#### NORTHWESTERN UNIVERSITY

Erotic Target Identity Inversions in Male Furries, Adult Baby/Diaper Lovers, and Eunuchs

#### A DISSERTATION

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#### **Abstract**

Sexual orientation is conventionally understood as relative attraction to men versus women. It has recently been argued that male sexual orientation in particular can be extended to include other dimensions of sexual attraction besides gender, such as sexual maturity and location. With respect to the dimension of location, most men are sexually attracted to other individuals and thus have external erotic targets, but some men are also or instead sexually aroused by the fantasy of being one of those individuals and thus locate an erotic target within their own body. Men with this internalized sexual attraction have an *erotic target identity inversion* (ETII), and they may be motivated to change their appearance and behavior to become more like their internalized erotic target. Autogynephilia is likely the most common ETII, and it occurs when a man's sexual attraction to women is internalized such that he is sexually aroused by fantasizing about being a woman himself. There is also systematic evidence supporting two other ETIIs, one in men who desire limb amputation and the other in men sexually attracted to children. In both ETIIs, men's preferred external erotic target (amputees or children) corresponds with their internal erotic target (fantasy of being an amputee or a child). The present research examined the extent to which ETIIs exist among three different populations of men who desire to change their appearance and behavior, perhaps for sexual reasons: male furries (Study 1; n = 334), adult baby/diaper lovers (Study 2; n = 148), and eunuchs and eunuch wannabes (Study 3; n = 75). Study 1 showed strong evidence for the idea that male furries are motivated by an ETII. Both sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal were nearly universal in that sample. Furthermore, male furries tended to be sexually aroused by fantasizing about being the same kinds of anthropomorphic animals to

whom they were sexually attracted, with respect to gender and species. In contrast, results of Study 2 did not support the idea that male adult baby/diaper lovers are motivated by an ETII. Contrary to the concept of ETIIs, few in that sample reported sexual attraction to babies, although many did report sexual arousal by the fantasy of being a baby. Results of Study 3 were the least clear regarding the idea that eunuchs and eunuch wannabes are motivated by an ETII. Both sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man were commonly reported in that sample, and eunuch and eunuch wannabes tended to be sexually aroused by fantasizing about being the same kinds of men to whom they were sexually attracted, with respect to castration form or genital modification. However, sexual attraction to castrated men was not as common as sexual arousal by the fantasy of being a castrated man. Thus, relative to Studies 2 and 3, Study 1 most clearly supports the concept of ETIIs and the notion that an erotic target's location constitutes an important dimension of male sexual orientation. Despite their differences, all three studies found a high prevalence of sexual motivation and non-heterosexual identities in their samples of male furries, adult baby/diaper lovers, and eunuchs and eunuch wannabes.

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#### **General Introduction**

Most people understand *sexual orientation* to mean relative attraction to men versus women. Some researchers (Blanchard, 2015; Hsu & Bailey, 2017; Seto, 2017) have recently argued that the meaning of sexual orientation can be extended to include other dimensions of sexual attraction besides gender, at least in men. For example, men vary in the extent to which they are attracted to sexually mature adults (*teleiophilia*) compared with prepubescent or pubescent children (*pedohebephilia*) (Bailey, Hsu, & Bernhard, 2016; Seto, 2012, 2017). It has been argued that important aspects of this dimension of sexual attraction—early onset, strong arousal by some but not all gender-age categories, and stability across time—are identical to the reasons why we refer to relative attraction to men versus women as sexual orientation.

In addition to gender and sexual maturity, another dimension of men's sexual attraction may comprise sexual orientation. This dimension is likely to be less familiar and more puzzling: the degree to which men are sexually attracted to other individuals or instead sexually aroused by the fantasy of being one of those individuals (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). Although most men are sexually attracted to other individuals (e.g., women) and thus have external erotic targets, some men are sexually aroused by the fantasy that they are one of those individuals and thus locate an erotic target within their own body. In the latter case, their sexuality comprises an *erotic target identity inversion* (ETII; Freund & Blanchard, 1993).

Men with ETIIs vary in the extent to which they retain attraction to other individuals (Blanchard, 1989b, 1992). Indeed, some men with ETIIs are *analloerotic*, or exclusively sexually aroused by fantasizing about themselves as another individual. Because they do not experience sexual attraction to others, analloerotic men with ETIIs may report that they are asexual

(Bogaert, 2012; Brotto & Yule, 2017). Those unfamiliar with ETIIs may also assume that they lack any kind of sexual attraction at all. Among men with ETIIs who retain sexual attraction to others, the external and internal erotic targets are similar. For example, men sexually aroused by the fantasy of being a woman are sexually attracted to actual women, if they are attracted to other individuals at all. Thus, ETIIs reflect the extent to which men's sexual attraction is external versus internal on a dimension that may be considered an erotic target's location (Blanchard, 2015; Hsu & Bailey, 2017).

