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ПРОГРАММА И МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ ПО ПРОВЕДЕНИЮ ВСТУПИТЕЛЬНОГО ИСПЫТАНИЯ ПО ИНОСТРАННОМУ ЯЗЫКУ НА ОБУЧЕНИЕ ПО ПРОГРАММАМ ВЫСШЕГО ОБРАЗОВАНИЯ - ПРОГРАММАМ ПОДГОТОВКИ НАУЧНЫХ И НАУЧНО-ПЕДАГОГИЧЕСКИХ КАДРОВ В АСПИРАНТУРЕ

Научные специальности

- 5.3.1. Общая психология, психология личности, история психологии
- 5.3.5. Социальная психология, политическая и экономическая психология
- 5.3.6. Клиническая психология
- 5.3.7. Возрастная психология

Форма обучения
очная

Рассмотрено на заседании кафедры
Гуманитарных и естественнонаучных дисциплин
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Цель вступительного испытания – определить уровень развития у поступающих иноязычной коммуникативной компетенции. Под иноязычной коммуникативной компетенцией понимается умение соотносить языковые средства с конкретными сферами, ситуациями, условиями и задачами общения, рассматривать языковой материал как средство реализации речевого общения.

1. Требования к поступающим

На вступительном экзамене поступающий должен продемонстрировать умение пользоваться иностранным языком как средством межкультурного общения в научной и профессиональной сферах. Поступающий должен владеть орфографическими, лексическими и грамматическими нормами иностранного (английского) языка и правильно использовать их во всех видах речевой деятельности, представленных в сфере профессионального и научного общения.

Учитывая перспективы практической и научной деятельности аспирантов, требования к знаниям и умениям на вступительном испытании осуществляются в соответствии с уровнем сформированности следующих навыков и умений:

Говорение и аудирование: на экзамене поступающий должен показать владение неподготовленной диалогической речью в ситуации официального общения в пределах вузовской программной тематики. Оценивается умение адекватно воспринимать речь и давать логически обоснованные развернутые и краткие ответы на вопросы экзаменатора, в том числе на вопросы по содержанию прочитанного текста по специальности (см. далее).

Чтение: контролируются навыки изучающего чтения. Поступающий должен продемонстрировать умение читать оригинальную литературу по специальности, максимально полно и точно переводить её на русский язык, пользуясь словарём и опираясь на профессиональные знания и навыки языковой и контекстуальной догадки. Письменный перевод должен соответствовать нормам русского языка.

Грамматика:

Порядок слов простого предложения. Сложное предложение: сложносочиненное и сложноподчиненное предложения. Союзы и относительные местоимения. Эллиптические предложения. Бессоюзные придаточные. Употребление личных форм глагола в активном залоге. Согласование времен. Функции инфинитива; инфинитив в функции подлежащего, определения, обстоятельства; оборот дополнение с инфинитивом (объектный падеж с инфинитивом); оборот подлежащее с инфинитивом (именительный падеж с инфинитивом); инфинитив в функции вводного члена; инфинитив в составном именном сказуемом (be+инф.) и в составном модальном сказуемом; оборот for + сущ. + инфинитив. Функции причастия: причастие в функции определения и определительные причастные обороты; независимый причастный оборот (абсолютная причастная конструкция). Функции герундия: герундий в функции подлежащего, дополнения, определения, обстоятельства; герундиальные обороты. Сослагательное наклонение. Модальные глаголы с простым и перфектным инфинитивом: функции глаголов should, would. Условные предложения. Атрибутивные комплексы (цепочки существительных). Эмфатические (в том числе инверсионные) конструкции: предложения с усилительным прилагательным do; инверсия на первое место отрицательного наречия, наречия неопределенного времени или слова only с инклюзией ритмического (непереводимого) do; оборот it is ... that; инверсия с вводящим there.

2. Содержание вступительного испытания

1. Краткая беседа с преподавателем на следующие темы:

- научные интересы,
- полученное образование,
- вуз, в котором было получено высшее образование,
- тема выпускной квалификационной работы,
- специфика профессиональной деятельности,
- выступления на научных конференции,
- мотивы поступления в аспирантуру,
- выбранное направление научных исследований.

На подготовку к ответу отводится примерно 10-15 мин.

2. Чтение и письменный перевод оригинального текста по направлению подготовки (научной специальности) со словарём. Беседа по содержанию прочитанного. Объём текста - 2000 печатных знаков, время выполнения - 60 минут. Форма проверки: проверка подготовленного перевода (если за указанный отрезок времени 75% от задания не выполнено, то экзаменуемый не допускается к дальнейшей сдаче экзамена); ответ на вопросы преподавателя по содержанию прочитанного. См. Приложение.

3. Критерии оценки знаний по иностранному языку

Оценка ответов поступающих на программы подготовки научных и научно-педагогических кадров в аспирантуре по дисциплине «Иностранный язык» проводится по пятибалльной шкале и выставляется согласно критериям, приведённым в таблице.

