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STRESS, GENDER AND ARE MEN REALLY FROM MARS?

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John Gray's 1992 book *Men Are From Mars, Women Are From Venus* began as follows:

Imagine that men are from Mars and women are from Venus. One day, long ago the Martians, looking through their telescopes discovered the Venusians. Just glimpsing the Venusians awakened feelings in them they had never known. They quickly invented space travel and flew to Venus.

The Venusians welcomed them with open arms. They had intuitively known this day would come. Their hearts opened wide to a love they had never known.

They delighted in being together, doing things together, and sharing together. Though from different worlds, they reveled in their differences. They spent months learning about each other, exploring and appreciating their different needs, preferences, and behavior patterns. For years they lived together in love and harmony.

Then they decided to fly to Earth. In the beginning, everything was wonderful and beautiful. But the effects of Earth's atmosphere took hold, and one morning everyone woke up with a peculiar kind of amnesia – *selective amnesia*!

Both the Martians and Venusians forgot that they were from different planets and were supposed to be different. In one morning, everything they had learned about their differences was erased from their memory. And since that day, men and women have been in conflict.

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The book goes on to explain that this is because of important differences between what men and women say and what they really mean. The author also emphasizes other important gender distinctions, particularly with respect to responses to stress, which he attributes to differing genetic, hormonal and socio-cultural influences.

The popularity and success of Gray's book was phenomenal. Over the next decade, he wrote five additional books that expanded on his theories and

established web sites to provide advice for couples and others on how to improve their relationships. These spawned a TV series, a Broadway show, various movies and albums and an industry of Mars and Venus related clothing, food products and games.



But not everyone jumped on the Mars and Venus bandwagon. The book was criticized by many because Gray's claims were based entirely on his personal opinions and experiences rather than any scientific studies and his credentials were questionable. A 1995 *Newsweek* article reported that he had spent nine years as a celibate monk and secretary to the Maharishi Mahesh Yogi, hardly a recommendation for a marriage counselor. A subsequent article in *Time* revealed that Gray's B.A. and M.A. in the "Science of Creative Intelligence" was from the Maharishi European Research University in Switzerland. Further investigation found that this "Science of Creative Intelligence" degree had been established by "His Holiness" to promote the development of higher states of consciousness through the practice of Transcendental Meditation. The European Research University apparently consisted solely of a few desks in a hotel owned by the movement in Seelisberg, Switzerland. Gray's Ph.D. in psychology is described on his book jackets and web sites as having been received from Columbia Pacific University, which turned out to be a mail order diploma mill in Novato, California that was not listed in any volume of *Ph.D. Dissertation Abstracts*. Investigators found that one Ph.D. dissertation written in Spanish was approved by four faculty members who could not speak the language. Another had no hypothesis, no data collection, and no statistical analysis. A member of the visiting accreditation committee characterized the work as "more like a project paper at the college freshman level." The University was subsequently shut down, fined \$10,000, ordered to notify all students enrolled since 1997 of this injunction and to provide refunds to them within 30 days of any request. Gray's marriage to fellow self-help author Barbara De Angelis ended in divorce, which was also hardly an endorsement for his book or theories.

Have Gender Differences Been Exaggerated And Exploited?

The book was also criticized for being sexist. Gray claimed that men go into their "caves" to solve problems and they value "power, competency, efficiency, and achievement". In contrast, women were like "waves" who were overwhelmed by problems because they inherently cherished "love, communication, beauty and relationships" as being more important. When women complain about what is bothering them they primarily want their concerns to be acknowledged and to feel listened to, whereas men want solutions for their problems. Therefore, offering solutions to a woman who is complaining will frustrate her and make her feel as if she's not being listened to. Conversely, sympathizing with a man will be frustrating because he is looking for ways to solve a problem rather than receiving your understanding and caring. Gray's other advice also tends to portray husbands as having active and dominant roles with women being passive participants rather than partners.