ETIIs can motivate men to change their appearance and behavior to become more like their internalized erotic target (Bailey, 2003; Blanchard, 1989a, 1991; Freund & Blanchard, 1993; Lawrence, 2006, 2009, 2013). For example, men sexually aroused by the fantasy of being a woman are often motivated to cross-dress and to act like women (Bailey, 2003; Blanchard, 1991; Blanchard, Racansky, & Steiner, 1986; Hsu, Rosenthal, & Bailey, 2015; Hsu, Rosenthal, Miller, & Bailey, 2017; Lawrence, 2013). Some men are so strongly motivated by ETIIs that they seek expensive and irreversible medical procedures to make their bodies more like their internalized erotic target. For example, some natal males sexually aroused by the fantasy of being a woman are motivated to seek sex reassignment surgery in order to make their bodies more like those of women (Bailey, 2003; Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009, 2013). Recently in Western countries, most natal males who have completed sex reassignment surgery appear to be motivated by ETIIs (Lawrence, 2010).

In the following sections, I review the three ETIIs that have received the most scientific attention, one of which exists in men attracted to women, the second in men attracted to amputees, and the third in men attracted to children. I then propose research to examine whether

ETIIs exist among three different populations of men who desire to change their appearance and behavior, perhaps for sexual reasons: male furries, adult baby/diaper lovers, and eunuchs.

#### Autogynephilia

Autogynephilia is a natal male's propensity to be sexually aroused by the thought or image of being a woman (Blanchard, 1989a), and it is the best studied example of an ETII (Blanchard, 2005; Lawrence, 2013). Autogynephilia occurs in natal males who are sexually attracted to women (Blanchard, 1991, 1993a; Freund & Blanchard, 1993; Lawrence, 2007). However, autogynephilic males' attraction to women has been internalized to some degree, such that they are also sexually aroused by the fantasy of being a woman. Although autogynephilia usually coexists with sexual attraction to women, sometimes the internalization is so complete that the autogynephilic male does not experience sexual attraction to women. Because women are the preferred erotic targets of most men, autogynephilia is likely to be the most common form of ETII (Blanchard, 1993b).

Most commonly, autogynephilia manifests as erotic cross-dressing, usually by adolescence (Bailey, 2003; Blanchard, 1991; Blanchard et al., 1986; Hsu et al., 2015, 2017; Lawrence, 2013). The specific erotic interest in cross-dressing is called *transvestic fetishism* (sometimes shortened to *transvestism*). Cross-dressing is a relatively easy, impermanent, and inexpensive way for a man to make himself look more like a woman. Thus, autogynephilic males often cross-dress to satisfy their sexual fantasy of being a woman. Some find it erotic to fantasize about having female-typical anatomy like breasts or a vagina. These anatomically autogynephilic males are more likely to experience *gender dysphoria*, or recurrent and intense feelings of discontent with being male (Blanchard, 1993a, c). For some autogynephilic males, gender

dysphoria and motivation to become a woman are so strong that they pursue sex reassignment surgery (Blanchard, 1991; Lawrence, 2004). The first row of Table 1 lists autogynephilia and its related phenomena as they pertain to the concept of ETIIs.

Studies that have examined the co-occurrence of autogynephilia and sexual attraction to women among gender dysphoric natal males or male-to-female transgender women provide indirect evidence supporting the idea that autogynephilia is an ETII. These studies have converged on the general finding that gender dysphoric natal males (Blanchard, 1985, 1989b, 1992; Blanchard, Clemmensen, & Steiner, 1987; Freund, Steiner, & Chan, 1982; Zucker et al., 2012) and transgender women (Lawrence, 2005; Nuttbrock et al., 2011; Smith, van Goozen, Kuiper, & Cohen-Kettenis, 2005; Veale, Clarke, & Lomax, 2008) who are sexually attracted to women report higher levels of autogynephilia or erotic cross-dressing, compared with those who are exclusively sexually attracted to men. Conversely, men with transvestic fetishism overwhelmingly report at least some attraction to women, with the majority identifying as heterosexual (Docter & Fleming, 2001; Docter & Prince, 1997; Långström & Zucker, 2005; Zucker et al., 2012). A recent online study of men who endorsed items explicitly assessing autogynephilia found that 81% identified as heterosexual and 15% as bisexual, further

Table 1
Sexual attraction to erotic targets, erotic target identity inversions, and their related phenomena in men

Erotic targets	Sexual attraction to erotic targets	Erotic target identity inversion	Manifestation of erotic target identity inversion	Related identity dysphoria
Women	Gynephilia	Autogynephilia	Cross-dressing (Transvestism)	Gender dysphoria
Amputees	Acrotomophilia	Apotemnophilia	Pretending	Body integrity dysphoria
Children	Pedohebephilia	Autopedophilia	Dressing in children's clothing (Pedovestism)	Age dysphoria

suggesting that this population is near exclusively comprised of men sexually attracted to women (Hsu et al., 2015). Such findings would be predicted if autogynephilia is an ETII involving the internalization of sexual attraction to women.

