

ELSEVIER FLASH ALERT TO NEW SCIENCE & HEALTH RESEARCH STORIES: VALENTINE SPECIAL

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UNTIL 00:01 GMT ON TUESDAY 14 FEBRUARY 2006

ELSEVIER FLASH ALERT TO NEW SCIENCE & HEALTH RESEARCH STORIES

♥ ♥ ♥ SPECIAL VALENTINE'S DAY ISSUE ♥ ♥ ♥

Welcome to this special, one-off edition of Flash, Elsevier's monthly alert for science, medical and health journalists, created just for Valentine's day and only carrying stories about love, sex and sexuality. As usual, this special Flash contains a selection of new research stories with synopses and a hotlink to the full Elsevier articles below.

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1. LOVERS TWICE AS LIKELY AS SPOUSES TO SAY "I LOVE YOU"

Star-struck lovers are more than twice as likely to say "I love you" to the apple of their eye than married couples. Even parents tell their children that they love them more often than husbands and wives tell each other. These are the findings of a major new study of the use and implications of the world's most emotional phrase. It was conducted by Richard Wilkins and Elisabeth Gareis and is published in the International Journal of Intercultural Relations by Elsevier.

Wilkins and Gareis found that 62 percent of lovers frequently tell their partners that they love them while just 34 percent of spouses do so. Almost half of spouses tell their other halves that they love them only occasionally. The researchers suggest that this discrepancy may be the result of lovers' insecurity at the start of a relationship that means they need to express their love verbally and publicly, while by the time they are married, spouses tend to express their love physically - with a touch or a hug - more than they do verbally.

Women were found to be much more likely to declare love than men. While 37 percent of women say "I love you" frequently and 48 percent occasionally, just 19 percent of men do so frequently and 38 percent occasionally. 31 percent of men use the phrase only rarely.

The researchers also found that 40 percent of parents tell their children that they love them often, although the compliment is only returned half the time. For just 21 percent of children regularly tell their parents they love them.

Wilkins and Gareis found some interesting cross cultural comparisons, too, among immigrant, bilingual participants. While many non-English speaking cultures only rarely use equivalent phrases of love in their own languages, non-native English speakers find it relatively easy to use the words "I love you" with friends, family and loved ones. The researchers believe this may be because the phrase has had its emotional content watered down for this group thanks to constant exposure in film and television.

Click here <<http://dx.doi.org/10.1016/j.ijintrel.2005.07.003>> for abstract and full-text article.

2. WOMEN REALLY DO FIND MEN WITH A "G.S.O.H." SEXY

Language has given humans the unique ability to create and use humor. A recent study has thrown light upon how humor may have developed during human evolution as a sign of fitness, one by which women - but not men - choose their sexual partners. The research was conducted by Eric Bressler and Sigal Balshine and it is reported in the latest edition of Evolution and Human Behavior, published by Elsevier.

Bressler and Balshine showed pictures of two different men rated as equally attractive to groups of women. When pictures of one of the men were displayed, neutral, unfunny statements were read out; when pictures of the other man were shown, half of the time neutral statements were read out, half of the time amusing statements were read out. A group of men were shown pictures and heard statements of two different women, also previously rated as equally attractive. Participants were then asked to say which of the two people they would choose as their preferred romantic partner.

The research found that both men and women believe that funny people are more socially adept than boring people. Interesting, both sexes also believe that

if you are humorous you are also less intelligent and less trustworthy than if you are dull. Men did not choose the funny woman over the boring woman. Women, however, routinely chose the funny man over the boring man as their preferred romantic partner. The research demonstrates conclusively and for the first time in such a controlled experimental setting that women really do find the "Good Sense Of Humour" - so often requested in lonely-hearts ads as a G.S.O.H. - to be sexy.

Previous, observational research - as well five minutes spent in any pub - shows that men use humor competitively when chatting up women. This new paper has found that women do indeed factor how funny a man is into their decision of whether to choose him as a mate. If he amuses her, a woman is even prepared to overlook his shortcomings in the trustworthiness and intellect stakes.

Click here <<http://dx.doi.org/10.1016/j.evolhumbehav.2005.06.002>> for abstract and full-text article.

3. SEXUAL ORIENTATION, NOT GENDER, SHAPES RESPONSE TO FACES
Facial beauty is a marker for mating and reproductive success. The more symmetrical and extreme male or female faces are, the more attractive we find them. The circuitry in the brain responsible for responding to and indicating interest in faces of potential mates is governed by sexual orientation and not gender. For heterosexual men and homosexual women, the brain's reward pathways respond most keenly to faces of women, while for homosexual men and heterosexual women, they respond to faces of men. These are the findings of new research conducted by Felicitas Kranz and Alunit Ishai. It is reported in the latest edition of Current Biology, published by Elsevier.