Some of Gray's opinions are reminiscent of the comments of the early 19th Century French novelist George Sand on how women were viewed at the time. **"If they are ignorant, they are despised, if learned, mocked. In love they are reduced to the status of**

courtesans. As wives they are treated more as servants than as companions. Men do not love them: they make use of them, they exploit them, and expect, in that way, to make them subject to the law of fidelity." George Sand was the pen name used by the Baroness Dudevant, a free spirit who had affairs with Alfred de Musset, Prosper Mérimée, Franz List, Frederic Chopin, Eugène Delacroix and other prominent writers, musicians and artists, some of which took place while she was married. She later left her husband with her two children to continue a nine-year affair with Chopin that brought them to Majorca until his tuberculosis forced him to return to France. Although she continued to dress as a woman for social occasions befitting a Baroness, Sand usually wore men's clothes, a hat to hide her hair and smoked a pipe. This male disguise allowed her access to establishments and parts of Paris normally denied to a woman of her status because of strict social codes. These experiences provided valuable material for her novels and writings and she continued to fight for women's rights and equality with men long before the term feminist was invented.

A flood of books and articles appeared offering contrary views that debunked Gray's theories. The NPR *Car Talk* guys Tom and Ray mocked the book in their comedy album entitled *Men are from GM, Women are from Ford*. The band Men From Earth also spoofed it when they selected this name for their group. Another rock band recently named its debut album *Women Are From Venus, Men From Anus*. Dr. Gray, now described as a "psychotherapist", was featured in an episode of Penn and Teller's *Bullshit!* TV series that lampooned the self-help industry and he also made the list of fakes and phonies included in the Quackwatch web site. The notion that women and men were so emotionally and psychologically dissimilar that they must have come from different planets was also contradicted by a meta-analysis of some 46 studies on gender differences that published over the past two decades. All the articles were carefully evaluated to assess various traits, behaviors and abilities, such as intelligence, cognitive skills, verbal and nonverbal communication, self-esteem, psychological well-being, moral reasoning, leadership, aggression and motor activities like throwing distance. The results indicated that males and females from childhood to adulthood were much more alike than different save for physical strength and some aspects of sexuality and heightened physical aggression. In addition, differences often depended on the context they were measured in. In one study where participants in the experimental group were told that they would not be identified as male or female when given the opportunity to act aggressively, neither sex conformed to their stereotyped images and many acted in a way that was opposite to what had been anticipated. The study also suggested that over-inflated claims of gender differences made by Gray and hyped in the media were major influences that had shaped the perceptions and attitudes of men and women in work, parenting and various types of relationships.

Studies of gender influences in the workplace showed that women who went against the caring, nurturing stereotype often paid for it dearly when being hired or evaluated for promotion. Despite greater experience and better performance, females were paid less than their male counterparts and were not as likely to be promoted. **Many felt that they had to "look like a girl, act like a lady, think like a man and work like a dog" just to retain their jobs.** Rather than Gray's assertion that women and men can't get along because they communicate so differently, the problem might be that women give up prematurely because they believe they can't change what they mistakenly believe is an innate trait. Children may also suffer from exaggerated claims of gender differences. It is generally believed that boys are much better in math than girls but this meta-analysis found that they performed equally well until high school when boys gain a slight advantage. This may be due to the fact that girls with math skills may be overlooked by many parents who have lower expectations for a daughter's success versus a son's likelihood to succeed or excel in math. Studies have shown that parents' expectations for their children's math success relate strongly to a child's self-confidence and his or her performance. In addition, iron deficiency due to menstruation in adolescent girls has been linked with poor math scores and iron supplementation can result in

significant improvement. This review of the literature suggested Gray's book might have done more harm than good. "The misrepresentation of how different the sexes are, which is not supported by the scientific evidence, harms men and women of all ages in many different areas of life. These claims can hurt women's opportunities in the workplace, dissuade couples from trying to resolve conflict and communication problems and cause unnecessary obstacles that hurt children and adolescents' self-esteem." (Hyde SJ. The Gender Similarities Hypothesis. *American Psychologist*, 2005; 60: 581-592)