Consistent with the concept of ETIIs, gender dysphoric natal males and transgender women sexually attracted to women tend to report much more autogynephilia than do those not attracted to women (e.g., Blanchard, 1992). There is also a strong tendency for autogynephilic men to report sexual attraction to women (e.g., Hsu et al., 2015). Because men have such a high base rate of sexual attraction to women, these findings are neither entirely surprising nor strong evidence for the concept of ETIIs. Indeed, some transgender women insist that they are "lesbians trapped in a man's body" and vehemently oppose the idea that their sexual attraction to women is related to autogynephilia (Dreger, 2008). If these individuals admit to experiencing autogynephilia, they argue that it is an expression of their latent feelings of being female, rather than an ETII. There are other, less common but more perplexing phenomena that provide more persuasive evidence for the concept of ETIIs. I review the most compelling example next.

#### **Apotemnophilia**

Lawrence (2006) argued that men who desire limb amputation are motivated by an ETII. Their desire is, according to Lawrence, analogous to some autogynephilic men's desire for sex reassignment surgery. For men who desire limb amputation, the motivation is *apotemnophilia*, or sexual arousal by the thought or image of being an amputee (Money, Jobaris, & Furth, 1977), which can be conceptualized as the ETII that occurs in men with *acrotomophilia*, or sexual attraction to amputees (Money, 1986). In this case, their attraction to amputees has been internalized to some degree, such that they are sexually aroused by the fantasy of being an

amputee.

In a study conducted by First (2005), 67% of 52 participants who desired limb amputation reported sexual arousal from the fantasy of being an amputee, and 87% reported sexual attraction to amputees. More recent surveys of primarily men who desire limb amputation have also found large percentages reporting sexual arousal from the fantasy of being an amputee and sexual attraction to amputees (Blom, Hennekam, & Denys, 2012; Blom, van der Wal, Vulink, & Denys, 2017; Pregartbauer, Schnell, & Kasten, 2014). Thus, following the concept of ETIIs, men who desire limb amputation tend to report both apotemnophilia and acrotomophilia. The tendency for apotemnophilic men to be especially attracted to amputees cannot plausibly be explained by high base rates, in contrast to the tendency for autogynephilic males to be especially attracted to women.

There are other parallels between those with apotemnophilia and those with autogynephilia (Lawrence, 2006). For example, in First's (2005) study, 92% of participants reported that they engaged in *pretending*, which is temporarily presenting as an amputee through prosthetics or other means. Pretending may involve binding or otherwise concealing a limb, and using crutches or a wheelchair to impersonate an amputee. Similar to cross-dressing in autogynephilic males, pretending is a relatively easy, impermanent, and inexpensive way for apotemnophilic men to look more like amputees and to thus satisfy their sexual fantasy of being an amputee. Some apotemnophilic men also experience *body integrity dysphoria*, or distress over having an intact body, which is often accompanied by a desire for limb amputation. Among participants in First's study, 17% successfully had a limb amputated. Similarly, some

<sup>&</sup>lt;sup>1</sup> The condition has also been called *body integrity identity disorder* (First, 2005), but I refer to it here as body integrity dysphoria to be consistent with gender dysphoria.

autogynephilic males experience gender dysphoria and the desire for sex reassignment surgery. Taken together, the parallels between apotemnophilia and autogynephilia provide evidence that both belong to the same dimension of sexual orientation, one best explained by the concept of ETIIs. The second row of Table 1 lists apotemnophilia and its related phenomena as they pertain to the concept of ETIIs.

Most of the participants in First's (2005) study were heterosexual men. The concept of ETIIs raises the question of whether apotemnophilic men sexually attracted to female amputees are also likely to have autogynephilia (Lawrence, 2006). After all, their preferred erotic targets are women as well as amputees. First found elevated rates of various manifestations of autogynephilia in his sample, including cross-dressing (29%), transvestic fetishism (15%), and desire for sex reassignment surgery (12%). The rate of transvestic fetishism in First's sample is five times the rate of only 3% reported in the general male population by Långström and Zucker (2005).

