

Chapter 8

SEXUAL MOTIVATION, AROUSAL, AND ATTRACTION

Why do we engage in sexual behavior? The answer seems obvious enough—because we experience physical pleasure when our bodies are stimulated through sexual expression. Even young people begin to experience this type of pleasure at a fairly early age during puberty. Discovery of the potential for physical pleasure may even happen unexpectedly, when individuals are not seeking out the experience. Consider the following description by one woman when she recognized for the first time that she was experiencing sexual arousal as a young adolescent:

My father owned a diner and one day six of us were sitting in a booth and I dropped something on the floor. One of my boy classmates bent down to pick it up for me and accidentally his hand touched my leg. I felt so aroused and it was the first time even though I had crushes on boys since first grade and was preoccupied with men of all ages, and thought about kissing them, I never felt the feeling of aching between my legs or the wetness. He must have had some reaction because he almost ran into the men's room. From then on I wanted to have that feeling and soon found out I could have it through kissing. Touching too but I was too shy to let a boy touch me so kissing was something I loved. In fact it turned me into a tease. I loved being aroused and the more I ached the more I liked it. (The Experience of Desire, On-line forum, retrieved July 22, 2006, from The-clitoris.com. Reprinted with permission of The-clitoris.com.)



Sexual arousal may sometimes occur unintentionally in unexpected situations.

This woman discovered the physical component of sexual pleasure through an initially nonsexual incident. However, she had actually already developed the potential to respond to the physically stimulating event when it happened. She reveals that she had been having crushes on boys and a fascination with men for several years before feeling sensations in her genitals. This fact suggests that sexual interest involves more than the desire for genital stimulation, or possibly even more than the desire for physical stimulation. Apparently other types of pleasure are also intricately involved in sexual feelings and experiences.

The experience of personal pleasure, whether in the form of physical stimulation or interpersonal gratification, is essential to motivation for sexual expression. Sexual behavior may occasionally occur for reasons unrelated to pleasure. Yet it is not likely to continue very long or to be pursued with much enthusiasm as when sexual activity provides some type of pleasure. In fact, if pain or negative feelings are expected to result from sexual experiences, individuals tend to avoid sexual expression. This is illustrated in an explanation by a woman who identified herself as Rachael regarding why she avoided engaging in her first ever sexual behavior with a partner:

For six years I was terrified of sexual intercourse. Most of it originated from the nightmarish recounts my friends had divulged about their own sexual encounters. They told me about instances of pain, abuse, rape and/or boredom that had resulted from highly disappointing sexual episodes. Many of the stories were repetitive and I started to wonder if I, too, would suffer the same fate. (Women's Sexual Experiences, On-line forum, retrieved July 22, 2006, from The-clitoris.com. Reprinted with permission of The-clitoris.com.)

She eventually decided to experience sex with her boyfriend after he sent her a link to the Web site, www.the-clitoris.com. She read the entries of numerous women who had contributed their personal experiences, many of them relating tales of pleasure, ecstasy, and joy, even while dealing with difficulties and unhappiness. Eventually, Rachael engaged in sex with her boyfriend with quite positive outcomes. She describes the reason for her experience,

Most importantly, the Web site reminds its readers that communication between sexual partners is vital to experiencing any sort of sexual gratification. This piece of advice was directly responsible for my joyful memory regarding my first time. I encountered minimal pain during intercourse that day, which vanished the moment I told Steven to stop and allow my body to adapt to him. I feel fortunate and proud that my first experiences with sex are happy ones.... (Women's Sexual Experiences, On-line forum, retrieved July 22, 2006, from The-clitoris.com. Reprinted with permission of The-clitoris.com.)

These various personal stories give insight into the nature of sexual desire and sexual motivation. They also reveal in a very rich way how complex human sexual motivation actually is, a far cry from a mindless quest for simple physical pleasure, tension, or release. Emotional and social types of fulfillment and concerns are at least as important as physical pleasure for humans, if not more so in many cases.

Sexual Motivation

Lust, the true kind of lust that makes itself known in groin, head, heart, and every atom in between, encourages a holographic view of the body; the whole is implicit in each of its parts. Thus, to brush your lips against

a lover's nipple, to inhale his scent and feel his heat, is to intuitively learn more about his essence than would seem to be inherent in any one of those fragments. Lust, far from being demeaning, is a humanizing thing; it is empathy at its deepest level. (Hall, 2000, p. 164)

An important concept in psychology for understanding the causes of behavior is that of motivation. In simple terms, motivation is the desire to attain or accomplish a goal. Within psychological theory, **motivation** is a state of increased interest in a specific goal; accompanying this heightened interest is a process of initiating, energizing, maintaining, and directing behavior intended to attain the goal (Buck, 1988; Heckhausen, 1991). In the case of sexuality, the goal is the experience of satisfaction that results from sexual behavior, fantasy, feelings, thoughts, and relationships (Hill, 1997; Hill & Preston, 1996). Very simply, it is the pleasure and joy individuals experience when they engage in sexual expression. Terms and concepts commonly used to talk about sexual motivation include *sexual desire*, *sex drive*, and *libido*, although these terms do not capture the full meaning of the concept of sexual motivation. The same is true with informal, slang words used to refer to increased sexual interest, such as feeling “horny,” “turned on,” or “sexy.”

Incentive Theory of Sexual Motivation

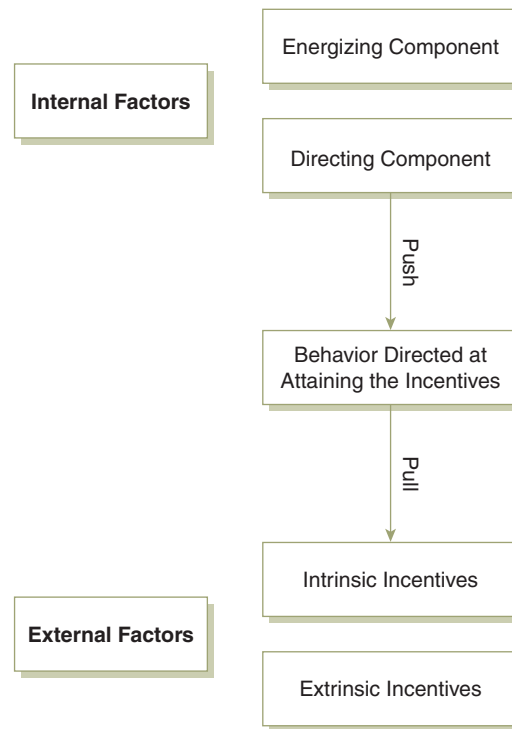
I love my girlfriend. For the first time in my life I've considered marriage. I could see myself with her forever. But, I can't curb my desire for random sex. Ours is great but the need for the hunt/kill is huge. Whenever I'm out, and I see some hottie across the bar, all I can think about is how bad I wanna get her. To try to get her, to get her home. . . I'm afraid I'll either be a cheater or alone forever, chasing every beautiful girl I see. I can't stop hunting no matter how much is on the line. (Confession Junkie, 2006b)

As discussed previously, the factors involved in the experience of sexual pleasure are not as simple as they may seem at first glance. So, what are the factors related to sexual pleasure that lead individuals to want to engage in sexual behavior? Scientific evidence indicates that different individuals may enjoy different aspects of sexual experience, such as feeling valued by one's partner, making one feel better, feeling powerful, and experiencing physical stimulation and excitement (Hill, 1997; Hill & Preston, 1996). Psychological theorists refer to the particular aspects of sexual experience that provide pleasure as **incentives**. Yet for individuals to actually initiate behavior aimed at experiencing these incentives, they must also believe that they have a reasonable chance of actually being successful at obtaining the pleasure (Heckhausen, 1991).

Several recent theoretical models of sexual motivation (Everaerd, Laan, Both, & Spiering, 2001; Hill & Preston, 1996) combine an emphasis on specific incentives with a factor that is also important to consider in human sexuality: processes within the person. These models propose that an accurate and complete understanding of the causes of sexual behavior must



Most individuals only approach others with whom they believe they have a reasonable chance of success at having pleasurable experiences.

FIGURE 8.1 The Incentive-Motivation Perspective

take into account factors both within the individual and outside of the individual in the environment, as presented in Figure 8.1.

Incentive-motivation models (Singer & Toates, 1987) in particular incorporate both types of factors (Atkinson, 1966; Bindra, 1968, 1974; Heckhausen, 1991). Within these models, internal factors interact with external factors to affect behavior; this means that internal and external factors influence, or depend on, one another in the effects they exert on behavior.

Internal factors consist of both an **energizing component** of motivation, as well as a **directing component**. These aspects of motivation are thought to provide the force that *pushes* an individual (the energizing function) toward a specific aspect of the environment that will provide pleasure and gratification (the directing function). Internal factors include structures and processes occurring within the brain and nervous system. In humans, they also involve complex psychological motives such as the long-standing desire for emotional intimacy or the desire for thrill and excitement (Hill, 1997; Hill & Preston, 1996), as discussed in chapter 5 on personality.

External factors are the incentives existing in the immediate situation that produce pleasure on experiencing them. Incentives are also referred to as the **situational aspect** of motivation. They are conceived of as *pulling* individuals toward them, causing the individuals to engage in behavior that will allow them to experience the incentives (Everaerd et al., 2001). Furthermore, sexual motivation involves interest in attaining a

general *class* of incentives, not just one specific instance of incentive. Therefore, incentives encompass a range of experiences that provide sexual pleasure (Atkinson, 1966; Heckhausen, 1991); examples include the expression of intense emotional intimacy and tenderness that may occur during sexual interaction, or the profound sensual stimulation and excitement that may result from physical sexual contact.

Intrinsic incentives are outcomes of behaviors that produce pleasure or gratification through the act of engaging in the behaviors themselves. Consequently, the behaviors are engaged in largely, if not solely, to experience the pleasure, not to achieve some other, ulterior goal. Engaging in the behaviors is rewarding in itself (Leiblum & Rosen, 1988).