Nevertheless, *Men Are From Mars, Women Are From Venus*, which claimed that there were enormous psychological differences between men and women, sold over 30 million copies and has been translated into 40 languages. According to one of his web sites, "John Gray, Ph.D. is the best-selling relationship author of all time" and in addition to offering counseling to couples, he now offers a Mars Venus shake and dietary advice. Deborah Tannen's *You Just Don't Understand: Women and Men in Conversation* also proposed that it was the vast difference in the way males and females spoke that caused problems. It was on the *New York Times* bestseller list for four years and was translated into 24 languages. These and dozens of other books focused on alleged major gender differences and advice on how men and women could take advantage of this to get what they wanted, especially if it was a better heterosexual or even a same sex relationship. Some recent sample titles include: *Why Men Love Bitches: From Doormat to Dreamgirl - A Woman's Guide to Holding Her Own in a Relationship*, *Stop Getting Dumped!: All You Need to Know to Make Men Fall Madly in Love with You and Marry "The One" in 3 Years or Less*, *What Men Won't Tell You but Women Need to Know*, *The Complete A**hole's Guide to Handling Chicks*, *How To Pick Up Beautiful Women In Nightclubs or Any Other Place: Secrets Every Man Should Know*, *How To Easily Get Laid By Beautiful Women*, *The System: How to get Laid Today*, *The Straight Girl's Guide to Sleeping with Chicks*, *How to Get Laid: The Gay Man's Essential Guide to Hot Sex* and *How to Get Anyone to Do Anything*.

Are Women's Desires Due More To Genetic Or Social Influences?

All of the above books as well as numerous articles were primarily based on the premise that the authors knew what men and women really wanted and the erroneous assumption that all women wanted the same things. The *Miami Herald* columnist Dave Barry's conclusion summed much of this up as follows: "What Women Want: To be loved, to be listened to, to be desired, to be respected, to be needed, to be trusted, and sometimes, just to be held. What Men Want: Tickets for the World Series". He also pointed out that, "To judge from the covers of countless women's magazines, **the two topics most interesting to women are: (1) Why men are all disgusting pigs and (2) How to attract men.**" However, not all women want the same things, especially when it comes to male relationships. While some desires are dictated by genetics and biology others may be due to sociocultural, educational and other environmental influences.

The fact is that women have always been a mystery. Sigmund Freud referred to them as "a dark continent" since their sexuality baffled him. "The great question that has never been answered, and which I have not yet been able to answer, despite my thirty years of research into the feminine soul, is 'What does a woman want?'" he asked, but never found a satisfactory answer. His views were rooted in a culture in which there were enormous prejudices about the capabilities of females, which led him to focus on their inherent limitations. He saw women's sexual development as being cut short when they discovered that they didn't have penises, which he felt had a strong lifelong influence. In attempting to explain how differences between the two sexes developed, Freud suggested in *Civilization and Its Discontents* that when primitive man was left alone with a campfire, he could not help but urinate on it. It was a natural working out of his homosexual struggle with a competitive penis-symbol, the flame. See a fire, piss it out was a manifestation of his anatomically capable and competitive-prone behavior. Women could obviously not accomplish this feat as

well, which is why they became the caretakers of the hearth. Their role was relegated to childbearing, parenting and being a good and obedient *hausfrau*. (Some commentators believe this explained more about Freud than the origin of gender differences.) The great philosopher Bertrand Russell also found women mysterious and confusing but wisely warned, "For my part **I distrust all generalizations about women, favorable and unfavorable, masculine and feminine, ancient and modern; all alike, I should say, result from paucity of experience.**"

Evolutionary psychologists believe that gender differences are the result of reproductive strategies designed to insure survival. A male, who can increase his progeny by having many mates, is programmed to wander and to seek dominance. A female, for whom parenthood is time-consuming, saves her favors for males who are willing and able to "invest" in her and her young. A man looks for youth and attractiveness in a mate, which he views as signs of fertility; a woman looks for status and resources. Both sexes have a choice when it comes to survival and mating. One option is to take all your energy and focus it on competing to get as many mates as you can. The other is to have few mates and invest your reproductive energies on raising offspring. Men, who can have as many children as women they impregnate take the first option. Women, who are bound to their offspring by pregnancy and nursing, follow the latter. Even if these patterns are no longer relevant in contemporary society where many men parent their children and women are the breadwinners, evolutionary psychologists maintain they are "hard-wired" into our brains by millennia of evolution.