#### Autopedophilia

Until recently, no other putative ETII besides autogynephilia and apotemnophilia had received systematic empirical study. Freund and Blanchard (1993) provided at least one good lead by presenting several cases of pedohebephilic men who were sexually aroused by fantasizing about being a child or dressing in children's clothing. These men appear to have been motivated by an ETII involving sexual arousal by the thought or image of being a child, which Lawrence (2006, 2009) has called *autopedophilia*. In this case, pedohebephilic men's attraction

<sup>&</sup>lt;sup>2</sup> The term *autopedohebephilia* would be more accurate, but it is cumbersome and inconsistent with existing terminology. Thus, I use the term *autopedophilia* to mean sexual arousal by the thought or image of being either a prepubescent or a pubescent child.

to children has been internalized to some degree, such that they are sexually aroused by the fantasy of being a child.

Following the seminal publication by Freund and Blanchard (1993) and two other case reports on autopedophilia (Dickey, 2007; Howitt, 1995), Hsu and Bailey (2017) examined whether autopedophilia exists and can be conceptualized as an ETII in a non-forensic, non-clinical sample of pedohebephilic men recruited anonymously from the Internet. They found that a greater percentage of 475 pedohebephilic participants reported some degree of autopedophilia (49%) than some degree of autogynephilia (32%). Furthermore, pedohebephilic participants were more intensely autopedophilic than they were autogynephilic, d = 1.50, based on continuous measures that assessed both autopedophilia and autogynephilia. These results were consistent with the concept of ETIIs: Because pedohebephilic men are preferentially attracted to children rather than to women, they should be more autopedophilic in prevalence and degree than autogynephilic, despite the fact that autogynephilia is likely the more common ETII in general. Like the tendency for apotemnophilic men to be especially attracted to amputees, the tendency for pedohebephilic men to be especially autopedophilic cannot be explained by high base rates.

Hsu and Bailey (2017) presented additional results that suggest parallels between autopedophilia and autogynephilia. For example, the degree of autopedophilia was related to the frequency of dressing in children's clothing in their sample, and 13% of their autopedophilic participants reported that they had ever dressed in children's clothing as an adult. The specific erotic interest in wearing children's clothing is called *pedovestism* (Lawrence, 2006, 2009). Dressing in children's clothing is a relatively easy, impermanent, and inexpensive way for autopedophilic men to look more like children, and it appears analogous to both cross-dressing in

autogynephilic males and pretending in apotemnophilic men. In addition, just as some autogynephilic males experience gender dysphoria and the desire for sex reassignment surgery, and some apotemnophilic men experience body integrity dysphoria and the desire for limb amputation, some autopedophilic men experience *age dysphoria* (distress over being an adult) and the desire to physically become a child (Freund & Blanchard, 1993; Hsu & Bailey, 2017). Although the desire to physically become a child cannot be actualized, Freund and Blanchard described a pedohebephilic man who wished to have his foreskin reconstructed to look like a young boy's. The parallels between autopedophilia and autogynephilia, in addition to those between both phenomena and apotemnophilia, suggest that all three share a common explanation, and the concept of ETIIs is the best candidate. The third row of Table 1 lists autopedophilia and its related phenomena as they pertain to the concept of ETIIs.

Consistent with the concept of ETIIs, autopedophilic men in the study by Hsu and Bailey (2017) tended to be sexually aroused by the fantasy of being the same kinds of children to whom they were sexually attracted, with respect to gender and age. For instance, autopedophilic men sexually attracted to girls more commonly found it sexually arousing to imagine themselves as a girl (58%), and autopedophilic men sexually attracted to boys overwhelmingly found it sexually arousing to imagine themselves as a boy (96%). In addition, sexual attraction to children of a particular gender-age category (e.g., girls 4-10) among autopedophilic men was most strongly correlated with sexual arousal by the fantasy of being a child of the same gender-age category.

#### ETIIs as Paraphilias

Autogynephilia, apotemnophilia, and autopedophilia may be considered *paraphilias*.

Indeed, Freund and Blanchard (1993) suggested that all ETIIs may be considered paraphilias, an

ill-defined set of unusual sexual interests that include pedohebephilia, acrotomophilia, zoophilia, exhibitionism, voyeurism, masochism, and sadism, among others. Although paraphilias are not pathological by nature, they may cause significant distress or impairment in an individual, or they may cause an individual to harm others. Such instances of paraphilias have been called *paraphilic disorders* in the most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed. [*DSM-5*]; American Psychiatric Association, 2013).