Оценка	Критерии
«Отлично»	1. Коммуникативная задача выполнена полностью. Осуществляется активное взаимодействие с собеседником. Словарный запас полностью адекватен поставленной задаче, характеризуется разнообразием и идиоматичностью, используются разнообразные грамматические средства, допускаются 1-2 негрубые ошибки, не затрудняющие понимание и не искажающие смысл. 2. Письменный перевод выполнен в полном объёме, стилистически грамотно с точным подбором адекватных лексических (терминологических) средств перевода научной литературы.
«Хорошо»	1. Коммуникативная задача выполнена, но не в полном объёме. Беседа, в целом, логична и последовательна. Не всегда отмечается активное взаимодействие с собеседником, возникают некоторые затруднения при понимании друг друга. Словарный запас, в целом, соответствует поставленной задаче, но недостаточно разнообразен, имеются 3-4 негрубые грамматические ошибки, не затрудняющие понимания и не искажающие смысл. 2. Письменный перевод выполнен в полном объёме, но с

	небольшими стилистическими лексико-грамматическими неточностями.
«Удовлетворительно»	1. Коммуникативная задача выполнена частично. Отмечаются нарушения в логике ведения беседы, не отмечается активное взаимодействие с собеседником. Словарный запас не всегда соответствует поставленной задаче, грамматические средства однотипны, имеются грамматические ошибки, затрудняющие понимание высказывания. 2. Письменный перевод выполнен не в полном объеме и с стилистическими и лексико-грамматическими неточностями, нарушающими адекватное восприятие текста.
«Неудовлетворительно»	1. Коммуникативная задача не выполнена. Не может взаимодействовать с собеседником. Словарный запас не достаточен для выполнения поставленной задачи, речь почти не воспринимается на слух из-за большого количества ошибок. 2. Письменный перевод выполнен не в полном объеме и с большими стилистическими и лексико-грамматическими неточностями, ведущими к искажению понимания содержания иноязычного текста.

4. Литература для подготовки к вступительному испытанию

1. Английский язык (Магистратура) : учебное пособие / В. П. Фролова, Л. В. Кожанова, Е. А. Молодых, С. В. Павлова. — 2-е изд. — Воронеж : Воронежский государственный университет инженерных технологий, 2021. — 188 с. — ISBN 978-5-00032-540-7. — Текст : электронный // Цифровой образовательный ресурс IPR SMART : [сайт]. — URL: <https://www.iprbookshop.ru/119654.html> (дата обращения: 14.04.2022). — Режим доступа: для авторизир. пользователей
2. Дроздова, Т. Ю. English Grammar. Reference and Practice : учебное пособие / Т. Ю. Дроздова, А. И. Берестова, В. Г. Маилова. — 11-е изд. — Санкт-Петербург : Антология, 2021. — 464 с. — ISBN 978-5-9909598-9-7. — Текст : электронный // Цифровой образовательный ресурс IPR SMART : [сайт]. — URL: <https://www.iprbookshop.ru/104032.html> (дата обращения: 14.04.2022). — Режим доступа: для авторизир. Пользователей
3. Дроздова, Т. Ю. English Grammar. Reference and Practice. Version 2.0 / Т. Ю. Дроздова, В. Г. Маилова, А. И. Берестова. — Санкт-Петербург : Антология, 2021. — 424 с. — ISBN 978-5-9907622-6-8. — Текст : электронный // Цифровой образовательный ресурс IPR SMART : [сайт]. — URL: <https://www.iprbookshop.ru/104033.html> (дата обращения: 14.04.2022). — Режим доступа: для авторизир. пользователей
4. Утевская, Н. Л. English Grammar Book. Version 2.0 = Грамматика английского языка. Версия 2.0 : учебное пособие / Н. Л. Утевская. — Санкт-Петербург : Антология, 2021. — 480 с. — ISBN 978-5-9500282-7-4. — Текст : электронный // Цифровой образовательный ресурс IPR SMART : [сайт]. — URL: <https://www.iprbookshop.ru/104029.html> (дата обращения: 14.04.2022). — Режим доступа: для авторизир. Пользователей
5. Psychology 2e: учебное пособие / Rose M. Spielman, et al. – OpenStax, Rice University, 2021. – Текст: электронный: [сайт]. – URL: https://assets.openstax.org/oscms-prodcms/media/documents/Psychology2e-WEB_0eRvAre.pdf (дата обращения: 14.04.2022).

- 14.04.2022). — Режим доступа: открытый.
6. Gililand T., Dooley J. Career Paths Psychology Student's Book. – Express Publishing, 2017.
 7. Short J. English for Psychology in Higher Education Studies. Course Book. - Garnet Education, 2012.

Интернет-ресурсы

1. <http://psychology.about.com/> - Complete Guide to Psychology for Students, Educators and Enthusiasts
2. http://www.sciencedaily.com/news/mind_brain/psychology/ - Science Daily – Psychology News
3. <http://www.psychology.org/> - Encyclopedia of Psychology – Psychology Websites
4. <http://www.oup.com/elt/englishfile/pre-intermediate> – New English File Pre-Intermediate
5. <https://www.verywellmind.com/psychology-4157187> - VeryWell Mind: Explore the various types of psychology, their history, and the major theorists behind them and apply this knowledge to your own mental and emotional well-being.

ПРИЛОЖЕНИЕ

Тексты для перевода со словарем

Текст № 1

All the Rage: Survey extends reach of explosive-anger disorder

By Bruce Bower

A mental disorder that encompasses a wide range of recurring, hostile outbursts, including domestic violence and road rage, characterizes considerably more people than previous data had indicated, a national survey finds.