From this perspective, emotional skills that might lead to long-term relationships would have little value. Women, on the other hand, will pursue men who are more likely to stick around the morning after and help provide the food and protection mother and child will need to survive in a long-term relationship. All of this sounds similar to some current gender stereotypes that reduce things to a species of aggressive philandering men and nurturing, monogamous women. A March study of over 300 college women confirmed that while they view muscular men as more attractive, sexy and better in bed they are also more intimidating and dominant. Most would definitely not want to marry them because they would be "less faithful, less likely to treat them well, and less emotionally sensitive." One authority not connected with the study agreed, noting, "Fair or not, muscular men are perceived as more likely to play the field and less likely to make commitments." He also believed that most women would not marry very handsome men like Brad Pitt for the same reason and would prefer a Ray Romano type as a long-term marriage partner. Generalizations like this are often erroneous.

A Harris Poll conducted for Dodge Dakota trucks that asked over 1000 women to describe their ideal man found that nine out of ten wanted him to be dependable, someone they can count on, "low-maintenance" and easy-going and someone who will make them laugh. 75 percent said the ideal man does not buy his shampoo and grooming products in a salon but in the same store he shops for milk and eggs and that they wanted someone who enjoys spending his free time doing jobs around the house like hanging a mirror, instead of standing in front of one. 61 percent preferred a man with rough, hard-working hands instead of hands that are soft and manicured. Not everyone agrees with these survey results, which may have been influenced by the sponsor's questions. As one relationship consultant commented, "These manly men are arrogant. Women don't want arrogant men. They want men who take a little time to care about how they look. The second thing that most women complain about all the time over and over is that they're sick of the way men dress. They think men dress like mother still dresses them." He also noted that women's preferences depended on where they live. "In Washington, D.C., they are looking for a confident, real man. In Oklahoma City, they may or may not be looking for the Dodge man. The redneck women are looking for the redneck men, but even they want the redneck guy to look good and to make somewhat of an effort." Another relationship consultant and author of *Domestic Tranquility*, believes the

survey results point toward a longing for a simpler time. "My idea of a good husband is one who is strong, dependable, is going to accept the burdens which he is going to bear in the workplace. And he doesn't have to buy his own shampoo, because I do all the shopping. He doesn't have to do anything but go out to work and win the bread." She sees the "fashionable man" celebrated by pop culture as an emblem of selfishness. "Men being more concerned about how they look than how dependable they are is a sign of the times. So many men are like that -- so narcissistic, so self-centered. They are really afraid of growing up."

A March 2006 survey also compiled a list of the eight types of men women don't want to get involved with and why they avoid them.

1. The Needy Guy: He is overly emotional and shares all his feelings with her right away.
2. The Predictable Guy: He follows formulas and never wants to do anything differently.
3. The Arrogant Guy: He has a huge ego and he's condescending. He is also rude.
4. The Boorish Guy: He doesn't try to hide the fact that he's checking out other women while in her presence.
5. The Cheap Guy: He invites a woman to dinner and then subtly suggests they go Dutch.
6. The Arguer: When he takes a woman out, he makes her feel like she's in debate class rather than on a date.
7. The Self-Righteous Guy: This guy is very judgmental of others.
8. The Misogynist: This guy makes no secret of his bitterness toward women.

As the old saying goes, "A good man nowadays is hard to find." Some women complain that when they are lucky enough to find a man who is caring, sensitive, compassionate and shares her feelings, it later develops that he already has a relationship with someone – but who is very likely to be a boyfriend.

How And Why Women Are Different Than Men

The attractiveness of Gray's book was enhanced by selecting Mars and Venus to emphasize gender differences, even though there is nothing to suggest that there might be Martian men or Venusian women. Indeed, the word venusian didn't exist but the correct adjective, venerian, could not be used because of its modern association with sexually transmitted diseases.



Venus is the goddess of love and beauty and the planet probably got its name because save for the sun and the moon, it is the brightest object in the sky. Its symbol is a representation of the goddess Venus's hand mirror: a circle with a small cross underneath. However, ancient alchemists used this as the symbol for copper, with the circle, representing spirit, on top of a cross representing matter. Whatever its origin, it is now a symbol of femininity and is the sign used in biology to denote the female sex. The association with sex and femininity allegedly relates to the number of days it takes for Venus to complete its orbit, which roughly corresponds to the length of human pregnancy.