For example, only sexual interaction with a partner provides the special sense of being valued by, and attractive to, that person in such a way that the partner wants to be physically close and experience one's body. Feeling valued by one's partner may be experienced through nonsexual behaviors such as discussing one's hopes and fears with him or her; however, feeling valued the way one does through sexual intimacy is a relatively distinct type of emotional intimacy (Hill, 1997; Hill & Preston, 1996).

Other behaviors do not produce the same type of gratification as intrinsic incentives. For an individual who obtains gratification out of feeling valued through sexual interaction, the other ways of being made to feel valued may not provide the kind of intimacy he or she desires. Such an individual is likely to feel unfulfilled, neglected, or unhappy if one's partner does not communicate a special warmth and attachment to him or her through sexual interaction, even if valuing is expressed in other ways as well in the relationship. The specific kind of pleasure is relatively distinctive to sexual intimacy, and therefore is intrinsic to sexual interaction.

Eight types of intrinsic sexual incentives have been identified by Hill and Preston (1996): (a) physical pleasure, stimulation, and excitement; (b) reproduction; (c) feeling valued by one's partner through sexual interaction; (d) expressing value for one's partner through sexual interaction; (e) experiencing relief from stress; (f) providing relief to one's partner; (g) exerting power over one's partner through sexual interaction; and (h) experiencing the power of one's partner.

Yet, individuals may engage in sexual behavior for a variety of reasons that have nothing to do with experiencing sexual pleasure (Leiblum & Rosen, 1988). Such reasons are called **extrinsic incentives**. These include participating in sexual interaction with a partner out of a sense of duty or obligation because of involvement in a romantic relationship with the partner. In fact, an individual may have sex with a partner because she feels obliged, even though she feels she is not really attracted to the person after all. The individual engaging in sex out of a sense of duty is not participating to obtain sexual pleasure, and may even find the experience dull, unexciting, irritating, or unpleasant.



What kinds of incentives do you think this type of setting offers for engaging in sensual or sexual behavior? What particular types of sexual expression are most likely to occur?



Do you think this person is engaging in sexual behavior to enjoy some aspect of the sexual interaction with her partner? What might be some reasons she is involved in this sexual relationship?

Another individual may engage in sexual behavior to receive money from the sexual partner, or because the partner provides other types of material support. In this case, the pleasure associated with money received for sex may be experienced through performing other nonsexual behaviors; it is not specific to engaging in sex. If the individual does not engage in sexual behavior primarily to experience sexual pleasure, the incentive for sexual behavior is *extrinsic* to sexuality. Therefore, such factors as fulfilling obligations and receiving money or material goods are **extrinsic incentives** for sexual behavior.

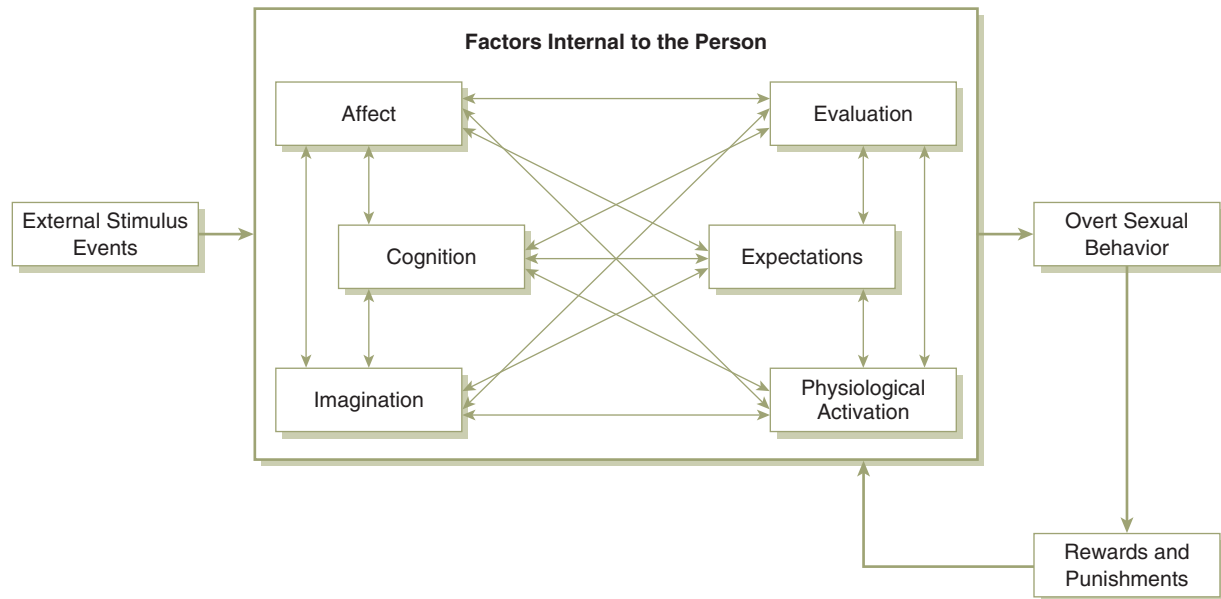
Factors within the person and in the environment influence one another in very specific ways. Internal factors may involve physiological changes in the brain or nervous system, or thoughts or fantasies that lead to sexual excitement. Such internal factors heighten attention to, and awareness of, aspects of the environment that will provide the desired pleasure or stimulation; again, these aspects of the environment are incentives. The heightening of interest in specific incentives will lead the individual to be more sensitive to their availability in the environment, or even to seek the incentives out to experience them. In turn, aspects of the environment likewise influence internal factors. Encountering sexual incentives, such as a physically

attractive person or a person with whom one has become extremely close emotionally, may result in the activation of internal processes in the nervous system and in psychological systems. Exposure to incentives therefore is likely to increase the level of motivation the person feels.

Sequence Models of Sexual Behavior

Everaerd, Laan, Both, and Spiering (2001) proposed a model of sexual motivation to explain the process through which sexual motivation arises and produces sexual behavior. The model is extremely similar to that developed by Donn Byrne (1977, 1982; Byrne & Schulte, 1990) called the Sexual Behavior Sequence, presented in Figure 8.2. Within the Everaerd and colleagues model, sexual motivation is proposed to energize the sexual system, which includes the nervous system, the body, and psychological processes. The activation may eventually result in overt (observable) sexual behavior.

The Byrne model (1977, 1982; Byrne & Schulte, 1990) does not explicitly include a concept of sexual motivation, which is actually an important concept because it includes the directing function; the directing function guides behavior purposefully toward very specific goals and outcomes. That is, sexual behavior is not aimless and mindless, but occurs for very particular reasons. Byrne does, however, briefly allude to factors that produce arousal as motivational factors. A strength of the Sexual Behavior Sequence model proposed by Byrne is that it provides a highly detailed, well-organized understanding of the many factors that are involved in determining

FIGURE 8.2 The Sexual Behavior Sequence

Adapted from Byrne, 1982, and Byrne & Schulte, 1990. Used with permission.

sexual behavior. It also includes variables that are essential to sexual motivation, most especially emotions and feelings. The initial phase of the sexual behavior sequence in the Byrne model is called arousal.

Sexual Arousal

Sexual arousal is a state of heightened activation that provides the impetus for sexual behavior in general, rather than for specific types of sexual behavior (Byrne, 1977, 1982; Byrne & Schulte, 1990). Similarly, Everaerd and his colleagues (Everaerd et al., 2001) identified the energizing or activating of the sexual system as **sexual arousal**. A fundamental assumption of Byrne's model is that the likelihood of overt sexual behavior increases with increasing levels of arousal. Everaerd and his colleagues called this increasing likelihood of sexual behavior the **action tendency**. The degree to which the sexual system is energized is determined by the attractiveness of the stimulus, the aspect of the environment that inspires arousal, such as another person. Factors influencing attractiveness of romantic and sexual partners are considered in a later section. The degree of arousal is also affected by the ability of the psychological system to inhibit other thoughts or feelings that may interfere with the sexual system, such as sexual anxiety or guilt, or worrying about some other aspect of one's life (e.g., a problem at work).

According to the model, increasing sexual arousal produces a growing awareness of **sexual desire** after arousal intensity exceeds a minimum level or threshold. Sexual desire is the conscious feeling that one is sexually aroused (Everaerd et al., 2001). The heightened sexual action tendencies activate **motor systems**, aspects of the nervous system and body that produce movement and responding. This may include muscle contractions and increased blood flow in the genital area, which contribute to the subjective experience of desire. Subjective feelings that are typically associated with increased arousal and motivation include "intense interest, 'engaged curiosity,' and 'eager anticipation'" (Panksepp, 1998, p. 149).



What do you think are the conditions that are essential to experiencing sexual arousal and sexual desire?

others. The terms, *unconditioned* and *conditioned*, are based on fundamental concepts within the learning theory account of classical conditioning; this theory was examined in chapter 5 on personality.

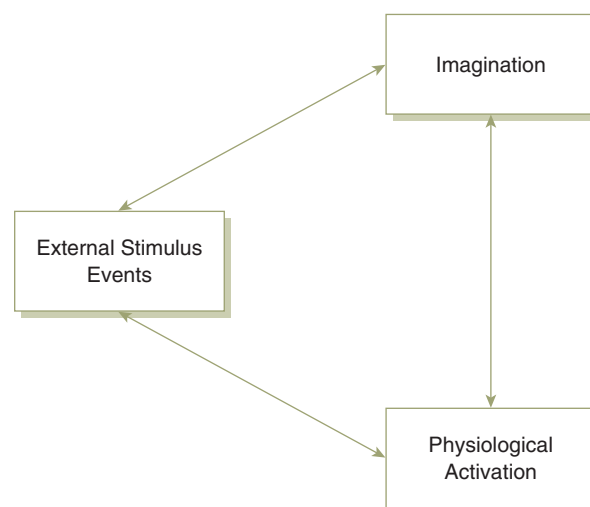
Unconditioned Stimuli. *Unconditioned stimuli* are aspects of the environment that produce a particular response without any prior experience or training with the stimuli. Recall that within learning theory, preexisting stimulus–response associations are referred to as *unconditioned*. The automatic response that results

According to Byrne, arousal is determined by three interacting components: (a) **external stimuli**, (b) **imagination**, and (c) **physiological activation** (see Figure 8.3). The arousal process may start as a result of any of the three factors.