At some point in their lives, between 5.4 percent and 7.3 percent of U.S. adults qualify for a diagnosis of intermittent explosive disorder, concludes a team led by sociologist Ronald C. Kessler of Harvard Medical School in Boston. Those percentages, which depend on whether the syndrome is narrowly or broadly defined, correspond to between 11.5 million and 16 million people, respectively.

In any given year, intermittent explosive disorder affects between 2.7 percent and 3.9 percent of adults, or from 5.9 million to 8.5 million people, Kessler and his coworkers report. "We never thought we'd find such high prevalence rates for this condition," Kessler says.

In contrast, a 2004 study of 253 Baltimore residents estimated a lifetime prevalence of 4 percent for intermittent explosive disorder.

Intermittent explosive disorder features tirades, grossly disproportionate to the triggering circumstances, during which a person destroys property, tries to hurt or actually hurts someone, or threatens to do so. The expression of rage elicits a sense of relief, followed by remorse for the incident. The syndrome doesn't include outbursts that stem from other mental disorders or from alcohol or drug effects.

For lifetime-prevalence figures in the new survey, broadly defined intermittent explosive disorder consisted of at least three such episodes during a person's life. The narrowly defined version required three anger attacks in the same year.

For 1-year prevalence rates, the broad definition called for three or more anger attacks, at least one of which had occurred in the past year. The narrow definition required three attacks in the

past year.

The findings, published in the June Archives of General Psychiatry, indicate that intermittent explosive disorder typically begins during adolescence and lasts for at least a decade, with an average of 43 episodes per person. A majority of those incidents targeted spouses or children, with potentially harmful effects on their emotional health (SN: 5/27/06, p. 323: Available to subscribers at <http://www.sciencenews.org/articles/20060527/fob1.asp>). During young adulthood or middle age, most people with intermittent explosive disorder developed other mental disorders, usually depression, anxiety, or substance abuse.

Kessler's team analyzed data from in-person interviews with a nationally representative sample of 9,282 adults, age 18 and older.

Researchers now need to examine whether youngsters with intermittent explosive disorder who are treated with cognitive therapy, relaxation training, or psychiatric medications avoid later depression or other mental disorders, Kessler says.

The new survey offers a preliminary, possibly excessive estimate of intermittent explosive disorder's reach, remarks psychiatrist Darrel A. Regier, director of the American Psychiatric Association's office of research in Arlington, Va. Since clinicians didn't validate the diagnoses with detailed assessments, prevalence rates may have included people whose angry reactions fell within a normal range of responses to stressful situations, Regier notes.

"I take these prevalence estimates with a big grain of salt," he says.

It's unclear whether anger attacks by children and teens represent initial symptoms of broader problems, such as attention-deficit hyperactivity disorder or mood disorders, adds psychiatrist William E. Narrow of the American Psychiatric Association.

ТЕКСТ № 2

Autism's DNA Trail: Gene variant tied to developmental disorder

By Bruce Bower

Scientists have taken a promising step forward in untangling the genetic roots of autism. Inheritance of a common variant of a gene that influences immunity, gastrointestinal repair, and brain growth substantially raises the chances of developing autism, at least in families with more than one child diagnosed with the severe brain disorder, a study finds.

Children with autism show severe social difficulties, language problems, and repetitive behaviors. The gene, called *MET*, regulates production of a protein that influences cell proliferation in various parts of the body.

"This is a moderate-to-high-risk autism-vulnerability gene," reports developmental neurobiologist Pat Levitt of Vanderbilt University in Nashville.

Certain variants of the gene, which contain minor alterations in their genetic code, cause several cancers.

Levitt's group had explored how *MET* contributes to brain development. After learning that the gene lies on a stretch of chromosome 7 that other investigators had linked to autism, the group began its new study.

Consulting a large database, the researchers obtained genetic information from members of 204 families in which one or more children had autism. These children ranged from below average to average in intelligence.

The researchers then identified variants of *MET*. Study participants who carried two copies of a specific *MET* variant displayed autism substantially more often than the others did. Levitt's group later found the same association for children with autism in 539 additional families.

Further analyses indicated that the link between the *MET* variant and autism appeared primarily in families with two or more affected children, the researchers [report online this week](#) for an upcoming *Proceedings of the National Academy of Sciences*.

Laboratory tests showed that this *MET* form lowers the gene's activity and reduces its production of proteins that bind to various tissues.

If confirmed by other groups, these results would explain controversial reports that people with autism often have immune and gastrointestinal problems, according to Levitt.

Roughly 47 percent of the population carries at least one copy of the autism-associated *MET* variant. The researchers have yet to learn how it operates in the minority of that group that develops autism, which affects about 1 in 500 individuals, Levitt notes. In some people, beginning before birth, *MET* might respond to unknown environmental influences or interact with other genes to derail brain formation, Levitt theorizes.

Other researchers had reported preliminary associations between DNA regions and autism. "This is the first time someone has identified a candidate gene for autism, replicated their finding, and demonstrated that gene's biological function," remarks geneticist Daniel H. Geschwind of the University of California, Los Angeles. *MET* may contribute to autism in diverse ways, he proposes.

However, *MET* could be just the tip of the genetic iceberg. "Autism will turn out to be many different disorders influenced by hundreds of genes," Geschwind predicts.

An effort is now under way, led by geneticist Anthony P. Monaco of the University of Oxford in England, to gather DNA from as many as 2,000 families with autistic children. When that database is completed in about a year, researchers will use it to confirm whether numerous candidate genes, including the *MET* variant, contribute to autism, Monaco says.