Because they have not been clearly defined or understood, paraphilias have been criticized as a scientifically vacuous concept that is based on value judgments regarding which sexual interests are more or less socially desirable (e.g., Moser & Kleinplatz, 2006). Two important observations, however, support the scientific validity of paraphilias as a concept with limited but promising support: Paraphilias are much more commonly found in natal males than in natal females, and paraphilias tend to co-occur within the same individual (Abel & Osborn, 1992; Baur et al., 2016; Dawson, Bannerman, & Lalumière, 2016; Joyal & Carpentier, 2017; Långström & Seto, 2006; Långström & Zucker, 2005). Both of these general findings suggest that classifying a sexual interest as a paraphilia is more scientifically meaningful than a mere value judgment.

Paraphilias have typically been classified as sexual interests in either non-normative erotic targets (e.g., pedohebephilia, zoophilia), or non-normative sexual activities (e.g., masochism, sadism) (Freund, Seto, & Kuban, 1996). ETIIs may represent another class of paraphilias that consist of sexual interests in an erotic target's non-normative location within one's own body (e.g., autogynephilia), resulting in sexual arousal by the fantasy of being the erotic target (Freund & Blanchard, 1993). Consistent with their conceptualization as paraphilias,

ETIIs have thus far been observed almost exclusively in natal males rather than in natal females. For instance, First's (2005) study included only four women out of 52 participants who desired limb amputation. Also consistent with their conceptualization as paraphilias, ETIIs tend to co-occur, such as autogynephilia most notably with apotemnophilia (First, 2005; Lawrence, 2006) and autopedophilia (Hsu & Bailey, 2017). In addition, at least two other unusual sexual interests that might be classified as paraphilias but not ETIIs have been shown to co-occur with autogynephilia: masochism (Blanchard & Hucker, 1991; Hsu et al., 2015; Långström & Zucker, 2005; Lawrence, 2006, 2013) and gynandromorphophilia (sexual interest in transgender women with a penis; Blanchard & Collins, 1993; Hsu, Rosenthal, Miller, & Bailey, 2016; Rosenthal, Hsu, & Bailey, 2017).

#### **The Present Research**

It is unlikely that ETIIs are limited to the three that I have reviewed so far. Two promising approaches to studying ETIIs have been employed sparingly so far. The first, used by Hsu and Bailey (2017) in their study of autopedophilia, is to recruit participants sexually attracted to specific kinds of individuals (e.g., pedohebephilic men) and examine whether a subset of them report sexual arousal by the fantasy of being one of those individuals, consistent with the concept of ETIIs. The second, used by Lawrence (2006) in her work on apotemnophilia, is to recruit participants who desire to change their appearance or behavior to become more like a specific kind of individual (e.g., men who desire limb amputation), and to examine the extent to which they are motivated by ETIIs. Individuals who might be sexually motivated to change their appearance or behavior are especially promising candidates for this second approach.

The present research used the second approach to investigate the extent to which male

furries (Study 1), adult baby/diaper lovers (Study 2), and eunuchs (Study 3) are men with ETIIs. As part of examining ETIIs in these three populations, I also characterized their sexual orientation within the conventional framework of relative attraction to men versus women, as well as the extent to which they are sexually motivated. I restricted samples to men for two reasons. First, ETIIs may be considered paraphilias, which occur almost exclusively in men (Abel & Osborn, 1992; Baur et al., 2016; Dawson et al., 2016; Joyal & Carpentier, 2017; Långström & Seto, 2006; Långström & Zucker, 2005). Second, furries (e.g., Gerbasi et al., 2008) and adult baby/diaper lovers (Hawkinson & Zamboni, 2014) are predominantly male, and eunuchs are male by definition.

# Study 1: Sexual Orientation, Sexual Motivation, and Erotic Target Identity Inversions in Male Furries<sup>3</sup>

Furries are individuals who are especially interested in anthropomorphic or cartoon animals (e.g., Bugs Bunny; Gerbasi et al., 2008; Půtová, 2013; Roberts, Plante, Gerbasi, & Reysen, 2015). They are often involved in the *furry community*, which creates and consumes art, media, and stories depicting anthropomorphic animals. As part of the furry community, they sometimes meet in person and attend events ranging from small gatherings to large conventions. Although the large conventions tend to receive the most publicity (e.g., Gurley, 2001), most furries primarily interact with each other online rather than in person.

Many furries strongly identify with anthropomorphic animals of one or more species and create *fursonas*, identities of themselves as those anthropomorphic animals (Gerbasi et al., 2008; Půtová, 2013; Roberts et al., 2015). They primarily enact their fursonas online, although they sometimes do so in person. Some may even wear entire costumes, *fursuits*, which resemble their fursonas. Fursuits look similar to the costumes worn by mascots of athletic teams or theme parks. Because fursuits are expensive, furries tend to own only parts of a fursuit, such as the paws, feet, ears, or tail, rather than the entire fursuit. Some furries also wear human clothing, such as shirts or pants, over their fursuits, which further exemplifies the anthropomorphic nature of their fursonas. The practice of wearing fursuits is called *fursuiting*. Although furries are commonly associated with fursuiting, many express their interest in anthropomorphic animals by creating fursonas, engaging with the furry community, or drawing and looking at furry artwork instead.