Mars is the next brightest planet and is named for the Roman God of War, who was also associated with fire and destruction. Mars is sometimes referred to as the red planet and its fiery appearance is due to iron oxide (rust) on its surface that reflects the red portion of sunlight. Its astronomical symbol is a circle with an arrow pointing northeast, which

represents the shield and spear of the god Mars, and is used in biology as a sign for the male sex. This helps to explain why Gray's choice of Mars and Venus was particularly appropriate and popular.

There are obvious physical and physiological gender differences. The average man is taller than the average woman. Men have more bodily hair and are stronger than women, especially in the upper torso. On average, girls begin puberty approximately two years before boys but female fertility declines after age 35 and ends with the menopause while men can father children in their seventies and later. Men's skin is thicker and oilier because it contains more collagen and sebum. Women generally have a smaller waist-to-hip ratio and a greater body fat percentage than men. The second or index finger tends to be shorter than the fourth or ring finger in males while in females the index finger tends to be longer than the ring finger.

Male brains are about 10% larger than females and have 6.5 times more gray matter, sometimes called "thinking cells". However, bigger doesn't necessarily mean smarter. Women have almost 10 times more white matter, which connects various parts of the brain and they seem to use both sides of their brain more than men. Brain imaging studies that measure blood flow to parts of the brain that are "working" show that when males listen to someone reading a novel only the left hemisphere of their brains is activated whereas females exhibited activity in both hemispheres. In addition, the frontal, temporal and other language processing areas of the cerebral cortex are proportionally larger and more precisely organized in females, which may help to explain the superiority they seem to have over men when it comes to language and communication skills. Females are more apt to utilize language than physical activity to gain an advantage in competitive situations. One researcher has suggested that their ability to use language by manipulating information and gossiping provided survival value during the course of evolution. He believes that these and other language and communication skills also help to organize and build relationships, noting that, "Women pause more, allow the other friend to speak more and offer facilitative gestures." Studies also show that women are more adept than men at distinguishing facial differences and interpreting changes in vocal intonations, which enables them to be faster and more accurate in identifying emotions. Brain areas involved in language and fine motor skills like handwriting mature about six years earlier in girls than in boys. Clinics report that dyslexia is more common in boys with ADHD (Attention Deficit Hyperactivity Disorder) and that there are ADHD gender differences. Boys tend to be prone to lack of impulse control and hyperactivity whereas girls are more likely to exhibit lack of attention.

On the other hand, boys tend to be better than girls in math and geometry, possibly because these areas of the brain mature several years earlier. One study found that the brain area involved in solving math problems in a 12-year-old girl resembles that of an 8-year-old boy. Males also seem to be superior when it comes to activities that require navigational or spatial skills. As a result, when giving directions, "Women are more likely to rely on landmark cues: they might suggest you turn at the 7-11 and make a right at the church, whereas men are more likely to navigate via depth reckoning -- go east, then west, etc." The reason for this is that imaging studies show that women use the cerebral cortex for solving navigational problems. Men use an entirely different area in the left hippocampus that automatically codes where you are in space that is not activated in females when they have navigational tasks. This is thought to explain why men tend to have a better "sense of direction" when there are no familiar landmarks. There are numerous studies suggesting other sex-associated brain differences but it is difficult to draw any meaningful conclusions and dangerous to over generalize. The differences noted above in children tend to even out after puberty and there is considerable overlap. There are many women with superior spatial skills and men who have exceptional dexterity with respect to good writing and other fine motor activities.

Many studies that allegedly showed strong gender differences have been found to be flawed, sometimes in an effort to have the results to agree with preconceived conclusions. A prime example is an oft-cited one in which 1-year-olds were separated from their mothers by a barrier. The results were summed up by one investigator as "Most boys try to knock the barrier down; most girls just stand there and cry for help". Yet, when he tried to repeat the experiment it was mostly the boys who were crying and the girls struggling to get out. In the original 1969 study, the girls cried almost twice as long as the boys, and boys were more likely to wander to the ends of the barrier, which was latched. This was interpreted as indicating that they were trying to solve their predicament. But in a more detailed analysis of the same data published 10 years later, it turned out that the girls pushed at the barrier as much as the boys did and tried to open the latches more often; the boys who moved to the end of the barrier mostly just stood there. In a follow-up study of the children at age 2, girls were no weepier than boys and were far more active problem solvers: More than 20 percent of them got out, compared with only 7 percent of the boys.