Текст № 3

The COVID-19 pandemic made U.S. college students' mental health even worse Almost half of the students surveyed experienced high levels of emotional distress and worry By Sujata Gupta

JANUARY 22, 2021 AT 6:00 AM <https://www.sciencenews.org>

The ongoing coronavirus pandemic has caused the mental health of U.S. college students to plummet, a new study shows.

Students most at risk of mental health challenges stemming from the pandemic include women, Asians, students under age 25, those in poor health, those who knew somebody with COVID-19 and lower-income students, researchers report January 7 in *PLOS ONE*.

Even before the emergence of the novel coronavirus, U.S. college students struggled with depression, anxiety and other mental health disorders at higher rates than the general population. Many college students are grappling with a new social environment, struggling to figure out their careers and worrying about finances, says Matthew Browning, an environmental psychologist at Clemson University in South Carolina.

To assess how the pandemic is impacting student mental health, Browning and colleagues surveyed more than 2,500 students from seven public universities across the United States last spring when the pandemic was ramping up. Study participants ranked statements about their emotional state, preoccupation with COVID-19, stress and time use. Based on total scores, researchers classified the students as having experienced high, moderate or low levels of emotional distress and worry. The researchers note that they did not use standardized screening tools for disorders such as anxiety and depression, but instead zoomed in on mental health stressors arising directly from the pandemic (*SN*: 3/29/20).

About 85 percent of the students surveyed experienced high to moderate levels of distress, Browning's team found — about 45 percent were highly impacted and about 40 percent were moderately impacted. Those who reported low levels of distress were more likely to be white and spend two or more hours outdoors.

Certain factors put some students at greater risk of feeling highly distressed. Women were twice as likely to fall into that group, versus the moderate or low groups, while Asians were 30 percent more likely. Spending eight or more hours in front of computer, smartphone or television screens also

increased risk.

Colleges and universities must meet students' basic safety and psychological needs before true learning can occur, Browning says. "We need to address students' mental well-being before we think about the best way to deliver online classes during COVID."

Текст № 4

Brain study shows the waiting is the hardest part

Anyone who has ever waited in dread to have a root canal may find some comfort in the findings of a new brain-imaging study.

For some people, researchers say, the waiting is indeed the hardest part, and finding a distraction might help.

Their study, published in the journal *Science*, used a brain-imaging technique called functional MRI to investigate the neural mechanisms underlying dread—specifically the agony of waiting to have a painful procedure. It found that among 32 volunteers who agreed to have a series of shocks to the foot, some of them dreaded each shock so much that they repeatedly opted to have a higher-voltage jolt just so they could get it over with more quickly.

These individuals, dubbed "extreme dreaders," showed greater activity in a brain region related to both pain and attention. The findings, say the researchers, indicate that dread arises not from simple fear, but from the brain's attention to the unpleasant event.

"The dread is often worse than the event itself," said lead study author Dr. Gregory S. Berns, a professor of psychiatry and behavioral sciences at Emory University School of Medicine in Atlanta.

The brain-imaging results are "good news," he told Reuters Health, because they indicate that extreme dreaders can do something to alleviate the problem: find a distraction - such as meditation, exercise or some other activity—to take the focus off the anticipated event.

For the study, Berns and his colleagues took brain images of volunteers who agreed to endure Electrical shocks to their feet. First, each jolt was preceded by a cue that told participants how intense it would be—60 percent of their maximum pain tolerance, for instance—and how long they would have to wait for it. In a second go-around, participants were presented with choices on how each shock should be delivered, with the voltage and timing of the jolt as the variables. For example, they could choose between having a shock at 90 percent of their maximum pain tolerance delivered in the next 3 seconds, or one at 60 percent intensity in 27 seconds.

Of the 32 volunteers, nine—the extreme dreaders—consistently opted for the stronger shock in order to avoid the longer wait.

This may seem illogical to many people, Berns said, but for extreme dreaders avoiding the anguished wait makes sense.

And it was the extreme dreaders who showed particularly high activity in the brain's so-called pain matrix during the build-up to their Electrical shocks—specifically, in areas related to attention, but not those associated with fear and anxiety. In other words, extreme dreaders were giving more attention to their foot than "mild dreaders" were.

So finding a distraction may be the best way for extreme dreaders to deal with the wait for a medical procedure, Berns said. This, he noted, is something many people have "subjectively" known, but the new findings reveal the brain basis for it.

Cell phones excite the brain but is that good or bad?

Are You More Attractive When You're Nervous?

Research reveals how anxiety impacts interpersonal attraction.

BY Wendy L. Patrick, J.D., Ph.D.; Reviewed by Devon Frye

<https://www.psychologytoday.com>

If you've ever become nervous during a conversation with someone you like, you're not alone. Thankfully, according to research, you might actually be more attractive when you are anxious, rather than arrogant—self-conscious, rather than self-confident. For the majority of people, perhaps, this is good news.

First Impression Butterflies

Many people suffer from first impression jitters when interacting with attractive relational options. They feel butterflies in their stomach and flushing in their face, among other semi-automatic responses in the moment. Yet as luck would have it, such inadvertent expressions of interest may actually make them appear more interesting—and attractive. Susan M. Hughes et al. (2020) studied nervous behaviors displayed in response to interpersonal attraction and found that people use nervous reactions to assess whether someone is attracted to them. [i] They identified a number of potentially adaptive reasons why it is common to exhibit nervousness during an initial encounter with a potential paramour, and the ways in which such behaviors can be endearing. We don't usually think of anxiety as appealing. But in the world of interpersonal attraction, think again.