<sup>&</sup>lt;sup>3</sup> This section was adapted and modified for the following publication: Hsu, K. J., & Bailey, J. M. (2019). The "furry" phenomenon: Characterizing sexual orientation, sexual motivation, and erotic target identity inversions in male furries. *Archives of Sexual Behavior*.

#### **Are Furries Sexually Motivated?**

In the media and popular culture, furries have been portrayed as sexually motivated (Gerbasi et al., 2008; Plante, Roberts, Reysen, & Gerbasi, 2014; Roberts et al., 2015). News stories and television shows have depicted fursuiting and attending conventions in particular as focused on sex. For instance, a news story in *Vanity Fair* included interviews with several furries at a convention, who claimed that there was widespread sexual activity or described their sexual fantasies related to being an anthropomorphic animal (Gurley, 2001). An episode of the once popular television show *CSI: Crime Scene Investigation* also brought significant attention to furries from the general public (Zuiker, Stahl, & Lewis, 2003). In the episode, furries are mainly shown attending a convention to have sex with other furries in their fursuits. More informally, furries tend to be associated with unusual sexual interests or practices, such as bestiality, when described online by individuals who are not furries themselves (Brookey & Cannon, 2009).

Portrayals of furries in the media and popular culture may be biased by preconceptions and thus inaccurate. Some furries especially object to the way that they are depicted in the *Vanity Fair* story (Gurley, 2001) and the *CSI: Crime Scene Investigation* episode (Zuiker, Stahl, & Lewis, 2003), because they believe that there is undue emphasis on sexuality, such as the idea that furries go to conventions primarily to have sex with each other in fursuits. Three other observations, however, suggest that furries are not only sexually motivated, but also sexually attracted to anthropomorphic animals. First, several major websites that cater to furries (e.g., FurAffinity, Inkbunny, SoFurry) provide outlets for sharing erotic art, media, and stories featuring anthropomorphic animals. Second, tongue-in-cheek terms like *yiff* and *furvert* have been popularized among furries to refer humorously to erotic art and media depicting

anthropomorphic animals and to those who consume it, respectively (Gurley, 2001; "Yiff," n.d.). Finally, in an informal online survey of 276 furries, a majority of respondents (79%) reported that their interest in being furries was sexual to some extent (Evans, 2008). Although the wording of the relevant question was somewhat ambiguous ("Is your interest in furry of a sexual or non-sexual nature?"), the researcher clarified that he was asking about "a more general interest in anthropomorphic animals for sexual reasons, such as arousal from erotic anthropomorphic animal art" (p. 17). He also recruited furries only from websites without an erotic focus. Reassuringly, his results were consistent with those of two more recent surveys, one of 4,338 furries indiscriminately recruited online (Plante, Mock, Reysen, & Gerbasi, 2011) and another of 912 furries recruited at a large furry convention (Schroy, Plante, Reysen, Roberts, & Gerbasi, 2016). In both surveys, sexual motivation of some degree was commonly reported, characterizing over 50% of Plante et al.'s (2011) sample.

Furries sometimes report that they are not sexually motivated, especially in their interviews with the media (Stewart, 2016). As a result, recent news stories have deemphasized sex in their portrayal of furries, if they address sexual motivation at all (e.g., Broderick, 2014; Erbentraut, 2014; Wall, 2016; Winterman, 2009). Some articles have even asserted that furries do not have any sexual motivation, unusual sexual interests, or unusual sexual practices. The recent tendency for both furries and the media to minimize or completely deny sexual motivation may represent a response to social stigma. This stigma is partly due to the early media portrayals of furries that emphasized unusual sexual interests and practices (e.g., Gurley, 2001; Zuiker et al., 2003), which are stigmatized in and of themselves (e.g., BDSM; Wright, 2006). Non-furries do tend to perceive furries negatively (Roberts, Plante, Reysen, & Gerbasi, 2016), and furries

tend to perceive that they are stigmatized (Kington, 2015; Plante et al., 2015; Roberts et al., 2015). Furthermore, many furries worry about the negative consequences of revealing their identity as a furry (Mock, Plante, Reysen, & Gerbasi, 2013; Roberts et al., 2015). Thus, furries may wish to downplay any sexual motivation that might exist in order to reduce social stigma. For similar reasons, they may also be cautious about, if not hostile toward, media and research that address the possibility of sexual motivation.