Kranz and Ishai investigated the effects of gender and sexual orientation on face perception using the latest fMRI brain scanning technology. While straight and gay, male and female subjects were in the scanner, they were shown a wide variety of photographs of men and women and asked to rate them for facial attractiveness. Interestingly, all subjects gave similar ratings to photos of both men and women, regardless of gender or sexual orientation. There was a general consensus as to what constitutes an attractive person.

It was only when the researchers matched the brain scans of subjects to the photographs they were shown that an effect of sexual orientation was found. The reward circuitry of the brain is a critical part of the complex network of structures involved in face processing and is responsible for saying "I fancy him/her". Scans showed a greater response in the reward circuitry of heterosexual men and homosexual women to female faces, more response in heterosexual women and homosexual men to male faces.

In sum, subjects' brains responded with greater interest to sexually relevant faces. In this particular function and circuit, heterosexual men and homosexual women perform similarly, and differently from heterosexual women and homosexual men.

Click here <<http://dx.doi.org/10.1016/j.cub.2005.10.070>> for abstract and full-text article.

4. A CONVENTIONAL SEX LIFE LOWERS BLOOD PRESSURE

Men and women whose bedroom activity is limited to exclusively conventional, penetrative intercourse have significantly lower blood pressure than those with either a more adventurous sex life or none at all. Their bodies show less response to stressful situations. These are the intriguing findings of a new study by Stuart Brody, published in *Biological Psychiatry* by Elsevier.

Brody gave his subjects diaries in which they were required to record over a two-week period how often they had penetrative sex and how often they engaged in sexual activity that did not lead to penetration, including masturbation and oral sex. He then brought them into the lab and took a baseline blood pressure reading. Those who only indulged in penetrative sex had significantly lower readings than all other groups. He then exposed his participants to a stressful situation by forcing them to prepare for and deliver a speech in public. This is a classic test of stress, the response to which is measured by changes in blood pressure. Again, those who only had penetrative sex showed significantly less stress response to the test. Their peak or systolic blood pressure was 14mmHg lower than men and women who either reported other, non-penetrative forms of sexual behavior or none at all.

Brody comments that the improved psychological and physical response to stress found in the 'conventional sex' group was impressively large, and larger than the differences associated with family history of high blood pressure, exercise and smoking. It is known that penetrative sex leads to the release of oxytocin, the hormone involved in pair bonding. Brody suggests that the apparent protective effective of regular, penetrative intercourse may have an evolutionary explanation. Those whose sexual activity is more often potentially reproductive may be afforded the advantage of a reduced probability of stroke or heart attack that can follow from elevated blood pressure.

Click here <<http://dx.doi.org/10.1016/j.biopsycho.2005.03.005>> for abstract and full-text article.

5. REVEALED: THE CHEMICAL SECRETS OF A BRAIN IN LOVE

New research has shown that, when we're in the first flush of love, the brain is saturated with high levels of chemicals that are normally used to control anxiety, emotion and behaviour. The stronger the bond we feel for our new love, the more our brains are flooded. These are the findings of a study from Italy by Enzo Emanuele and colleagues and published by Elsevier in the journal *Psychoneuroendocrinology*.

Emanuele studied three groups: people who had fallen in love within the past six months, people in long-term relationships, and singles. He found much higher levels of a brain chemical called nerve growth factor in those who had recently fallen in love than either of the other groups, whose levels were the same. He also found a strong correlation between how truly, madly, deeply people said they were in love and levels of nerve growth factor. The more intense the feelings of declared love, the higher the levels. For the first time Emanuele has located the chemical signature of passionate love, previously the domain of playwrights, novelists and songwriters.

The behavioural effects of romantic love have been defined as: focused attention on another individual, obsessive thinking – typically for four hours a day – about that individual, craving emotional union with them, euphoria, and increased energy. We are also now beginning to understand the biochemical

mechanisms that are involved in the initial stages of romance, and Emanuele's research is at the forefront of this understanding. He expects his findings to be replicated in groups other than his cohort of mostly white, Italian women. But he also expects that, because falling in love is so complex and all consuming, many other chemical interactions underlying romance will be identified by future research.

Click here <<http://dx.doi.org/10.1016/j.psyneuen.2005.09.002>> for abstract and full-text article.

6. HOW TO FALL IN LOVE ... WITH YOUR HOMETOWN

The individualist ethos of the USA is destroying American cities, forcing down their citizens' quality of life, and making them some of the least loveable places to live on earth. By contrast, the collectivist ethos of Europe is enhancing the experience of the built environment in European cities, raising their citizens' quality of life, and making them some of the world's most loveable places to live. The key factors that allow Europeans to fall in love with their hometowns and those that prevent Americans from doing the same have been identified in a new study by Jay Walljasper. It is published in the latest issue of *Technology in Society* by Elsevier.