As many of us know, as much as we try to hold it together, when we are nervous, our voices tend to give us away. But that is not necessarily a bad thing. Hughes et al. note that attraction or romantic interest can be discerned through vocal tones, since many people may find it hard to mask anxiety in the throes of attraction. They found that women reported raising their vocal pitch, which may make them sound more attractive, illustrating how speech patterns under the stress of initial interaction can enhance first impressions and attraction.

Regarding content, Hughes et al. note that although someone who is nervous may use more flustered communication, when a person becomes anxious when first speaking to someone they find attractive, their semantic communication may in fact become more effective.

In addition, or perhaps in part because of alluring vocal tone and content, Hughes et al. note that anxious individuals appear nicer, more engaging, more interesting, and more conversational, all of which increase desirability. Accordingly, someone who displays nervous reactions during initial attraction could signal to a possible mate that he or she possesses other desirable personality traits conducive to long-term relationships and parenting potential.

In fact, while appearance undoubtedly matters to some extent, Hughes et al. note that nonverbal expressiveness can compensate for a lack of physical attractiveness by enhancing initial impressions, making people appear more attractive. And regarding other senses, they note that nervous sweating releases pheromones during an initial encounter with an attractive potential mate, which can serve as a chemical signal of attraction.

Recognizing Reciprocity

So nerves may cause people to look, sound, and smell more appealing. But when it comes to perceiving reciprocity, nervousness has some downsides. Hughes et al. found that the more nervous a person was in the company of someone they found highly attractive, the less they were able to discern attraction from the other person. They attribute this to cognitive interference experienced during anxiety and attraction, and note that one's own feelings of attraction may create nervousness, and complicate the ability to perceive attraction from another.

The good news is that nervousness does not necessarily decrease attractiveness—if anything, it may even increase it. Even if you are too flustered to fathom how someone else feels, your nerves will not automatically diminish someone's attraction towards you.

Gay Males' Sibling Link: Men's homosexuality tied to having older brothers

Birth order may steer some men toward homosexuality in a process that perhaps begins before birth. A new study finds that homosexuality grows more likely with the greater number of biological older brothers—those sharing both father and mother—that a male has.

Men display this tendency toward homosexuality even if they weren't raised with biological older brothers, finds psychologist Anthony F. Bogaert of Brock University in St. Catharines, Ontario. No gay connection appears in men raised with half-brothers, stepbrothers, or adoptive brothers, all deemed non-biological by Bogaert.

"The mechanism underlying this fraternal birth-order effect remains unknown," Bogaert says. It's possible that succeeding pregnancies with male fetuses trigger a maternal immune response. A mother's immune system may treat male fetuses as foreign bodies, attacking them with antibodies that alter sex-related brain development, the Canadian psychologist suggests.

Scientists haven't yet looked for any specific immune reaction during pregnancy that targets later-born boys who become homosexual.

Bogaert's analysis of men's family histories appears in the July 11 *Proceedings of the National Academy of Sciences*. It confirms an analysis of sexual orientation in 604 men reported in 1996 by Bogaert and a colleague. That report didn't include men raised with non-biological older brothers, leaving open the possibility that some psychological reaction to older brothers fostered homosexuality.

The new investigation consists of 944 Canadian men for whom Bogaert verified background information, including sexual orientation and age, number of biological and non-biological siblings, whether siblings occupied the same house as children, and the biological mother's age at the participant's birth.

Critically, 521 of the men had grown up with one or more non-biological siblings.

The number of biological older brothers correlated with the likelihood of a man being homosexual, regardless of the amount of time spent with those siblings during childhood, Bogaert says. No other sibling characteristic, such as number of older sisters, displayed a link to male sexual orientation.

By accounting for potential psychological effects of having older brothers, Bogaert's data "strengthen the notion that the common denominator between biological brothers, the mother, provides a prenatal environment that fosters homosexuality in her younger sons," say neuroscientist S. Marc Breedlove of Michigan State University in East Lansing and his coworkers in a comment to be published with the new report.

The release of maternal antibodies that boost a boy's probability of becoming gay is a provocative but untested hypothesis, Breedlove and his coworkers note. It makes sense, though, in light of previous failures to find any older-sibling influences on female homosexuality, they say.

Breedlove's group suspects that some boys are "born to become gay" as a result of genetic and prenatal factors. However, psychologist Daryl J. Bem of Cornell University argues that the new findings don't necessarily support that view.

Bem has proposed that genes and biology orchestrate temperaments that gear kids toward sex-typical or sex-atypical activities. Boys who don't like rough-and-tumble play perceive males as different from themselves, a feeling that may turn erotic during adolescence, Bem says.

Bogaert's work indicates that for homosexuality to develop, it doesn't matter whether boys feel different from sex-typical older brothers, only that they have older brothers, Bem acknowledges. Still, a maternal immune response could promote homosexuality by lowering a boy's aggression, rather than by stamping a same-sex orientation into the brain, Bem says.

Hidden Smarts: Abstract thought trumps IQ scores in autism

There's more to the intelligence of autistic people than meets the IQ. Unlike most individuals, children and adults diagnosed as autistic often score much higher on a challenging, nonverbal test of abstract reasoning than they do on a standard IQ test, say psychologist Laurent Mottron of Hôpital Rivière-des-Prairies in Montreal and his colleagues.