External Stimulus Events

External stimulus events are the aspects of the environment that serve as incentives, as discussed with respect to incentive theory. There are three types of external stimuli: (a) unconditioned stimuli, (b) conditioned stimuli, and (c) observing the sexual behavior of

FIGURE 8.3 Arousal as Conceived Within the Sexual Behavior Sequence Model



Adapted from Byrne, 1982, and Byrne & Schulte, 1990. Used with permission.

from an unconditioned stimuli is called an **unconditioned response**. The most basic unconditioned stimulus–response associations are those that result from biologically based reflexes, such as the case with the association between food and such automatic responses as increased desire to eat and salivation.

As noted by Byrne (1982), certain sexual stimuli may cause even sexually naive individuals, meaning those with no previous sexual experience at all, to respond sexually. Sexual response may include becoming sexually aroused, seeking contact with the cause of the sexual stimulation (e.g., a particular person), and engaging in sexual behavior. Perhaps the most obvious unconditioned stimulus for sexual arousal is direct touching and stroking of areas of the body sensitive to stimulation, such as the genitals (Byrne, 1982). Yet other parts of the body, such as the face, lips, neck, breasts, thighs, buttocks and abdomen, are also likely to lead to sexual arousal under certain conditions. Sexual arousal may even occur in reaction to brief, accidental brushes of one person's body with that of another person, as was the case in the anonymous example at the beginning of the chapter.

Even this type of stimulation, however, is not purely “reflexive,” meaning nonconsciously automatic. Higher-level cognitive and emotional processes involved in understanding the stimulation are almost always involved in reacting. Being touched by someone you do not find attractive, or being caressed in an inappropriate situation (e.g., around others), does not always lead to arousal; in fact, the primary reaction instead is likely to be anger or displeasure. Likewise, some individuals may be less comfortable with the experience of sexual stimulation in general than others, because of religious or emotional inhibitions.

Other unconditioned stimuli may include sexual pheromones, chemical substances produced by the body that activate physiological sexual arousal. Although most research on pheromones has involved lower animals, some evidence suggests that humans may also respond in some ways to their presence (Graham, Janssen, & Sanders, 2000; Thornhill et al., 2003).

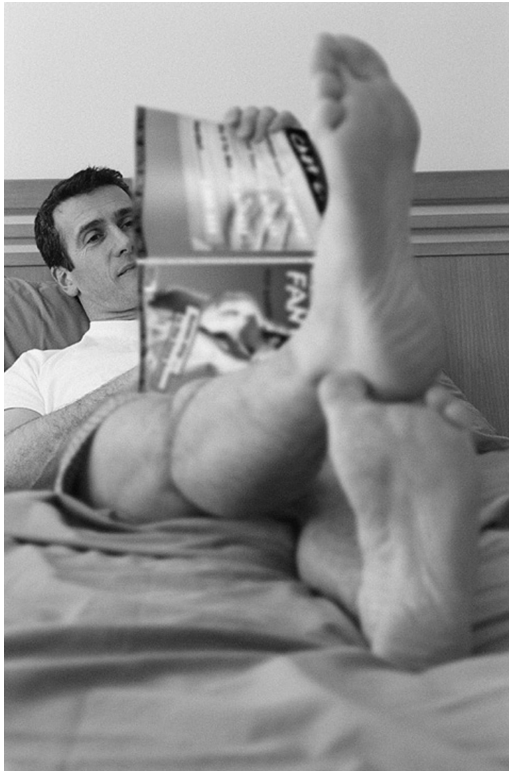
Possibly more widely influential for humans are visual cues, the sight of other humans, especially features associated with attractiveness; these factors are discussed later, and include specific attributes of the human body perceived as physically attractive, such as the hourglass shape of the female body and the V-shape of the male torso. Beyond visual stimuli, other types of unconditioned stimuli may include emotionally intimate or nurturant behaviors. Such behaviors signal that another person holds a positive view of an individual, as well as a willingness to maintain an ongoing relationship; these cues may be particularly important to females in producing sexual arousal or interest (Hill, 2002).

Conditioned Stimuli. Conditioned stimuli are aspects of the environment that come to elicit a specific response only after training or experience. Conditioning (or training) consists of combining some aspect of the environment that does not produce a sexual response with a stimulus that does create sexual arousal (i.e., the unconditioned stimulus). For example, a specific song or type of music that is not sexually arousing might be paired with sensual stroking of the body. The unconditioned stimulus, as defined previously, prompts a naturally occurring response, the unconditioned response; in this case, the response is sexual arousal. After a number of pairings of the neutral event (the song) with the unconditioned stimulus (sensual stroking), the song comes to elicit the response of sexual arousal. In this way, with consistent pairing, various aspects of the environment may become capable of producing sexual arousal. After being sexually aroused a number of times while particular music is playing, individuals may eventually find that the music by itself can cause them to become aroused or “feeling sexual.”

In fact, seemingly incidental features of the environment, such as music or particular locations (one's bedroom or a nightclub someone frequents), are not the only type capable of producing sexual arousal; specific attributes of other people also often become associated with sexual stimulation. Individuals may develop strong

preferences for specific facial features; hair of a certain color or style; smooth, hairless skin or, on the other hand, the presence of body or facial hair; particular types of clothing; particular facial expressions, gestures, or body postures; or specific body shapes. Such attributes are all fairly commonly associated with attractiveness and sexual arousal among people in general. However, an obsession with a single feature to the exclusion of all other features, one that is required to be present for an individual to experience sexual arousal, is a type of psychological disorder called a **fetish**. In fact, classical conditioning has been proposed as a means of explaining the development of fetishes (Byrne, 1982).

Observing the Sexual Behavior of Others. A third type of external stimulus to sexual arousal is observing the sexual behavior of other people either by watching a video recording or watching them in person (Byrne, 1982). This specifically refers to watching others engage in sexual behavior without being directly involved in the sexual behavior or directly stimulating one's own body. Observation produces vicarious arousal, because it involves enjoying the experiences of others and possibly imagining oneself involved in the activity.



What psychological functions might viewing erotic images serve for individuals?

Byrne noted that large numbers of studies have demonstrated that exposure to **erotica**—art, photographs, videos, audio recordings, and written descriptions of sexual activity—produces sexual arousal. Observing sexual behavior in this way has also been shown to increase the likelihood of engaging in sexual behavior. When aroused by viewing erotica, however, an individual is most likely to engage in sexual behavior that is typical for that particular individual, rather than trying to imitate the behavior he or she may have been viewing. Contrary to traditional folk beliefs, viewing erotica does not lead individuals to engage in greater levels of all types of sexual behavior, or unusual sexual behavior.

Several factors have been found to affect the type of response individuals have to erotica. Most typically, erotica is presented in video recordings or in written vignettes describing the sexual behavior. A meta-analysis of 46 studies conducted by Murnen and Stockton (1997) found a gender difference in self-reported arousal to erotica that was small to moderate in size ($d = .31$; refer back to chapter 6 on gender differences for an explanation of the d statistic). Contrary to traditional stereotypes and predictions within evolutionary theory (Symons, 1979), gender differences did not occur for visual types of erotica; Symons had predicted that men would experience greater arousal to visually presented erotica.

Factors related to greater gender differences in sexual arousal to erotica were (a) exposure to erotica in smaller groups of respondents (decreased anonymity leads to increased pressure to conform to gender expectations) and (b) younger age of respondent. Murnen and Stockton (1997) concluded that the results of the meta-analysis in general do not provide support for evolutionary psychology predictions. The disconfirming findings include the relatively small size of the gender differences when they occurred, the lack of a gender difference in visual

stimuli, and the fact that gender differences were affected by the social situation, specifically the presence of fewer versus more participants in a research session. Instead, Murnen and Stockton concluded that greater support is provided for a social influence (social constructionist) explanation; in this view, prevailing social roles and expectations are thought to determine the type of reaction that women and men have to erotic stimuli.

Stimulus Factors Affecting the Amount of Arousal. Three characteristics of external stimuli—specifically, unconditioned stimuli, conditioned stimuli, and observing sexual behavior—that increase arousal are (a) the attractiveness of the stimulus, (b) the novelty of the stimulus, and (c) the extent to which the stimulus focuses on engaging in overt erotic behavior. Greater attractiveness of the stimulus—in terms of the physical or personality features of a potential partner—has been shown to produce greater arousal, as well as a greater likelihood of experiencing conscious excitement and desire. Novelty refers to the newness of the stimulus; this can result from encountering the same stimulus in different settings (e.g., one’s romantic partner at a vacation resort rather than in one’s home), the prospect of engaging in different types of sexual behavior, or the potential to engage in sexual behavior with a different partner.

With respect to the focus on overt sexual behavior, research has demonstrated that imagery involving motor expression—that is, engaging in actual behavior—generates greater sexual arousal than imagery not involving motor expression (Dekker & Everaerd, 1988; Dekker, Everaerd, & Verhelst, 1984). This means that simply imagining a desired sexual partner or some feature of his or her body produces less arousal than imagining engaging in some sexual behavior with the partner. In fact, the most popular fantasies for both women and men are about *doing* something with a desired partner, such as engaging in penile–vaginal intercourse, oral–genital sex, or involvement in emotional expression (Leitenberg & Henning, 1995).

Imagination

Imagination involves images and experiences generated within cognitive and emotional systems of the person; these are more commonly known as fantasies, daydreams, and nighttime dreams. **Imaginative processes** are cognitive and emotional activities that produce the fantasies and dreams. Imaginative cues may stimulate sexual arousal and may be critical to maintaining or heightening sexual arousal. As noted by Byrne (1982),

In all probability, the uniquely human contribution to sexuality is the way in which internal images function to increase or decrease sexual arousal, to provide the opportunity to rehearse acts prior to their actual occurrence, to guide ongoing behavior, and to make it possible to take part imaginatively in activities that are unlikely to occur in real life. (p. 232)

Four types of cognitive activities are critical imaginative processes: (a) imaginative play, (b) anticipatory fantasy, (c) memories, and (d) dreams.