What else might motivate furries besides sexuality? The fact that furries are often part of a community with shared interests suggests that they might be socially rather than (or in addition to) sexually motivated. Indeed, the gatherings and conventions organized by furries are open to the public and advertised as non-sexual. Some individuals may therefore be furries because they want the feeling of belonging and the social support that come with being a part of the furry community. They may also be socially motivated in other ways, such as having friends, romantic partners, or sexual partners who are furries. The fact that some furries create and consume art, media, and stories without sexual content is consistent with non-sexual motivation, including non-sexual interest in anthropomorphic animals or in being an anthropomorphic animal.

Some studies have suggested that social interactions as part of the furry community online and in person constitute a significant source of social support for many furries (Mock et al., 2013; Reysen, Plante, Roberts, & Gerbasi, 2016; Roberts et al., 2015; Satinsky & Green, 2016). These studies have also suggested that furries tend to feel that belonging to the furry community is an important part of their identity, and that most strongly identify with being furries. Still, the fact that websites catering to furries often include erotic content created by furries suggests that sexual motivation is not uncommon. In contrast, most activities that are

widely considered to be socially motivated, such as following specific sports teams or music groups, show little indication of sexual motivation. Schroy et al. (2016), for example, found that furries from a large furry convention were more likely to report sexual motivation than were fantasy sport fans from Amazon Mechanical Turk, a website used by people to make small sums of money for completing surveys. It is thus likely that furries are both socially and sexually motivated.

This is not the first time it has been suggested that sexual motivation may be related to being a furry, but social or other motivations may exist alongside it. Soh and Cantor (2015) documented a visit to a furry convention, from which they concluded that sexual motivation constitutes only one part of being a furry. Their conclusion seems to be reasonable and nuanced in light of the claims that furries are either completely sexually motivated or not at all sexually motivated. Even if their conclusion is correct, however, two major questions remain: To what extent are furries sexually motivated, and what explains any sexual motivation? Regarding the second question, it is doubtful that most people would find the prospect of behaving or dressing like an anthropomorphic animal to be sexually arousing. Assuming that some furries do experience sexual arousal in this context, the question remains why. In the next section, I elaborate on a promising concept that may help answer this question.

#### Are Furries Sexually Motivated by an Erotic Target Identity Inversion?

By fursuiting and enacting their fursonas, furries change their appearance and behavior to become more like anthropomorphic animals. In these ways, they are similar to male cross-dressers, who change their appearance and behavior to become more like women. Heterosexual male cross-dressers are by definition sexually attracted to women, and their cross-dressing is

sexually motivated (Bailey, 2003; Blanchard, 1991; Blanchard et al., 1986; Hsu et al., 2015, 2017; Lawrence, 2013). Specifically, they have autogynephilia: the propensity to be sexually aroused by the fantasy of being a woman (Blanchard, 1989a). Autogynephilia can be conceptualized as an ETII, in which an external erotic target (e.g., women) is located within a man's own body (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). Although autogynephilia is likely to be the most common form of ETII (Blanchard, 1993b), there is systematic evidence in support of two other ETIIs: apotemnophilia in men who desire limb amputation (First, 2005; Lawrence, 2006) and autopedophilia in men sexually attracted to children (Hsu & Bailey, 2017).

ETIIs are unlikely limited to autogynephilia, apotemnophilia, and autopedophilia. Indeed, the concept of ETIIs is promising for investigating phenomena in which men change their appearance or behavior to become more like other kinds of persons or things, especially when there is reason to believe such changes are sexually motivated. The behaviors of some male furries, including fursuiting and enacting their fursonas, could be motivated by an ETII, similar to how cross-dressing in autogynephilic men is motivated by an ETII. If some male furries are motivated by an ETII, then they should experience both sexual attraction to anthropomorphic animals (anthropomorphozoophilia) and sexual arousal by the fantasy of being an anthropomorphic animal (autoanthropomorphozoophilia). This is because anthropomorphic animals comprise the external erotic target, which would be internalized as the ETII. Because erotic content featuring anthropomorphic animals is not uncommon on popular websites that cater to furries, there is precedent to believing that some male furries are sexually attracted to anthropomorphic animals. Because furries often change their appearance and behavior to become

more like anthropomorphic animals, there is also precedent for believing that some male furries are sexually aroused by the fantasy of being an anthropomorphic animal. Real animals share some physical similarity with anthropomorphic animals, suggesting that some male furries may additionally experience both sexual attraction to real animals (*zoophilia*) and sexual arousal by the fantasy of being a real animal (*autozoophilia*), if they are motivated by an ETII. In one previous online survey of 276 furries, 17% endorsed zoophilic attraction (Evans, 2008).