The same autistic individuals who score near or below the IQ cutoff for "low functioning" or "mental retardation" achieve average or even superior scores on a test that taps a person's ability to infer rules and to think abstractly about geometric patterns, Mottron's team reports in the August *Psychological Science*.

"Intelligence has been underestimated in autistics," Mottron says. Autistic people solve problems and deploy neural resources in unusual ways, which are poorly understood and might contribute to problems with IQ tests, he asserts.

Mottron regards autism as a variant of healthy neural development. For that reason, his group—including study coauthor Michelle Dawson, herself diagnosed as autistic—prefers the term "autistic" to "person with autism."

The researchers studied 38 autistic children, ages 7 to 16; 13 autistic adults, ages 16 to 43; 24 nonautistic children, ages 6 to 16; and 19 nonautistic adults, ages 19 to 32.

Volunteers completed an age-appropriate IQ test and a Raven's Progressive Matrices test. The latter test includes 60 items, each consisting of a series of related geometric designs and a choice of six or eight alternative designs, one of which completes the series.

The nonautistic children and adults scored slightly above the population average on both tests.

In contrast, autistic kids and adults scored far higher on the Raven's test than they did on the IQ tests. These youngsters' average IQ was substantially below the population average, but their average score on the Raven's test was in the normal range.

One-third of autistic children qualified as "low functioning" by IQ, but only 5 percent did so by Raven's scores. Moreover, another third of the autistic children achieved "high intelligence" on the Raven's test.

As in previous research, autistic volunteers performed well on an IQ task that required them to reproduce geometric designs using colored blocks.

The new findings confirm prior indications that autistics score poorly on IQ tests despite processing perceptual information well, comments psychologist Uta Frith of University College London. In a 2000 study, Frith's team noted that autistic and nonautistic children made equally rapid and accurate visual judgments, such as discerning which of two lines was longer.

In people with autism, a lack of social insight derails the ability to acquire skills and information from others, a key to IQ success, Frith theorizes. Autistics thus succeed only on self-explanatory tasks, such as the Raven's test.

The Raven's test may measure autistic intelligence better than an IQ test does, adds psychologist Helen Tager-Flusberg of Boston University. Nonetheless, many autistic children are extremely impaired intellectually, she says.

Researchers generally sell short the unique features of autistic intelligence, Dawson responds. For example, autistics shift flexibly back and forth between focusing on details of a scene or its overall configuration, whereas non-autistics single-mindedly concentrate on the big picture, she says.

Do genetics control who our friends are? It seems so with mice

Date: September 1, 2021 <https://www.sciencedaily.com>

Source: University of Maryland School of Medicine

Have you ever met someone you instantly liked, or at other times, someone who you knew immediately that you did not want to be friends with, although you did not know why? Popular author Malcolm Gladwell examined this phenomenon in his best-selling book, *Blink*. In his book, he noted that an "unconscious" part of the brain enables us to process information spontaneously, when, for example, meeting someone for the first time, interviewing someone for a job, or faced with making a decision quickly under stress.

Now, a new study from the University of Maryland School of Medicine (UMSOM) suggests that there may be a biological basis behind this instantaneous compatibility reaction. A team of researchers showed that variations of an enzyme found in a part of the brain that regulates mood and motivation seems to control which mice want to socially interact with other mice -- with the genetically similar mice preferring each other.

The UMSOM researchers, led by Michy Kelly, PhD, Associate Professor of Anatomy and Neurobiology, say their findings may indicate that similar factors could contribute to the social choices people make. Understanding what factors drive these social preferences may help us to better recognize what goes awry in diseases associated with social withdrawal, such as schizophrenia or autism, so that better therapies can be developed.

The study was published on July 28 in *Molecular Psychiatry*, a Nature publication.

"We imagine that this is only the first among many biomarkers of compatibility in the brain that may control social preferences," said Dr. Kelly. "Imagine the possibilities of truly understanding the factors behind human compatibility. You could better match relationships to reduce heartache and divorce rates, or better match patients and doctors to advance the quality of healthcare, as studies have shown compatibility can improve health outcomes."

A succession of unlikely events and circumstances over the years eventually culminated in this research project, according to Dr. Kelly.

While she was working at a pharmaceutical company, a group of bone researchers asked Dr. Kelly to characterize the behavior of one of their mutant mice that was missing the PDE11 protein. She observed that these mice without PDE11 withdrew socially, so she knew that PDE11 had to be in the brain. <...> In the lab, researchers took wooden beads rubbed all over with pungent, airborne pheromones from one group of mice, and placed them in an enclosure with a second group. A mouse presented with one bead from a familiar friend and another from a new stranger mouse would typically spend more time investigating the bead with the stranger's scent on it. <...>

A student working in the laboratory offhandedly remarked that he noticed children with autism prefer to interact with others that have autism. So, Dr. Kelly decided they should test to see if the PDE11 mutants and normal mice had a preference with whom they interacted. The researchers found that PDE11 mutants preferred being around other PDE11 mutants over the normal mice, while normal mice also preferred their own genetic type. This discovery held true even when researchers tested other laboratory mouse strains. When they tested another genetic variant of PDE11 with a single change in the DNA code, mice with that genetic variation preferred other mice with the same variant over any others.