Imaginative Play. This process is the creation of erotic ideas, images, and scenarios within one’s imagination that serve as stimuli that may increase sexual arousal. The content of these thoughts is likely to be a combination of memories of past erotically stimulating situations and creation of new, imagined situations that might be arousing. The results are specially tailored fantasies that maximize the amount of sexual arousal experienced by each individual. Fantasizing may occur while involved in actual sexual episodes, such as masturbating or engaging in sexual interaction with a partner; it often also occurs, however, at apparently random times throughout the daily routine for many individuals in the form of daydreams (Byrne, 1982; Leitenberg & Henning, 1995).

Why would individuals even concoct imaginary scenarios in their mind at all? Of what value are fantasies that are specifically tailor-made for each person? The significance of personally tailored erotic fantasy is demonstrated in research in which individuals were asked to fantasize in a laboratory setting. Not only are individuals able to conjure up sexual images and scenarios, they also report being more sexually aroused than individuals in another experimental condition who were presented erotic images and stories by the researcher (Byrne, 1982). Fantasies that are designed to tap into a person's most arousing, titillating concepts very likely fulfill his or her wishes more completely than scenarios designed by someone else. Perhaps active engagement in their creation itself involves the person more in the substance of the fantasies, making them more vivid and meaningful as well.

A review of research on sexual fantasy by Leitenberg and Henning (1995) reveals that large proportions of both women and men have engaged in sexual fantasy. The proportions of women and men experiencing sexual fantasies during nonsexual activities are identical; such fantasies take place during the daily routine, rather than specifically in a sexual situation. Likewise, equally high numbers of women and men fantasize during sexual activity, although men are more likely to report fantasizing during masturbation.

The tendency to engage in sexual fantasy has traditionally been viewed as an indication that an individual has been deprived of sufficient sexual satisfaction, and even as an indicator of psychological problems.



Fantasizing about being forceful or submitting to a forceful partner allows individuals to explore the power and energy involved in sexuality, and to allow oneself to feel release from the demands of responsibility.

active participant, performing a sexual behavior on a sexual partner. Females typically construct fantasies involving a sexual partner doing something sexual to them. Furthermore, men are more likely in comparison to women to fantasize about sexual behavior with a number of partners (Leitenberg & Henning, 1995). Men also have more sexually explicit fantasies, focusing on specific sexual behavior and body features, whereas women are likely to focus more on emotional expression and romantic feelings. Males tend to imagine themselves in a forceful, dominant role, whereas females are more likely to fantasize about submitting to a partner or even being forced to submit (Byrne, 1982; Leitenberg & Henning, 1995). Leitenberg and Henning concluded that both types of fantasies likely serve the same purpose of affirming sexual power and expressing desire for irresponsibility.

One of the most prominent advocates of this view was Sigmund Freud (1908/1962), who proposed within psychoanalytic theory that fantasy results from the lack of sufficient satisfaction. Little empirical evidence exists to support such a view, however. In fact, frequency of sexual fantasy is associated with fewer sexual difficulties, less sexual dissatisfaction, greater levels of sexual activity, and more sexual experience. Leitenberg and Henning concluded that people engage in fantasy to increase sexual arousal and enhance sexual enjoyment, rather than to compensate for dissatisfaction. This is consistent with Byrne's proposal that fantasy is one aspect of imaginative processes that may be used to heighten or maintain arousal.

The content of fantasy often differs to some extent by gender. Males frequently generate mental scenarios in which they are the

As Byrne (1982) cautions, fantasies do not necessarily relate to the types of experiences individuals wish will occur in real life. Byrne draws the following analogy:

To believe, for example, that “rape” fantasies among females indicate a widespread desire to become victims of a criminal assault is analogous to assuming that millions of individuals who spent money to view the movie *Jaws* secretly desire to be consumed by a great white shark. (p. 234)

The nature of sexual fantasies of lesbians and gay men tends to be identical to that of heterosexual women and men, with the gender of sexual partner reversed. That is, lesbians fantasize about women as sexual partners and gay men fantasize about men.

Consistent with Byrne’s proposal within the Sexual Behavior Sequence model (Byrne, 1977, 1982), conditioning resulting from earlier experiences appears to greatly affect the content of fantasy. Conditioning is the strengthening of a response to an aspect of the environment that previously did not generate the response, such as sexual arousal upon listening to a song that did not cause sexual arousal at one time. With respect to fantasy, conditioning usually results from the pairing of the positive experience of sexual arousal with some unrelated event or experience. As described by Leitenberg and Hanning (1995),

elements of scenes found to be arousing are repeatedly paired with further pleasurable arousal and orgasm during masturbation and other sexual activity. What one has read and seen as well as directly experienced further influences the content of one’s preferred fantasies. (p. 491)

In other words, people and situations that have caused sexual arousal in the past tend to become the subject of a person’s fantasies later on.

Anticipatory Fantasizing. Anticipatory fantasizing is imagining what the experience of sexual behaviors and interactions will be like before actually engaging in them (Byrne, 1982). This sometimes simply consists of vague, loosely directed curiosity about the nature of the sensations and feelings that will result from erotic activities. On other occasions, individuals create elaborate scenarios and step-by-step scripts in advance of an actual sexual encounter; this may provide a mental framework that helps guide the person’s behavior during the encounter.

Anticipatory fantasizing would include the type of fantasy in which individuals engage earlier in their life before actually having engaged in any sexual behavior. Byrne (1982) suggests that this type of fantasy may motivate young people to define themselves sexually, that is, to develop their sexual identity. However, individuals who have already engaged in some types of sexual behavior are also likely to fantasize about erotic situations, partners, and specific sexual behaviors before engaging in them. For some individuals, these musings may actually serve as the basis for developing intentions or strategies to engage in a particular behavior or to experience the situation or partner about which they have fantasized. As described by Byrne, “Quite possibly, repeated exposure to self-created exciting scenes of oral sex, anal sex, group sex, sadism, or whatever would similarly increase the possibility of eventually engaging in such behavior” (p. 234).

Memories. Memories are recollections of events experienced by an individual in the past. Recall of sexual experience is likely to serve as a major source of stimulation contributing to sexual arousal (Byrne, 1982). Research has indicated that, if individuals are asked to describe their most exciting sexual fantasies, past sexual experiences are often a major source of information for the fantasies. For most aspects of life, personal participation

in events causes these events to be perceived as especially significant to individuals. Similarly, the sexual encounters an individual experiences himself or herself tend to be especially influential in generating arousal (Kelley, 1979). In fact, memories of previous sexual experiences are often used by individuals to create images and thoughts that enhance arousal leading up to sexual behavior. This type of mental imagery also serves to direct and regulate arousal during sexual behavior (Byrne, 1982).

Dreams. Dreams are images and stories that occur spontaneously and virtually nonconsciously during the rapid-eye-movement (REM) period of sleep. Dreams involving sexual situations typically increase in frequency after the onset of puberty. The increase corresponds with an upsurge in gathering information, thinking about, and possibly experimenting with sexual behavior, including masturbation. Erotic dreaming may coincide with typical physiological arousal during the dreaming process that is virtually identical to the sexual arousal occurring during waking periods. The physiological arousal experienced during dreaming includes erection of the penis for men and, in some cases, even orgasm and ejaculation. The occurrence of ejaculation during sleep in young males is called nocturnal emission, nocturnal orgasm, or in slang terms, “wet dreams” (Byrne, 1982).

Physiological Activation

The physiological aspect of sexual arousal most obviously involves increased blood flow to the genitals in both males and females. As a result of this increase, as well as restricted outflow, the genitals become engorged with increased quantities of blood, causing them to swell and redden. In females, the labia become larger, and the labia minora—the inner, smaller folds of tissue—may enlarge by as much as two to three times their unaroused size. Moisture also seeps through the walls of the vagina because of the elevated blood pressure, increasing the wetness of the vaginal walls and providing a source of lubrication. In males, the accumulation of blood may result in erection of the penis. Other parts of the body also experience an increased blood flow, causing most notably a flushed appearance to the face and torso (Byrne, 1982).

Another reaction to arousal is a heightening of muscle tension, called **myotonia**, causing various muscular tissue to become more rigid and active; this likewise causes the nipples of the breasts in both genders to become erect. At some point in the process, increasing myotonia results in waves of contraction and expansion of the muscle tissue in the genitals and throughout the body that become involved in the intense physical pleasure of orgasm, and ejaculation of seminal fluid by males (Byrne, 1982).



Do you think that the experience of sexual pleasure simply involves an increase in muscle tension and waves of contractions? What other types of factors might also be important?

Some theoretical perspectives have defined sexual arousal entirely in terms of the activation of physiological processes, although it is obvious from the examination of the previous two components of sexual arousal that more is involved than simply activation of body parts. Likewise, another aspect of arousal is the subjective awareness of being sexually interested and experiencing **sexual desire**. This may be measured (e.g., using standardized rating scales as discussed in chapter 5) by asking individuals to report the degree to which they feel sexually aroused or experience sexual feelings. An extremely high level of agreement is typically found between self-reports of arousal and measures of physiological arousal when high-quality measurement procedures are used. Correlations are typically

found in the .80 to .90 range or higher, an exceptionally high level indicating close to complete overlap. The correspondence between self-reported arousal and more objective physiological measures is often somewhat higher for men than for women; however, the overlap for women is nonetheless exceptionally great (Byrne, 1982). An example of a self-report questionnaire of sexual arousal is presented in Box 8.1.