Responses To Stress Differ Due To Sex Hormones And Oxytocin

The most important gender differences are hormonal and as the old French saying goes, "Vive la difference". Men have a higher concentration of androgens while women have a higher concentration of estrogens and many of the brain and other disparities noted above are due to this variance. Gender brain differences begin during pregnancy when the male fetus starts secreting large amounts of testosterone that can reach blood levels comparable to those seen in young adult men. Aromatase enzymes in parts of the brain cause testosterone to bind to these sites and significantly influence their development. Israeli researchers have shown that you can distinguish a male from a female brain after 26 weeks of pregnancy by a routine ultrasound examination. Their research confirms prior studies of the brains of babies that had died before birth, a major difference being that the corpus callosum, a large bridge of white matter that connects the two hemispheres is thicker in female fetuses. The greater size of the corpus callosum in women has been used for decades to explain that women have better communication skills and "intuition" because of a greater ability to use both sides of their brain. Subsequent studies have shown no evidence that differences in cognitive behavior are related to corpus callosum size and some have found it to be larger in men. Split-brain operations have demonstrated that the corpus callosum is not necessary for life, health or even intellectual function. Nevertheless like many other alleged male-female differences, this myth has also been hyped and continues to resurface.

There are gender differences in behavior and responses to stress due to hormonal and brain chemistry influences. Women are better at concealing certain emotions like anger and aggressiveness because sections of the brain responsible for this are larger in women than men. However, it's a different story when it comes to depression, which is seen twice as often in women than men and it has been estimated that as many as one in five women will experience an episode of depression during any given year. Post partum depression following pregnancy is not uncommon and involuntal melancholia (the melancholy that comes with "change of life") was an established psychiatric diagnosis for decades. Eating disorders like anorexia and bulimia are ten times more common in women and like depression, have been linked to low levels of serotonin and are frequently treated by antidepressant drugs that boost serotonin. The greater incidence of both these diagnoses in women may be explained by studies showing that their brain serotonin levels are more than 50% lower compared to men.

Men and women can also respond to stress differently due to the influence of oxytocin and vasopressin, hypothalamic hormones secreted by the posterior pituitary. Oxytocin, which has been called the "cuddling" or "bonding" hormone, is produced during childbirth and

lactation and is also increased in both sexes during orgasm and other pleasant forms of touch and massage. Lactating rodents exhibit less fear when challenged and several studies have shown that women who nurse their babies have lower anxiety levels compared to bottle-feeding moms. In one experiment in which new mothers underwent a treadmill stress test, bottle-feeders had significantly steeper surges in stress hormones compared to those who were nursing. Other studies have reported that the frequency and severity of panic attacks are reduced during pregnancy and lactation. Oxytocin levels are otherwise similar in both sexes but its effects are greater in women because they are enhanced by estrogen and reduced by testosterone.

Vasopressin augments testosterone activities and blood pressure responses to stress and concentrations are higher in male brains, especially in the amygdala, an area associated with processing fear. Like testosterone, vasopressin has also been linked with increased aggressive behavior and protection of territory in male rodents. In contrast, oxytocin has significant stress reducing activities. Injections of oxytocin promote bonding between mothers and babies and also between adults and during stress, cause both male and female experimental animals to bond with females. Acute stress produces an increase in both oxytocin and vasopressin secretion by the posterior pituitary as well as ACTH from the anterior pituitary to stimulate the adrenal cortex to produce cortisol. At the same time, the adrenal medulla pours out adrenaline and other catecholamines that produce numerous "fight or flight" responses throughout the body. Oxytocin blocks many of these. The pituitary-adrenal "alarm reaction" is blunted in lactating women. Similarly, when oxytocin is released as part of the stress responses in a woman, it buffers the "fight or flight response" and encourages her to bond with children and other women instead. When she actually engages in these tending and befriending activities, more oxytocin is released which further reduces stress and produces a calming effect. This calming response does not occur in males because testosterone, which men produce in high levels when they're under stress, seems to reduce the effects of oxytocin whereas estrogen enhances it. (Taylor SE, Klein LC et al. Biobehavioral Responses to Stress in Females: Tend and Befriend, Not Fight-or-Flight. *Psychological Review*, 2000; 107:411-429.

