворённостью жизнью». Несмотря на внешние достижения (занимает управляющую позицию; успевает совмещать работу и заботу о семье; есть крепкие дружеские отношения; получила хорошее образование и т.п.) чувствует, что она «недостаточно хороша». Сравнивает себя с другими, «более успешными» людьми, критикует себя и окружающих за недостаточную активность, работоспособность.

Опишите ваши соображения о природе состояния Екатерины и возможный подход к ее психологическому сопровождению с позиции одного из трех подходов: 1) транзактноаналитического, 2) экзистенциально-аналитического; 3) человекоцентрированного.

Трек 250.3. «Позитивная психология»

Задание 9 (30 баллов).

<u>Скачайте и прочитайте приведенную статью.</u> Выполните следующие задания <u>на русском</u> <u>языке</u>.

1) Напишите аннотацию приведенной статьи объемом не более 300 слов.

2) Предложите свой дизайн исследования на тему статьи. Сформулируйте исследовательский вопрос (гипотезы) исследования. Опишите выборку и методы исследования. Опишите предполагаемые результаты и ограничения исследования.

Задание 10 (20 баллов).

Выполните данное задание <u>на русском языке</u>. Прочитайте кейс. Опишите, какие исследовательские (эмпирические) методы и теоретические подходы психологии личности и позитивной психологии вы могли бы применить в данном случае? Предложите свои рекомендации для директора компании и специалистов.

Кейс

B научную лабораторию обратился директор некоммерческой организации, сопровождающей лиц с ограниченными возможностями здоровья в их психологической реабилитации после травматических событий (утрата зрения, слуха, двигательных возможностей). В качестве главной задачи программы реабилитации значится поддержание высокого качества жизни сопровождаемых в долгосрочной перспективе. По мнению директора, программа сопровождения охватывает достаточно объективных аспектов, связанных с навыками самообслуживания, ориентацией, когнитивными способностями, но недостаточно учитывает субъективные, психологические особенности сопровождаемых. По мнению директора и специалистов организации, от психологических факторов зависит общая эффективность реабилитации. Индивидуальная психологическая помощь оказывается сопровождаемым по запросу и не включает психологическую диагностику. Руководитель организации и специалисты хотят получить объективную информацию от экспертов-исследователей в целях совершенствования программы и учета возможных индивидуальных траекторий реабилитации.

Трек 250.4. «Прикладная социальная психология»

Задание 11 (30 баллов).

Download, read the article (John W. Berry, <u>Acculturation: Living successfully in two</u> <u>cultures</u>) and answer questions below. Answers should be given in English.

Questions to answer:

1. According to the article, what is the difference between acculturation and assimilation?

2. Please think of the ways to cope with acculturation stress, considering Berry's approach to this concept.

3. Please, think of pros and cons of integration, assimilation and separation strategies. When we speak about migrants from Central Asia in Russia, which acculturation strategy in your opinion will be more beneficial for their psychological adaptation and why?

4. Please describe the possible outcomes of multiculturalism policy in the terms of the acculturation strategy framework. Please provide some examples based on discussions in media, scientific literature and your own experience.

5. Can you think of a study involving one of the concepts described in the article? Try to come up with your own goal of the study, a research question that could be checked empirically and formulate a hypothesis with the variables that you would study. Please, describe your potential sample and research methods. Don't forget to provide expected study results.

Задание 12 (20 баллов).

Case study.

As a psychologist, please, comment on this case.

- 1. Describe and explain what are the main problems and challenges the Russian delegation has faced.
- 2. Explain why a misunderstanding occurred and what is the reason for the low effectiveness of negotiations?
- 3. Create a set of possible solutions which can help the Russian team to cope with the problem in the most effective way.
- 4. What preliminary preparation or instructions (before going to South Korea) could have helped the Russian team to avoid the difficulties described in the case? Which psychological theories and concepts do these instructions or preparation programs should rely on?

Please, use social psychological theories in your response. Try to be concise and avoid journalism and stereotypes in your analysis. Note that your response should be given in English.

The Russian company sends a delegation to South Korea to negotiate with potential equipment suppliers. They are going to visit three factories and meet with factories' Directors to negotiate potential contract details. In the opinion of the Russian General Director, the most useful in the delegation will be the Chief engineer, the Head of the Sales and the Deputy General Director. From the Korean side, representatives of all 3 factories agree to accept the Russian team and provide their own translator.

Upon arrival, the Russians realise that there are much more people who participate in negotiations from the Korean side. Korean factory Director seems puzzled at the initial meeting. Russians also feel uncomfortable by the fact that during a tour at the factory and dinner at a restaurant, the director of the factory always takes his driver with him. During negotiations, it seems to the Russians that the translator is not doing his job, because they cannot get comprehensive answers to their questions. At the same time they receive a lot of very detailed questions about their business processes. The Russian delegation constantly feels some tension from the Korean side. As a result, mistrust is formed, which doesn't allow establishing partnerships.