BOX 8.1 AN OPPORTUNITY FOR SELF-REFLECTION

Sexual Excitation Scale

In this questionnaire you will find statements about how you might react to various sexual situations, activities, or behaviors. Obviously, how you react will often depend on the circumstances, but we are interested in what would be the most likely reaction for you. Please read each statement carefully and decide how you would be most likely to react. Then select the number that corresponds with your answer. Please try to respond to every statement. Sometimes you may feel that none of the responses seems completely accurate. Sometimes you may read a statement that you feel is not applicable. In these cases, please select a response that you would choose if it were applicable to you. In many statements you will find words describing reactions such as "sexually aroused," or sometimes just "aroused." With these words we mean to describe feelings of sexual excitement, feeling "sexually stimulated," "horny," "hot," or "turned on." Don't think too long before answering, please give your first reaction. Try to not skip any questions. Try to be as honest as possible. Use the following rating scale: 1 = Strongly agree, 2 = Agree, 3 = Disagree, and 4 = Strongly disagree.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. When I think of a very attractive person, I easily become sexually aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. When a sexually attractive stranger looks me straight in the eye, I become aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. When I see an attractive person, I start fantasizing about having sex with him or her. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. When I talk to someone on the telephone who has a sexy voice, I become sexually aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. When I have a quiet candlelight dinner with someone I find sexually attractive, I get aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. When an attractive person flirts with me, I easily become sexually aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. When I see someone I find attractive dressed in a sexy way, I easily become sexually aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. When I think someone sexually attractive wants to have sex with me, I quickly become sexually aroused. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(Continued)

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(Continued)

- | | | | | |
|--|---|---|---|---|
| 9. When a sexually attractive stranger accidentally touches me, I easily become aroused. | 1 | 2 | 3 | 4 |
| 10. When I see others engaged in sexual activities, I feel like having sex myself. | 1 | 2 | 3 | 4 |
| 11. If I am with a group of people watching an X-rated film, I quickly become sexually aroused. | 1 | 2 | 3 | 4 |
| 12. If I am on my own watching a sexual scene in a film, I quickly become sexually aroused. | 1 | 2 | 3 | 4 |
| 13. When I look at erotic pictures, I easily become sexually aroused. | 1 | 2 | 3 | 4 |
| 14. When I feel sexually aroused, I usually can feel that I am physically aroused or have an erection. | 1 | 2 | 3 | 4 |
| 15. When I start fantasizing about sex, I quickly become sexually aroused. | 1 | 2 | 3 | 4 |
| 16. Just thinking about a sexual encounter I have had is enough to turn me on sexually. | 1 | 2 | 3 | 4 |
| 17. When I feel interested in sex, I usually feel physically aroused or get an erection. | 1 | 2 | 3 | 4 |
| 18. When I am taking a shower or a bath, I easily become sexually aroused. | 1 | 2 | 3 | 4 |
| 19. When I wear something I feel attractive in, I am likely to become sexually aroused. | 1 | 2 | 3 | 4 |
| 20. Sometimes I become sexually aroused just by lying in the sun. | 1 | 2 | 3 | 4 |

To calculate your score for the scale, add together all of the numbers for items. You may want to compare your own scores with the average scores obtained in research by Janssen and his colleagues. The scale was constructed to be used with men only, although the version presented here has been modified to be relevant to both sexes. The average for men was 57.4. The original questionnaire included additional scales, measuring two types of inhibition. Items from all three scales are presented together in random order in that version.

Adapted from Janssen, E., Vorst, H., Finn, P., & Bancroft, J. (2002). The Sexual Inhibition (SIS) and Sexual Excitation (SES) Scales: I. Measuring sexual excitation and sexual inhibition proneness in men. *The Journal of Sex Research*, 39, 114–126. Reprinted with permission from the authors and the Society for the Scientific Study of Sexuality. Please note that the scale has been slightly adapted from the original.

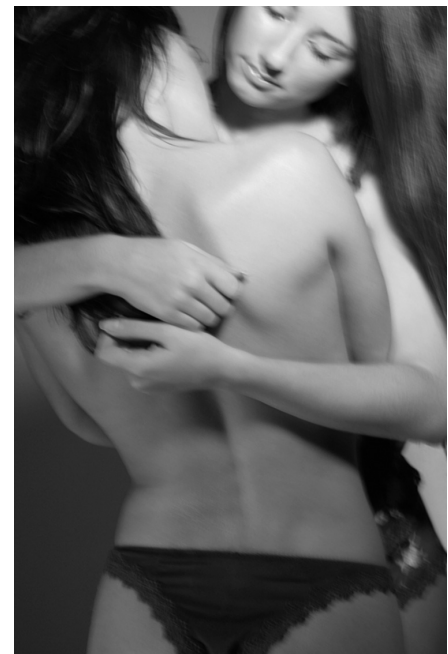
The extent to which physiological arousal is involved in consciously identifying oneself as experiencing sexual desire appears to be different for women in comparison to men, however. This was demonstrated in a study by Chivers, Rieger, Latty, and Bailey (2004). Participants viewed video clips of couples engaged in different types of sexual behavior while physiological arousal was measured. Both heterosexual men and women, and gay men and lesbians, were included. The videos were of (a) two women engaged in oral–genital sex and penetrative sex, with one woman wearing a strap-on dildo that she inserted in the vagina of the other woman; (b) two men engaged in oral–genital sex and penile–anal intercourse; and (c) a man and a woman engaged in oral–genital sex and penile–vaginal intercourse.

A difference was found between women and men in their responses to the various videos. Men experienced heightened sexual arousal only to the videos involving their preferred gender, but did not experience heightened arousal to the videos with only those of the nonpreferred gender. That is, heterosexual men tended to become aroused only to videos portraying women, and gay men became aroused only to videos portraying men. In contrast, two different samples of women were more likely to experience equal or even greater sexual arousal to videos of their nonpreferred gender; specifically for heterosexual women, these were the videos of two women engaged in sex and, for lesbians, they were the videos of two men engaged in sex.

In fact, for the second group of women who were all self-identified heterosexuals, genital arousal was 19% higher for the female–female videos and self-reported arousal was twice as high for the female–female videos compared with the male–male videos. Nonetheless, the women reported being more sexually aroused by the male–female videos than by male–male or female–female videos. As in previous research, this study also found a lower correlation for women between self-reported sexual orientation and genital arousal to the videos than for men; a lower correlation for women was also found between genital arousal and self-reported arousal to the videos.

Chivers and her colleagues (2004) concluded that women tend to have a nonspecific pattern of arousal to sexual stimuli, especially physiological arousal. By this, they meant that sexual stimuli in general produce sexual arousal, rather than only stimuli relevant to their sexual orientation. Yet the results do not support the position that women are inherently bisexual for several reasons. One is that women do not engage in higher rates of same-sex sexual behavior than men. Secondly, the vast majority of women report being sexually attracted exclusively to men. The researchers note that “A self-identified heterosexual woman would be mistaken to question her sexual identity because she became aroused watching female–female erotica; most heterosexual women experience such arousal” (p. 741).

Such a conclusion cannot be drawn about men. Arousal to the same sex in men tends to be associated with a self-identified gay or bisexual orientation. Physiological arousal, especially genital arousal, appears to play a substantially smaller role in the sexual orientation identity of women than it does of men. They suggest that female sexuality may be motivated to a greater extent by factors other than genital arousal, such as by incentives related to emotional intimacy. This proposal finds some support in research on dispositional sexual motives in that, in two out of three studies, women reported stronger



What conclusions would you draw from the finding that women experience sexual arousal to a range of sexual stimuli, including images not relevant to their sexual orientation?

tendencies than men for expressing emotional value for their partner as a basis for their sexual interest (Hill & Preston, 1996).

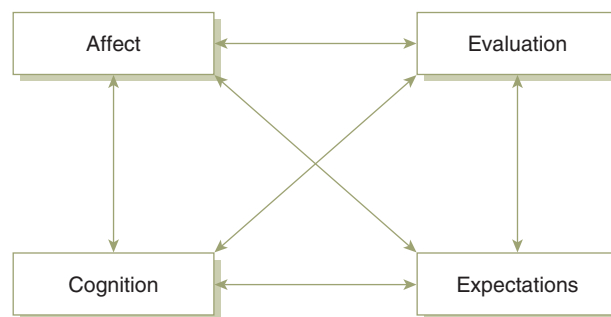
Mediational Factors

The Byrne model (1977, 1982) proposes that other processes besides arousal influence the specific direction that sexual behavior takes. These factors may be thought of as aspects of the *directing component* in the model advocated by Everaerd and colleagues. On the other hand, sexual arousal is the *energizing component*, the other element of the Everaerd model. The energizing component of motivation provides the activation and impetus for behavior.

The second phase of the Byrne sexual behavior sequence involves mediational factors. Mediational factors are aspects of the directing component in that they move sexual arousal toward particular goals and outcomes. The term *mediational* refers to factors that mediate, or occur in between, arousal and the actions constituting overt sexual behavior. The issue of whether the directing component actually occurs after the arousal component has not been established empirically, and it may be the case that the two components occur simultaneously. Most theories of motivation do not conceive of the energizing and directing components occurring sequentially.

Nonetheless, such factors, whether called mediational factors or the directing component of motivation, are important to account for because they determine the specific types of reactions that individuals have to the arousal that they experience. According to the Byrne model (1977, 1982), **mediational factors** are emotional and cognitive systems within the individual through which a person interprets and reacts to sexual arousal (see Figure 8.4). What are these mediational factors? One classic example is the characteristic of erotophobia–erotophilia presented in chapter 5. As discussed previously, not all individuals respond positively to the experience of sexual stimulation and arousal. Some individuals may feel uncomfortable with the experience, although others may have more positive reactions to sexual arousal. However, Byrne actually proposed four general mediational factors: affect, evaluative responses, informational responses, and expectancies.

FIGURE 8.4 Mediational Factors Within the Sexual Behavior Sequence Model



Adapted from Byrne, 1982, and Byrne & Schulte, 1990. Used with permission.

Affect. *Affect* refers to emotional reactions to erotic stimuli and the resulting sexual arousal. Some stimuli produce positive feelings, whereas other stimuli result in negative feelings. Moreover, different individuals typically experience more positive or more negative reactions to sexual stimuli, whereas others typically experience a mixture of both positive and negative emotions or little emotional reactions at all. Research has shown that aggressive reactions to sexual stimuli are more likely to occur if negative emotional reactions result from the stimuli (Byrne, 1982).