The downside of this is that women require adequate oxytocin to promote a sense of well-being and suffer greater from living in what has become an anti-touch society. Touching stimulates oxytocin and is much more vital to human health than generally appreciated. Babies deprived of touch don't develop normally because certain connections in the brain atrophy and actually disappear. Orphans who receive very little touching or hugging die at much earlier ages and those who survive often suffer from permanent physical and mental retardation. Kids who don't get enough touch grow up to become aggressive and antisocial and older adults deprived of touching tend to become senile sooner and die earlier. Another interesting effect of oxytocin is that it impairs memory for unpleasant events. That's why hugging and touching often help people recover from arguments and cool things off more quickly. The resultant increase in oxytocin helps us to stop thinking about it and even forget some of the pain and discomfort we felt. Oxytocin makes us feel good about the person who caused the rise in oxytocin and promotes a bonding between them. Even thinking of someone we love can help; when women in good and close marriages were asked to think about their husbands, their blood levels of oxytocin quickly shot up.

While everyone is affected by not getting enough touching or hugging, women suffer more than men because they require more due to their higher estrogen levels. Women who do not receive adequate amounts of touching can become withdrawn and depressed and in some instances may develop a strong opposition to sexual touch and intercourse despite the fact that this is what they may require most. High levels of oxytocin promote greater sexual receptivity because oxytocin increases testosterone production, which is responsible

for increased sex drive in both men and women. Orgasm causes oxytocin levels to spike even higher, often three to five times normal, which creates the "afterglow" closeness experienced following lovemaking. The fact that sex increases oxytocin levels can benefit women who complain they "never feel like sex" and may partially explain why many women find that the more sex they have, the more they want, and the less sex they have, the less they want.

Several studies suggest that women suffer more stress than men in their daily lives. As one psychologist noted, "Men worry about three things: their immediate family, their job and money. Women worry on a daily basis about up to 12 things – their immediate family, their job, money, their extended family, their friends, their kids' friends, the way the house looks, their weight, the dog, etc." These all entail additional responsibilities.



For example, women are often portrayed as being dumb, distracted and more easily influenced by advertising, especially while shopping, as indicated by the diagram on the left. The fact is that they are apt to be more efficient and use their shopping experience to look for bargains on numerous items that they have to purchase anyway for their home, children, spouses, themselves or gifts for family and friends. Another stereotype is the "dumb blonde", who allegedly suffers from some genetic mental defect, despite the fact that most blondes have acquired their hair color.

Women are also subjected to more stress in their marriages and relationships than men. As indicated in a recent Newsletter, they experienced more stress from hostility and sarcasm from their mates during a 20-minute spat than men did and had more adverse cardiovascular and immune system effects that also lasted longer. In one experiment, when couples were given the stressful task of preparing a speech for delivery in front of a large audience, men who were joined by their female partner for the preparation and delivery periods showed much lower stress levels than those who had no support. When women preparing their speeches were joined by their male partners, their stress hormones surged. In another, when couples were told they would have to give similar speeches, 100 first sat together holding hands for 10 minutes and then embraced for 20 seconds before going on stage. Another 85 couples rested quietly but separated from their partners. During their speeches, heart rates and blood pressures rose twice as high in the non-contact group compared to the handholding couples. Despite being subjected to more stress, women live longer than men. Married men are much healthier and live longer than bachelors or widowers because their wives reduce the adverse effects of loneliness. In contrast, unmarried women and widows live almost as long as their married counterparts because all women have friendships outside of marriage that can supply the powerful stress buffering effects of strong emotional support.