Appropriately enough, Illinois-born Walljasper began his comparative study of American and European cities when on honeymoon in Europe. At first he put the observation that European cities are more pleasant environments for their inhabitants simply down to the fact that they are older and more historic - and that he was in the first flush of young love when he visited the continent. More systematic, less emotional analysis has helped him identify more rational reasons why it is easier for Europeans to love their hometowns than Americans.

The age of European cities does help - particularly the fact that many were established long before the introduction of the car. As such, they were not built with the car in mind and so they know where to end and give way to green countryside at their edges, so unlike the miles of sprawl at the edge of every American city. Europe's marginally more collectivist worldview also means that its citizens are more willing to pay higher taxes and are keen for these funds to be invested in public transportation systems, preservation of green spaces, the introduction and maintenance of bicycle lane networks, traffic calming measures, and the expansion of pedestrian zones. Environmental and public health concerns are taken more seriously and there is widespread acceptance of the quasi-moral status of bicycling or walking to and from work and shops.

Walljasper maintains that America's cities are so unlovable because of the nation's addiction to the automobile. It is as if the right to drive, even the shortest distance, is enshrined in the constitution. This worldview has had extremely negative consequences on urban planning and civic construction. Combined with the related individualist, frontier attitude that the state has no right to take a significant proportion of income in tax and spend this on infrastructure that could benefit the entire community, the nation's love affair with the car has blighted the nation's urban landscape. Walljasper implies that the only way back for American cities is to look across the Atlantic and learn. But he also implies that it may well already be too late.

Click here <<http://dx.doi.org/10.1016/j.techsoc.2005.10.015>> for abstract and full-text article.

7. PENILE ENLARGEMENT SURGERY: ACHIEVES LITTLE, SATISFIES FEW
More than 10,000 men elected to have surgery to increase the size of their penis in the USA alone during the 1990s. The reasons men give for seeking out these procedures vary from a need to improve self-esteem to a desire to satisfy their partners better sexually. Most, however, are concerned to increase the size of their penis when flaccid – so-called “locker room syndrome”. However, according to new research from Chi-Ying Li and colleagues in London, two-thirds of men who have surgery to enhance the size of their penis are dissatisfied with the outcome. The research is published in the journal *European Urology* by Elsevier.

Li’s research is the first objective study of the outcome and patient satisfaction ratings following a variety of different procedures designed to increase penile length. Just 35 percent of the patients he studied were satisfied with the outcome of their operation, typically a 1.3cm increase in length of the flaccid penis.

Many men putting themselves forward for this sort of surgery often have unrealistic expectations of what it can achieve, and this study provides some salutary information that physicians should pass on to prospective patients. Most requests for surgery come from men with normal penile size; they only think they have a small penis, a disorder known to psychiatrists as penile dysmorphic disorder. Given the unimpressive results, patient dissatisfaction and the fact that none of the current techniques have been properly scientifically investigated and validated, Li, together with the editor of *European Urology*, Yoram Vardi, recommend that men should be discouraged from having surgery and instead referred for psychiatric counseling.

Click here <<http://dx.doi.org/10.1016/j.eururo.2005.12.053>> for abstract and full-text article.

8. THE KEYS TO SEXUAL SATISFACTION FOR MIDDLE-AGED WOMEN
As they enter middle age and particularly as they pass through the menopause, women often find that their libido and enjoyment of sex decreases. A recent study has identified the main reasons why it is that some women enjoy a higher libido and a more fulfilling sex life in middle age, giving pointers to some simple and practical interventions which could help more women continue to enjoy sex into later life. The study is published by Elsevier in the journal *Maturitas* and was conducted by Marcela González and colleagues in South America.

González and colleagues found that libido was higher among women who were better educated and scored themselves higher on a general life satisfaction rating. Women who were generally dissatisfied with their partners and believed they lacked emotional intimacy with them experienced fewer and less pleasurable orgasms. The same was true for women whose partners were more poorly educated. Hormone replacement therapy was found to have a positive effect on frequency and intensity of orgasms.

González suggests some simple and inexpensive interventions to help more middle-aged women have a more fulfilling sex life, including more widespread use of HRT for menopausal women and educational outreach programmes for men to develop their understanding of women’s emotional needs.

Click here <<http://dx.doi.org/10.1016/j.maturitas.2004.07.003>> for abstract and full-text article.

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- Article 1: <http://dx.doi.org/10.1016/j.ijintrel.2005.07.003>
Article 2: <http://dx.doi.org/10.1016/j.evolhumbehav.2005.06.002>
Article 3: <http://dx.doi.org/10.1016/j.cub.2005.10.070>
Article 4: <http://dx.doi.org/10.1016/j.biopsycho.2005.03.005>
Article 5: <http://dx.doi.org/10.1016/j.psyneuen.2005.09.002>
Article 6: <http://dx.doi.org/10.1016/j.techsoc.2005.10.015>
Article 7: <http://dx.doi.org/10.1016/j.eururo.2005.12.053>
Article 8: <http://dx.doi.org/10.1016/j.maturitas.2004.07.003>