Evidence also exists for an effect in the reverse direction, with the experience of *negative* emotions leading to *increased* sexual arousal, possibly contrary to what many people might expect. The tendency to experience negative emotions to many aspects of life in general is a personality characteristic discussed in chapter 5 on personality and sexuality. The characteristic is called **neuroticism**, or sometimes **trait anxiety**. Research by Pedro Nobre and his colleagues (Nobre et al., 2004) has demonstrated that men who typically experience high levels of anxiety—those who are high in neuroticism—tend to experience *higher* levels of physiological arousal to viewing erotic videos than those who typically experience more positive emotions; physiological arousal was measured by the extent to which the men's penises became erect while watching the videos.

The researchers interpreted this finding in terms of **arousal transfer** (Barlow, 2002), an effect that occurs in women as well as men, despite the focus on men in this particular study (Barlow, Sakheim, & Beck, 1983; Hoon, Wincze, & Hoon, 1977; Laan, Everaerd, Van-Aanhold, & Rebel, 1993). Arousal transfer is the increase in behavior of one type (i.e., sexual response) caused by arousal associated with a conceptually unrelated type of behavior (i.e., negative emotions, aggressiveness, anger). This can be explained by the fact that increases in physiological sexual arousal heighten activity in the nervous system in general (specifically, the sympathetic nervous system; Meston & Gorzalka, 1996; Palace, 1995; Palace & Gorzalka, 1990). Consequently, other emotions and behaviors unrelated to sexuality cause sexual arousal to become much more likely due to the overall activation.

Contrary to what might be expected, however, men with higher levels of neuroticism reported *lower* levels of subjective arousal to the erotic videos they viewed; they perceived themselves as experiencing less sexual arousal than men who were lower in neuroticism. The tendency to experience negative emotions in general, therefore, may dampen an individual's ability to detect physiological arousal. This is supported by the fact that, in the study by Nobre and his colleagues (2004), highly neurotic men were less accurate in reporting the high levels of physiological arousal occurring, as indicated by greater erection of the penis.

The study (Nobre et al., 2004) additionally demonstrated that men who experienced more positive feelings while watching the videos reported higher levels of subjective sexual arousal. The finding is consistent with other studies (Heiman & Rowland, 1983; Koukounas & McCabe, 2001; Meisler & Carey, 1991; Mitchell, DiBartolo, Brown, & Barlow, 1998; Rowland, Cooper, & Heiman, 1995; Rowland, Cooper, & Slob, 1996) that indicate that it is not high levels of negative feelings that interfere with sexual arousal; rather it is low levels of positive feelings that diminish arousal. Contrary to what many people might believe, positive emotions individuals experience are typically unrelated to the negative emotions they feel; this means that people are capable of experiencing high levels of both positive and negative emotions at the same time.

This is the reason that it was also found that those who reported more positive feelings at the time of viewing the erotic stimuli were somewhat more likely to have greater levels of physiological arousal; however, these men were more accurate in estimating their level of physiological arousal. Mitchell and his colleagues (1998) have proposed that only the type of negative emotions that diminish physiological arousal, such as sadness and depression, interfere with sexual arousal. Negative emotions that increase physiological arousal, such as anxiety and anger, may actually contribute to sexual arousal through the excitation transfer process.

Such research reveals the critical role that cognitive and emotional processes play in sexual behavior in humans (Everaerd et al., 2001). The experience of sexual arousal therefore is only part of the picture in producing sexual behavior. Emotional reactions to stimuli are also critical. The arousal process, including the early nonconscious aspect, interacts with cognitive and emotional processes to determine the specific types of responses and behaviors that will result from the increased motivation.

Evaluation. Because it is possible to have both positive and negative feelings about a sexual situation at the same time, this sets up something of a puzzle. Will a person act on his or her positive feelings, or instead will the person respond to the negative feelings? This suggests that individuals go through a process that leads the person toward one particular type of behavior or another. Evaluation is the process that results from the combination of all positive and negative affective responses into one single reaction; the reaction may range from extreme liking for the arousal-producing stimuli to extreme dislike of the stimuli (Byrne, 1982).

Relatively stable individual differences have been found with respect to this type of like–dislike dimension in the form of the trait of erotophobia–erotophilia. Individuals who generally experience largely positive evaluative reactions are more likely to approach arousing stimuli and indulge in sexual behavior related to the stimuli. Those with largely negative evaluative reactions tend to avoid sexually arousing stimuli and related sexual behavior (Byrne, 1982).

Cognition and Expectations. Cognition involves knowledge or beliefs about sexual issues. This component of the Byrne model concerns the type of information that individuals possess about sexuality (Byrne, 1982). It includes knowledge of sexual anatomy and physiology. Knowledge also involves understanding social rules and customs related to expected or appropriate behavior, as well as strategies for effectively initiating sexual behavior or attracting partners. Expectations are beliefs about the probability that particular outcomes will result from particular actions. For example, a person may believe that dressing in a sexually provocative way will increase chances of engaging in sexual behavior. That person may be more likely to wear such clothing to attract sexual partners.

Overt Sexual Behavior

The final component of Byrne's Sexual Behavior Sequence model (Byrne, 1977, 1982) is a set of factors called **overt sexual behavior**. This refers to the types of overt sexual behaviors that result from the internal, less directly observable processes of *arousal* and *mediational factors*. Overt behaviors include **arousal-related behavior**, such as viewing erotic videos and generating sexual fantasies; however, presumably in some situations or characteristically for some people who have negative views of sexuality, arousal-related behavior could involve attempts to avoid erotic stimulation or to inhibit sexual arousal. Another type of overt behavior is **instrumental behavior**, meaning behavior in service of advancing a person toward his or her sexual goals. A person's goals may be to engage in sexual behavior, or they may be to avoid sexual behavior or sexual issues. Examples of these are talking about sex, flirting with one's spouse or partner to entice him or her, and purchasing contraceptives in advance of a sexual encounter. A third kind of overt behavior is **goal behavior**, or engaging in sexual stimulation and sexual expression, or avoiding it; this might involve masturbation, sensually stroking the body or genitals of a partner, oral–genital behavior, penile–vaginal intercourse, or penile–anal intercourse.

Depending on the outcomes that result, overt behavior may increase in frequency over time, or they may decrease. Some behaviors may be followed by positive outcomes, such as when instrumental behaviors succeed in initiating sexual behavior; another positive outcome would be the experience of pleasure and positive feelings during sexual behavior. If such outcomes cause the behavior to increase in the future, they are **reinforcers** (rewards), as discussed in chapter 5 concerning learning theory. Other behaviors may result in negative outcomes, such as failure to initiate sexual interaction, not experiencing arousal or orgasm, or discomfort or negative emotional reactions. Such outcomes may lead an individual to avoid engaging in them again in the future to avoid the outcomes; in this case, the outcome is a **punisher**—outcomes that decrease behavior.



Goal behavior involves engaging in sexual stimulation or sexual expression, including sensually stroking and kissing the body of one's partner.

Factors Affecting Attractiveness of Partners

As noted in the section on arousal, the attractiveness of a stimulus is one of the three general factors that affect the intensity of sexual arousal an individual experiences. The physical features of a potential partner, his or her face and body, are certainly factors that play into attractiveness and therefore the degree of arousal an individual might experience. However, physical features may not be the strongest influence, particularly for some individuals. What a person is like in terms of his or her personality—the way he or she typically behaves—is also an important element in attractiveness and the potential for sexual arousal. Table 8.1 presents the characteristics that women and men of various cultures around the world consider to be important in selecting a mate.

Social and Emotional Partner Attributes

Three general types of ideal partner characteristics have been consistently found across a series of studies by Fletcher and Simpson and their colleagues (Fletcher, Simpson, & Thomas, 2000; Fletcher, Simpson, Thomas, & Giles, 1999): (a) **warmth–trustworthiness**, (b) **vitality–attractiveness**, and (c) **status–resources**. The characteristics associated with ideal relationships were also examined. Two sets of characteristics are involved in individuals' conceptions of ideal relationships, which correspond very closely to the first two ideal partner attributes; these are **intimacy–loyalty** and **passion**. Ideal partner and relationship characteristics are more than hypothetical views that have nothing to do with actual real-world outcomes. Research has demonstrated that the overlap of such ideals with perceptions of one's actual partner and relationship is related to greater relationship quality and greater likelihood of the relationship continuing.

The only gender differences were that partner warmth–trustworthiness and relationship intimacy–loyalty were somewhat less important for women than for men. Fletcher and his colleagues (1999) hypothesized that, because women assume that men typically display less commitment and intimacy, women may

TABLE 8.1 Characteristics Considered Important in Mates in 37 Cultures Around the World

Ranking of Characteristics by Women	Ranking of Characteristics by Men
1. Mutual attraction—love	1. Mutual attraction—love
2. Dependable character	2. Dependable character
3. Emotional stability and maturity	3. Emotional stability and maturity
4. Pleasing disposition	4. Pleasing disposition
5. Education and intelligence	5. Good health
6. Sociability	6. Education and intelligence
7. Good health	7. Sociability
8. Desire for home and children	8. Desire for home and children
9. Ambition and industriousness	9. Refinement, neatness
10. Refinement, neatness	10. Good looks
11. Similar education	11. Ambition and industriousness
12. Good financial prospects	12. Good cook and housekeeper
13. Good looks	13. Good financial prospects
14. Favorable social status	14. Similar education
15. Good cook and housekeeper	15. Favorable social status
16. Similar religious background	16. No prior sexual experience
17. Similar political background	17. Similar religious background
18. No prior sexual experience	18. Similar political background

From Buss, D. M., Abbott, M., Angleitner, A., Asherian, A., et al., International preferences in selecting mates: A study of 37 cultures. *Journal of Cross-Cultural Psychology*, 21, 5–47. Copyright © 1990 SAGE Publications, Inc. Reprinted with permission.

develop lower standards for these attributes. Other research has additionally indicated that women are most attracted to men who exhibit characteristics of not only warmth and benevolence, but also dominance. However, high levels of dominance without substantial levels of warmth and compassion in men are not at all as attractive (Jensen-Campbell, Graziano, & West, 1995); this is apparently because dominance without concern for others suggests that such men are capable of taking advantage of and harming others.