"So, what is it that the mice are sensing that determines their friend preferences?" said Dr. Kelly. "We eliminated smell and body movements as contributing factors, but we still have some other ideas to test."

Текст № 9

How traumatic events leave a mark on the brain

Researchers in the US have discovered a potential mechanism to explain why people retain stronger memories of events that occur in emotionally charged situations.

The findings, by Hallan Hu and colleagues at the Cold Spring Harbor Laboratory, may have implications in understanding the causes of, and developing better treatments for, post-traumatic stress disorder, in which people suffer vivid flashback memories of traumatic events. But the process also plays a role in normal brain activity - allowing people to distinguish between trivial and significant events and to store the latter in the long term memory.

The study looked at the effects of the stress hormone noradrenaline - known as norepinephrine in the US - in the brains of laboratory mice. Emotional stress is known to have a strong effect on the brain's ability to lay down memories.

When injected into the mouse brain, the chemical caused the phosphorylation of type 1 glutamate receptors (GluR1) in brain cells connecting to the hippocampus and amygdala, two regions of the brain closely associated with emotional memory formation.

The team suggest that these modifications are important in the process of long term potentiation (LTP), which eases the passage of signals across synapses - the gaps between adjacent brain cells. Although the process is still poorly understood, LTP is thought to be central to memory formation.

The study looked at the release of natural noradrenaline in the brains of mice exposed to a stressful situation through being put in a cage containing traces of the urine of foxes - a common predator of mice. The researchers also returned the mice to the cages a few days later: mice genetically modified to have defective GluR1 receptors moved around the 'new' cage much more indicating that they had little memory of their previous spell in that environment.

Roberto Malinow, head of the laboratory's neurobiology group and one of the paper's authors, said the mouse brain was essentially the same as that of humans and the same mechanism was likely to be at work in human memory. The findings are just one piece of a larger puzzle, said Malinow, but they may help to produce a treatment for those suffering from disorders like PTSD.

"We've identified one potential therapeutic target. It may be possible to develop drugs that could prevent too many brain receptors from being added or that might remove them once they are there" - Roberto Malinow.

Jim McGaugh, of the Center for Neurobiology of Learning and Memory at the University of California, Irvine, confirmed that the study complements current understanding of the effects of noradrenaline in humans.

'The findings fit well with the extensive prior evidence that the release of epinephrine (noradrenaline) in the periphery and norepinephrine in the brain play an important role in regulating the strength of memories of emotionally arousing experiences,' McGaugh told *Chemistry World*. 'Their findings that norepinephrine phosphorylates GluR1 and facilitates the delivery of GluR receptors into synapses helps to increase understanding of possible mechanisms underlying the influence of emotion on memory.'

ТЕКСТ № 10

Parents in Western countries report the highest levels of burnout

A survey comparing 42 countries links parental exhaustion to a country's level of individualism

By Sujata Gupta

MARCH 29, 2021 AT 6:00 AM <https://www.sciencenews.org>

The ongoing pandemic has hammered parents. For many, work shifted to home. Schools closed or went partially remote in many places. Grandparents at high risk of getting severely ill with COVID-

19 isolated. That left many parents operating with minimal social support. Now, a new study of 17,409 parents from 42 countries measuring parental burnout shows that this exhaustion was high even in the Before Times — particularly in Western countries. The culprit? A country's level of individualism, or emphasis on independence. Parenting in individualist countries is often an intensely solitary pursuit. Parents living in countries with a culture of collectivism, meanwhile, can rely on extended family and friends, even acquaintances, to share in child rearing. "I had the intuition that individualism would contribute to parental burnout," says psychologist Isabelle Roskam of the University of Louvain in Belgium. But Roskam, whose findings appear in the March 18 *Affective Science*, was surprised to find that no other social factor she measured, such as a parent's workload or time spent with children, was linked to parental burnout. Parental burnout can take an enormous toll on families, Roskam says. Parents may withdraw or lash out and children suffer the consequences.

Surveyed parents answered demographic questions, such as the number and ages of children in the household, hours a day spent with children, number of adult women or men caregivers in the house and working status. They also completed an established 23-question parental burnout assessment, where they described the frequency of feelings, such as: "I feel completely run down by my role as a parent" and "I do not enjoy being with my children." The scale ranged from zero for never to six for daily. Parents were identified as burned-out if their total survey score, computed by simply adding up the responses, was equal to or greater than 92.

Team members evaluated those scores alongside a country's individualism score, computed by the data analytics company Hofstede Insights. Higher individualism scores linked to higher levels of burned-out parents, the team found. <...>

Researchers can now drill down to see what is going on within countries, counters anthropologist and sociologist Charlotte Faircloth of University College London. "It's a nice framework for some more granular work."

Roskam is currently doing that granular work closer to home. Her new data show that parental burnout in Belgium stayed flat from 2019 to after the first pandemic shutdown in 2020. But like most averages, that analysis obscures people's lived experiences: Some parents suffered tremendously in early 2020 while others thrived. What factors, she wonders, protected those parents who fared well? And how are those parents doing now?

Not well, Roskam hypothesizes, speaking from first-hand experience. The mother of five children, preschool to university age, Roskam initially came up with creative solutions to keeping her children engaged. "But now," she says, "I'm completely exhausted."