After reviewing dozens of studies and articles about gender differences I am convinced that you can find something that supports or refutes any position you choose to take. There is often unwarranted extrapolation from animal studies and too much generalization from sophisticated imaging studies like PET (positive emission tomography) and fMRI (functional magnetic resonance imaging) scans. While physical and physiologic gender differences do exist, stereotypes and alleged psychological distinctions do not apply to all women or all men. Some of the information being promulgated also comes from sources that are biased

because of preconceived conclusions or self-serving interests. For example, a poll conducted earlier this year reported that the majority of U.S. women said that they would rather be thinner than smarter. A similar United Kingdom survey found that 19 out of 20 women would rather be slim than have a much higher I.Q. Given a wish list that also included never having any financial worries and having a date with the celebrity of their choice, more than half of the women questioned said they would still rather be slim. Both surveys were conducted by leading web sites offering dietary plans and just happened to take place in early January to take advantage of weight loss as a leading New Year's resolution.

Numerous famous people have commented on women and gender differences over the past 2000 years as follows:

"Because I am a woman, I must make unusual efforts to succeed. If I fail, no one will say, 'She doesn't have what it takes. They will say, 'Women don't have what it takes.'" "Remember, Ginger Rogers did everything Fred Astaire did, but backwards and in high heels." "Feminism is the radical notion that women are people." "I've yet to be on a campus where most women weren't worrying about some aspect of combining marriage, children, and a career. I've yet to find one where many men were worrying about the same thing." "I asked a Burmese why women, after centuries of following their men, now walk ahead. He said there were many unexploded land mines since the war." "Give a woman a job and she grows balls." "Women are not the weak, frail little flowers that they are advertised. There has never been anything invented yet, including war, that a man would enter into, that a woman wouldn't, too." "Not only is women's work never done, the definition keeps changing." "Scratch most feminists and underneath there is a woman who longs to be a sex object. The difference is that is not all she wants to be." "When two people marry they become in the eyes of the law one person, and that one person is the husband." "A woman is like a tea bag. It's only when she's in hot water that you realize how strong she is." "Men are irrelevant. Women are happy or unhappy, fulfilled or unfulfilled, and it has nothing to do with men." "Women are all female impersonators to some degree." "If a woman has to choose between catching a fly ball and saving an infant's life, she will choose to save the infant's life without even considering if there are men on base." "Sure God created man before woman. But then you always make a rough draft before the final masterpiece." "Every girl should use what Mother Nature gave her before Father Time takes it away." "The average woman would rather have beauty than brains, because the average man can see better than he can think." "A woman can say more in a sigh than a man can say in a sermon." "Whatever women do they must do twice as well as men to be thought half as good. Luckily, this is not difficult." "Whether they give or refuse, it delights women just the same to have been asked." "Women are like elephants to me. I like to look at them, but I wouldn't want to own one." "Ah, women. They make the highs higher and the lows more frequent." "Woman begins by resisting a man's advances and ends by blocking his retreat." "It is only rarely that one can see in a little boy the promise of a man, but one can almost always see in a little girl the threat of a woman." "A woman should soften but not weaken a man." "Men at most differ as Heaven and Earth, but women, worst and best, as Heaven and Hell." "Women do not find it difficult nowadays to behave like men, but they often find it extremely difficult to behave like gentlemen." "A man is as good as he has to be, and a woman is as bad as she dares." "The supply of good women far exceeds that of the men who deserve them." "Woman's virtue is man's greatest invention."

"Nature has given women so much power that the law has very wisely given them little." "I hate women because they always know where things are." "Women always worry about the things that men forget; men always worry about the things women remember." "Women are wiser than men because they know less and understand more." "A lot of guys think the larger a woman's breasts are, the less intelligent she is. I don't think it works like that. I think it's the opposite. I think the larger a woman's breasts are, the less intelligent the men become." "What is the difference between men and women? A woman wants one man to satisfy her every need, and a man wants every woman to satisfy his one need." "The only time a woman really succeeds in changing a man is when he is a baby."

Three of my favorites are, **William Shakespeare, "Women speak two languages - one of which is verbal."** **Ian Fleming, "Men want a woman whom they can turn on and off like a light switch."** **Aristotle Onassis "If women didn't exist, all the money in the world would have no meaning."**

(If you would like to learn the authors of all the above and over 250 other quotations on women, men, sex, marriage, gender differences, feminism, etc., send an e-mail to stress124@optonline.net with a request for May 2006 Newsletter quotations)

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