In fact, partner attributes similar to those identified by Fletcher and his colleagues have been shown to correlate with theoretically relevant dispositional sexual motives (Hill, 1997). Ratings of the importance of a romantic partner remaining in love with a person (romantically committed) were correlated with the dispositional sexual motive of *desire to express value for one's partner* independently of all other motives. The romantic commitment dimension is directly analogous to the ideal partner attribute of warmth–trustworthiness and the ideal relationship characteristic of intimacy–loyalty. Furthermore, ratings of the importance of a romantic partner being physically attractive in the Hill study were associated with the dispositional sexual motive of *desire for pleasure and excitement* independently of all other motives. Physical attractiveness is directly relevant to the ideal partner attributes of vitality–attractiveness and the ideal relationship attribute of passion.

Ratings of the importance of a romantic partner being respected by one's friends were correlated in the Hill study with the dispositional sexual motive of *desire to be valued by one's partner*; ratings of the importance of a romantic partner's financial potential were related to *desire to exert power over a sexual partner* and *desire to experience the power of one's sexual partner*. Both of these ratings—respect by one's friends and financial potential—are explicitly relevant to the ideal partner characteristic of status-resources.

Such correlations between partner characteristics and interest in sexual incentives provide empirical evidence for a relationship between desirable partner characteristics and sexual attraction. Partner characteristics related to experiencing emotional closeness, psychological comfort, power, and physical and psychological pleasure are therefore likely to be factors that are attractive and lead to sexual arousal. In fact, all of these factors have been shown to relate to increased sexual attraction (Hill, 1997).

Physical Attractiveness

A fundamental issue in the examination of attraction involves physical attractiveness. The question regards the extent to which physical attractiveness is actually involved in perceptions of the desirability of individuals. Despite the common belief that physical appearance should not be a criterion for judging individuals in some people's minds, research indicates that physical attractiveness is in fact rated as the most important factor in arousing sexual desire for both women and men (Graziano, Jensen-Campbell, Shebilske, & Lundgren, 1993; Regan & Berscheid, 1995). Although men tend to give higher value to physical attractiveness than women in some studies of self-reported attitudes, research on actual behavior demonstrates that it has as much of an effect on women's reactions as it does on men's (Feingold, 1990).

One of the earliest demonstrations of the importance of physical attractiveness is a classic study by Walster, Aronson, Abrahams, and Rottman (1966). College students were randomly assigned as dates at a dance during the first week of school. After being allowed to dance and interact with one another for several hours, individuals filled out questionnaires about their liking for their partner and their desire to date the person again. The single most influential factor affecting attraction and their intention to date the person, for both women and men, was the partner's physical attractiveness. Physical attractiveness was determined objectively by ratings made independently by the researchers at the beginning of the study. Measures of personality, aptitude, and background characteristics were vastly overshadowed by physical attractiveness. The same results have been obtained as well for gay men (Sergios & Cody, 1985).

One distinction that has been found to affect judgments about the importance of physical attractiveness is the nature of the relationship individuals are considering. When evaluating the desirable characteristics of a partner for a short-term, uncommitted sexual relationship, both women and men list physical attractiveness as the most important of 23 possible characteristics



Why do you think that physical attractiveness is such an important factor in initial attraction and the desire to become involved in relationships?

presented to them. Physical attractiveness, however, is more important to men than women when considering desirable traits for a spouse, although even for men it was not one of the most important attributes (Regan & Berscheid, 1997).

Advantages Afforded by Physical Attractiveness

Based on meta-analyses of a number of studies on perceptions of physical attractiveness (Eagly, Ashmore, Makhijani, & Longo, 1991; Feingold, 1992), research has consistently found that people believe that physically attractive individuals are more likely to be socially competent, sociable, outgoing, and popular. Moreover, they are thought to be happier, more intelligent, and more successful, as well as sexually warmer. Ratings of before and after pictures of individuals who underwent plastic surgery likewise demonstrate that others' impressions of these individuals change in the expected direction; they were seen as more likeable, sensitive, kinder, and sexually warmer after the surgery (Kalick, 1977). Extremely similar kinds of effects for physical attractiveness are found in other cultures as well (Chen, Shaffer, & Wu, 1997; Wheeler & Kim, 1997).

Research actually provides support for the legitimacy of these stereotyped beliefs to some extent. Physically attractive individuals are in fact likely to be more socially skilled and to indicate that they have more satisfying interactions with others than do less attractive individuals (Feingold, 1992; Langlois et al., 2000; Reis, Nezelek, & Wheeler, 1980; Reis, Wheeler, Speigal, Nezelek, & Perri, 1982).

The effect of physical attractiveness may partially result from the self-fulfilling prophecy; people expect attractive individuals to be warmer, more likeable, and more sensitive, and therefore treat them in that way. The physically attractive individuals are therefore set up and enabled to respond with socially positive behavior. Research has demonstrated such an effect in actual interactions in which participants talked with a person of the other sex on the phone. Physical attractiveness was manipulated by showing the interaction partner a picture that was supposedly of the participants, but was actually an attractive or unattractive model. Both women and men whose interaction partners believed them to be more physically attractive were actually rated as more attractive and socially skilled by independent raters listening to the conversation (Andersen & Bem, 1981; Snyder, Tanke, & Berscheid, 1977).

Meta-analyses have confirmed the positive effects of physical attractiveness on both attitudes and behavior across hundreds of studies, as well as generally finding no differences between women and men. That is, physical attractiveness influences both sexes in exactly the same way (Eagly et al., 1991; Feingold, 1992; Langlois et al., 2000).

Features Contributing to Physical Attractiveness

Facial Attractiveness

Although standards for deciding facial attractiveness vary to a great extent across culture, time, and individuals (Morse & Gruzen, 1976), certain core features appear to be common to judgments of attractiveness (Berscheid & Reis, 1998; Cunningham, Roberts, Barbee, Druen, & Wu, 1995; Langlois et al., 2000); ratings of faces across different raters are highly correlated with one another, even across different cultures (Langlois & Roggman, 1990). With respect to female facial features, Cunningham (1986) demonstrated that men's ratings of the physical attractiveness of photographs of various women were correlated with (a) larger eyes and larger pupils; (b) high eyebrows; (c) more prominent cheekbones, but narrower cheeks; (d) smaller nose and chin;

and (e) a bigger smile. In addition, an underlying feature of attractiveness is **symmetry**, meaning that both sides of the face or the body have essentially identical appearances.

A later study of male facial features (Cunningham, Barbee, & Pike, 1990) found that larger eyes, stronger cheekbones, a broader chin, and a larger smile were associated with physical attractiveness. The larger eyes and smaller nose are called **babyface features**, because they are characteristic of infants. Such features tend to evoke a sense of warmth and a desire to provide caregiving, a typical first reaction when individuals encounter baby animals and young children (Berry, 1995; Zebrowitz, 1997). The larger cheekbones are associated with sexual maturity and dominance, attributes central to conceptions of masculinity (Sadalla, Kenrick, & Vershure, 1987).

However, the most attractive male face is actually a combination of features related to warmth and masculinity. In a study of faces of African American men depicted through line drawings, the head shape rated most attractive and socially competent possessed only a moderate degree of masculine features (Wade, Dyckman, & Cooper, 2004). The authors of the study concluded that masculine features in men are attractive to an extent; however, extreme masculinity may also be associated with negative aspects of masculinity, such as strong aggressiveness and excessive dominance.

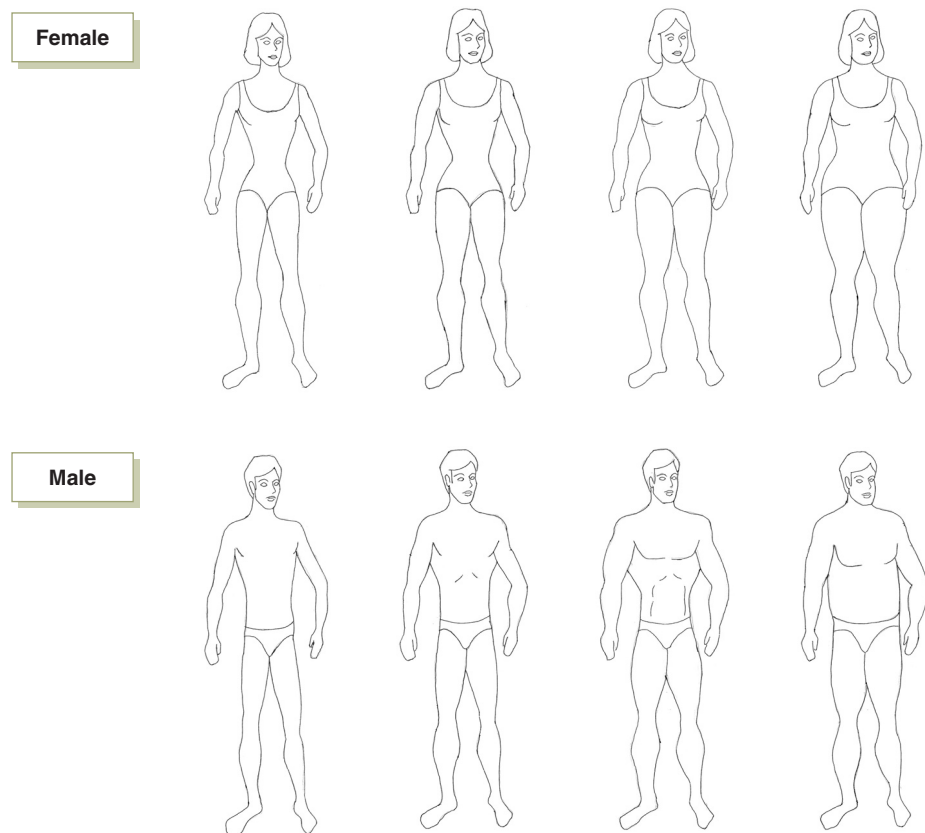
Body Features

Substantially more research has been conducted on the attractiveness of body features and physique for women than for men. Several methods of determining the attractiveness of the body have been proposed, most notably the waist-to-hip ratio (WHR) method and the body mass index (BMI). The WHR is calculated by determining the circumference of the waist at its narrowest point (e.g., the number of inches around) and dividing it by the circumference of the hip at its widest point. This provides an indication of the amount of fat around the middle part of the body, a feature associated with greater health risk (Bjorntorp, 1988), lowered reproductive success (De Ridder et al., 1990; Kaye, Folsom, Princeas, Potter, & Gapstur, 1990; Rebuffe-Scrive, Cullberg, Lundberg, Lindstedt, & Bjorntorp, 1989), and advancing age (Kirschner & Samojilik, 1991). The body mass index is a measure of the proportion of fat relative to muscle tissue in the body.