Текст № 11

The Psychology Of Deja Vu

Date: November 19, 2008 <https://www.sciencedaily.com>

Source: Association for Psychological Science

All of us have experienced being in a new place and feeling certain that we have been there before. This mysterious feeling, commonly known as déjà vu, occurs when we feel that a new situation is familiar, even if there is evidence that the situation could not have occurred previously. For a long time, this eerie sensation has been attributed to everything from paranormal disturbances to neurological disorders.

However, in recent years, as more scientists began studying this phenomenon, a number of theories about déjà vu have emerged, suggesting that it is not merely a glitch in our brain's memory system. A new report by Colorado State University psychologist Anne M. Cleary, published in *Current Directions in Psychological Science*, a journal of the Association for Psychological Science, describes recent findings about déjà vu, including the many similarities that exist between déjà vu and our understanding of human recognition memory.

Recognition memory is the type of memory that allows us to realize that what we are currently experiencing has already been experienced before, such as when we recognize a friend on the street or hear a familiar song on the radio. The brain fluctuates between two different types of recognition memory: recollection and familiarity. Recollection-based recognition occurs when we can pinpoint an instance when a current situation has previously occurred.

For example, seeing a familiar man at a store and realizing that we've seen him before on the bus. On the other hand, familiarity-based recognition occurs when our current situation feels familiar, but we don't remember when it has happened before. For example, we see that familiar man in the store, but we just can't remember where we know him from. Déjà vu is believed to be an example of familiarity-based recognition—during déjà vu, we are convinced that we recognize the situation, but we are not sure why.

Cleary conducted experiments testing familiarity-based recognition in which participants were given a list of celebrity names. Later on, they were shown a collection of celebrity photographs; some photographs corresponded to the names on the list, other photographs did not. The volunteers were told to identify the celebrities in the photographs and indicate how likely it was the celebrity's names were on the list they had seen previously. The findings were surprising. Even when the volunteers were unable to identify a celebrity by photo, they had a sense of which names they had studied earlier and which they had not. That is, they couldn't identify the source of their familiarity with the celebrity, but they knew the celebrity was familiar to them. Cleary repeated the experiment substituting famous places (such as Stonehenge and the Taj Majal) for celebrities and got similar results. These findings indicate that the participants stored a little bit of the memory, but it was hazy, so they were not able to connect it to the new experience. <...>

Results support the idea that events and episodes which we experience are stored in our memory as individual elements or fragments of that event. Déjà vu may occur when specific aspects of a current situation resemble certain aspects of previously occurring situations; if there is a lot of overlap between the elements of the new and old situations, we get a strong feeling of familiarity. "Many parallels between explanations of déjà vu and theories of human recognition memory exist", Cleary concludes, "Theories of familiarity-based recognition and the laboratory methods used to study it may be especially useful for elucidating the processes underlying déjà vu experiences."

Текст № 12

The Mass Marketing of Mental Health

Posted September 13, 2021 | David Scharff M.D. | Reviewed by Kaja Perina
<https://www.psychologytoday.com>

Psychotherapy may soon be available at your pharmacy. Is that a good thing?

Mental health is having a moment. As online counseling, holistic medicine and unlicensed alternatives to therapy proliferate, psychotherapy remains a critical service. However, as the world shifts to accommodate more interest in (and access to) psychotherapy, corporation-driven directives often compromise our ability to provide a consistently valuable service.

The New York Times recently ran an article describing a new project by a popular pharmacy chain to provide mental health services in their drugstores. Admittedly, it's easy to understand the appeal. For starters, popular pharmacy chains have enormous marketing potential; they lead with the message that psychotherapy is too difficult to access — and too expensive — and they can do it cheaper, faster and better.

Tempting though this idea may be, however, the practice of "marketing" rigorous psychotherapy through untested marketing channels is fraught with complication.

The one-stop-shop approach might work well when you need to develop some photos and pick up some Tylenol, but the limits of this service are obvious; the critical, intimate relationship between patient and psychotherapist is not something one can buy at a drugstore.

The implications for sole practitioners or small businesses are particularly discouraging; we have only to cite the example of how large pharmacy companies have cornered the market not only on drugstores, forcing smaller stores out of business, but have contributed to the rising prices of pharmaceuticals in the process.

And finally, there is the issue of motive: Pharmacies often work in tandem with insurance companies, sharing an incentive to limit coverage and reduce reimbursements. This presents the challenge of not being free to conduct therapy well, as long, or as frequently as may be indicated. Many therapists already feel constrained by insurance companies that second-guess their judgment — and, as other industries demonstrate, the benefits of mass production come at significant cost. I contend that conflating psychotherapy with retail therapy will not result in “cheaper, faster, better” treatment, but will instead result in a full-scale reduction in standards of practice and professional compensation—a profit-driven model that considers the needs of the company before the needs of the client.

It’s not just pharmacies angling for industry inroads. Consider the proliferation of apps and online offerings that market their services by promising that you’ll be connected with a licensed therapist 24 hours a day; not only does this present an obvious work/life-balance challenge for mental health professionals, but it conflates the work of the psychotherapist and crisis line operator. We do not — and should not — serve in the same capacity.

Large-scale changes to the messy, nuanced, deeply personal and highly effective practice of psychotherapy must be scrutinized from every angle. The fate of the practice of psychotherapy must be taken seriously. As we witness the next chapter in the corporatization of mental health, we should do all we can to warn against the dangers of shopping for psychotherapists at the same place you shop for bubble gum.