The guiding hypothesis of most research on the relationship of body shape and size to perceptions of attractiveness is that males are more attracted to females with lower WHR values; lower WHR values result from smaller waists and less fat around the middle of the body relative to the hips. The range of WHR values that are found for the typical woman prior to menopause, when fertility declines and then ends, is 0.67 to 0.80. The typical range for men is between 0.85 and 0.95. A number of studies (Singh, 1993a, 1993b, 1994) using line drawings of female figures have demonstrated that lower WHR (specifically a value of 0.70) is associated with perceptions of greater attractiveness and healthiness; this relationship has also been found in non-U.S.



Celebrities known for their attractiveness possess many of the features that research has identified as contributing to facial attractiveness.

FIGURE 8.5 Line Drawings Portraying Female and Male Physiques of Various Proportions

cultures as well (Furnham, McClelland, & Omer, 2003; Furnham, Moutafi, & Baguma, 2000). These types of female figures have waists that are 30% narrower than their hips.

High WHR values, whether due to being overweight or underweight, are perceived as less attractive. Even overweight figures in which the waist is narrower than the hips are viewed as more attractive than overweight figures with bigger midriff areas. Although not exactly the ones used in the cited studies, the line drawings in Figure 8.5 provide an idea of the type of stimuli used in such research. The relationship between WHR and attractiveness has likewise been replicated using photographs of individuals digitally altered to produce figures of different WHR values (Furnham, Mistry, & McClelland, 2004).

Some research indicates that body size has similar effects on attractiveness for both Black and White individuals (Meshreki & Hansen, 2004). However, other research has found that African American men consider the ideal size to be somewhat larger than European American men (Jackson & McGill, 1996; Rosenfeld, Stewart, Stinnett, & Jackson, 1999). In these two studies, both African American women and European American women perceived a slightly thin male body as more attractive than heavier bodies.

Box 8.2**An Eye Toward Research****How Do Men and Women Feel About Their Bodies?**

In one of the few studies concerning the attractiveness of the male body, Lynch and Zellner (1999) examined perceptions of college women (18–23 years old) compared with older women (30–60 years); they also examined the beliefs of college men and older men about the body type that women find attractive. College women preferred a physique that is more muscular than college men typically believe they have, based on self-ratings by college men in this study. However, college men wanted to have a body that is more muscular than college women reported that they most preferred, because college men thought that the more muscular body is the type that everyone finds most attractive. Older women preferred a less muscular type of male body than college women, the type that older men reported that they currently had. Moreover, older men indicated that they preferred having the type of body they currently had. In other words, older men were satisfied with their muscularity, a feeling that matched the preference of older women. Yet, college women preferred a body type that was somewhat more muscular than college men believe they had, but less muscular than the type that men would like to have.

In a study by Barnett, Keel, and Conoscenti (2001), both Asian and Caucasian college women evaluated their current body as somewhat larger than their ideal body type. Asian men on average, however, believed that their bodies were smaller than their ideal body type. Current body type and ideal body type were virtually identical for Caucasian college men. Increasing pressures for Westernization may be partially responsible for the dissatisfaction expressed by Asian women, even in Asian countries; however, Barnett and her colleagues note that traditional values in Asian societies likewise promote a desire for thinness. Asian men may be even more susceptible to pressures for Westernization, which increases their desire to achieve the Western ideal of a larger, muscular body type. Other research indicates that Asian men who have adopted U.S. values to a greater extent are more driven toward perfectionism than are Asian women (Davis & Katzman, 1999).

References

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Genital Features

Virtually no empirical research exists on perceptions of the attractiveness of female and male external genitals. In fact, it appears that no empirical research has been conducted on perceptions of the attractiveness of female genitals at all. Little thought apparently has been devoted to the nature of female genitals

in general, likely accounting for the reason that most people use incorrect terms when referring to female external genitals. The term typically used to talk about female genitals is *vagina*, which is actually an internal sexual structure, the muscular passageway leading outside from the uterus. The correct term for female external genitals is *vulva*, as discussed in chapter 6, which includes the clitoris, labia majora, and labia minora. Most people are essentially unaware of the existence or nature of the clitoris and believe that the inner portion of the vagina is the most sensitive area of the sexual organs, an inaccurate belief. Women tend to report the experience of less pleasure resulting from sexual intercourse than men, a finding that may be accounted for partially by lack of knowledge about the role of the clitoris in sexual pleasure (Ogletree & Ginsburg, 2000).

Only a few studies exist on perceptions of the penis. One study examined perceptions of penis size as it was described in written scenarios about a sexual encounter between a man and a woman (Fisher, Branscombe, & Lemery, 1983). Some participants in this study read a description in which the man was portrayed as having a three-inch penis (small); another version portrayed the man as having a five-inch penis (medium), whereas a third scenario described the man's penis as eight inches long (large). The descriptions were all significantly arousing to both females and males, regardless of penis size, even though the researchers verified that participants were aware of the size of the penises described. Nonetheless, penis size was unrelated to reported sexual arousal for both females and males, with two exceptions.

The first exception involved erotophilia, an aspect of personality involving positive attitudes toward sexuality as discussed in chapter 5. Greater arousal to the scenarios describing the medium or large penis was reported by men who were more erotophilic. Erotophilic women reported greater arousal to the description of the man with the large penis, but no differences were found among women for the other two sizes. The second exception involved men with greater numbers of past sexual partners. Such men reported less arousal to the scenarios of the man with either a small or large penis than did those with fewer sexual partners. Rather, men with greater numbers of past sexual partners experienced more arousal to the depiction of the man with a medium penis.

All of the relationships between variables were fairly small, although statistically significant. Therefore, Fisher and his colleagues concluded that, in general, penis size is not very important to either women or men in terms of sexual arousal. The researchers speculated that, for erotophilic women and men, penis size may serve somewhat as a cue related to sexual pleasure. The cue possibly causes them to become more aroused through positive associations with sexual pleasure they have developed. In contrast, those who are erotophobic experience negative reactions to sexual stimulation, as well as to many issues related to sexuality.

With respect to the greater arousal to the story describing the medium penis by men with more sexual partners, it is likely that men with greater sexual experience feel more confident in their sexual natures. With less concern about sexual adequacy, they may have come to value their own penis attributes to a greater extent than with fewer sexual partners. Because more men possess, by definition, a penis closer to average size, they may have identified more with the man described as having the medium penis, leading to greater arousal.

Summary

Incentive theory of motivation focuses on incentives, the specific features of sexual experience that provide pleasure intrinsic to sexuality. The availability of sexual incentives in the environment and stronger dispositional sexual motives of the person heighten sensitivity to the incentives and increase the inclination to seek out the incentives to experience them.

Two theoretical models of sexual motivation attempt to account for the process through which sexual motivation produces sexual behavior, one advanced by Byrne (1977, 1982) and the other by Everaerd, Laan, Both, and Spiering (2001). Sexual arousal is the first phase for the two models; as sexual arousal increases, the probability of sexual behavior is proposed to increase as well. In Byrne's Sexual Behavior Sequence model, sexual arousal is conceived as consisting of three interacting components: (a) external stimuli, (b) imaginative processes, and (c) physiological activation.

The second phase of the Sexual Behavior Sequence model involves mediational factors, affective and cognitive systems involved in interpreting and reacting to sexual arousal. Evaluative responses involve the combination of all positive and negative responses into one single reaction. Informational responses are a third type of mediational factor, consisting of knowledge and beliefs that individuals possess regarding sexuality. The third phase of the Sexual Behavior Sequence model is behavior, the overt sexual behaviors that result from the arousal and mediational phases.

Specific attributes that increase the attractiveness of potential sexual partners may

be categorized into two groups, (a) social and emotional attributes and (b) physical attributes. Theory and research have identified three types of ideal partner characteristics that are social and emotional attributes:

- (a) warmth–trustworthiness,
- (b) vitality–attractiveness, and
- (c) status–resources.

Physical attractiveness likewise involves a set of attributes that are extremely important in romantic and sexual attraction for both women and men. It is especially influential when individuals are considering the desirable characteristics of a partner for a short-term, uncommitted sexual relationship. Nonetheless, physical attractiveness is more important to men when considering desirable characteristics of a spouse, although even for men it was not rated as one of the most important attributes.

Particular facial features are associated with physical attractiveness. Symmetry of features is a central aspect of attractiveness, such that both sides of the face and body have essentially identical appearances.

Women's figures with smaller waist-to-hip ratios (WHR), in the 0.67 to 0.80 range, are viewed as most attractive—the classic hourglass shaped figure. These perceptions have been found across different racial groups. The most attractive male physique is that which is somewhat muscular.

Although virtually no research has been conducted on features of female genitalia that are related to attractiveness, a few studies have been conducted regarding the penis. In general, penis size portrayed in written scenarios is unrelated to self-reported sexual arousal for both men and women.

Chapter 8 Critical Thinking Exercises

1. Incentives for Sexual Expression

Think of specific events or times when you have engaged in sexual behavior with another person because you wanted to do so, or times you have *wanted* to engage in sexual behavior of some type, but did not. In your own words, what specifically caused you to want sexual behavior? That is, what particular experiences, outcomes, feelings, and sensations did you hope to have as a result of the sexual behavior?

2. Sexual Arousal

Conditioned stimuli are aspects of the environment that come to elicit a specific response only after training or experience (e.g., the fragrance of roses causing sexual arousal). What nonsexual events or objects might more easily become associated with sexual arousal through repeated pairing with sexual arousal? Can you think of any generally nonsexual situations or objects that have come to make you think of sexual issues, or that arouse you sexually? How do you think this association developed for you in particular? That is, how did the event or object become paired with sexual arousal?



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