Freund and Blanchard (1993) provided the only case report of an individual who might have had something resembling an ETII in furries. A man named R reported sexual fantasies of being an anthropomorphic dog named Puppy Smith. He also masturbated to the plush animal that represented Puppy Smith in his fantasies. Consistent with the concept of ETIIs, R appeared to be both sexually attracted to an anthropomorphic dog and sexually aroused by the fantasy of himself as that same anthropomorphic dog. Online magazines have since described men sexually attracted to plush animals who are also sexually aroused by the fantasy of being a plush animal (e.g., Gurley, 2001; Hill, 2000). Importantly, sexual attraction to plush animals appears to be distinct from sexual attraction to anthropomorphic animals, although they are related. Lawrence (2009) speculated that sexual attraction to plush animals might be a specific form of sexual attraction to anthropomorphic animals, because plush animals often represent anthropomorphic animals. If this were the case, there should be more individuals sexually attracted to anthropomorphic animals among those sexually attracted to plush animals than the reverse.

There is one notable difference between a possible ETII in male furries and the three previously mentioned ETIIs that have been formally studied: autogynephilia, apotemnophilia, and autopedophilia. For each of the latter ETIIs, men with the relevant preferred erotic target

were well known in the scientific literature before the corresponding ETII was studied. Specifically, men sexually attracted to women, to amputees, and to children were well known before the study of autogynephilia, apotemnophilia, and autopedophilia, respectively. In contrast, men sexually attracted to anthropomorphic animals are currently not well known, at least in the scientific literature, and their existence has been posited mainly because the concept of ETIIs as applied to male furries suggests so. Of course, this does not mean that such men have not existed, but rather that they have not yet been noticed by researchers.

#### **The Present Study**

I had three primary goals for Study 1. First, I characterized male furries with respect to their sexual orientation, referring herein to its conventional understanding as relative sexual attraction to men versus women. Such information provides a general profile of male furries' sexuality in a conventional framework. Second, I examined whether and to what extent male furries are sexually motivated. Third, I examined the extent to which the concept of ETIIs explains any sexual motivation of male furries.

Regarding this third goal, several key predictions about male furries and their sexual interests follow from the concept of ETIIs. Most importantly, male furries should be both sexually attracted to anthropomorphic animals and sexually aroused by the fantasy of being an anthropomorphic animal. In addition, because furries change their appearance and behavior to become more like anthropomorphic animals rather than actual animals or women, male furries should be more commonly and intensely aroused by the fantasy of being an anthropomorphic animal than they should by the fantasy of being an actual animal or a woman. Furthermore, the concept of ETIIs suggests that male furries might be especially sexually aroused by the fantasy

of being the same kinds of anthropomorphic animals (e.g., female anthropomorphic animals, anthropomorphic wolves) to whom they are sexually attracted.

Study 1 was conducted using a large sample of male furries recruited from the Internet. I restricted this sample of furries to men, because the large majority of furries are young and male (Evans, 2008; Gerbasi et al., 2008; Plante et al., 2011; Satinsky & Green, 2016). ETIIs have also been hypothesized to be paraphilias (Freund & Blanchard, 1993), which are much more likely to occur in men (Abel & Osborn, 1992; Baur et al., 2016; Dawson et al., 2016; Joyal & Carpentier, 2017; Långström & Seto, 2006; Långström & Zucker, 2005).

#### Method

#### **Participants**

Furries were recruited for an anonymous online questionnaire via advertisements initially placed on select websites and blogs that cater to furries, such as FurAffinity and Dogpatch Press. They were also encouraged to send the questionnaire to other furries and to post it on other websites that furries frequent. Respondents were excluded from the present analyses if they did not report that they were male (n = 48) or that they identified as furries (n = 63).

The resulting sample comprised 334 male furries (M age = 22.47 years, SD = 4.72). Of these participants, 216 (64.7%) reported that they were recruited via an Internet forum for furries, 28 (8.4%) reported that they were recruited via word of mouth from someone who they knew, 27 (8.1%) reported that they were recruited via Dogpatch Press, and 21 (6.3%) reported that they were recruited via FurAffinity. The remaining 42 participants (12.6%) reported some other recruitment source, such as different Internet forums for furries. Participants received no compensation.

#### Measures

Participants completed an anonymous questionnaire online, which took about half an hour. The questionnaire included several questions that assessed the extent and the development of their interest in being furries. However, it focused mainly on three categories of self-report items: (1) sexual orientation; (2) sexual interests related to being a furry; and (3) sexual interests related to ETIIs that might be found in male furries. These three categories corresponded with my three primary goals for the study: (1) to characterize the sexual orientation of male furries; (2) to examine whether and to what extent male furries are sexually motivated; and (3) to examine the extent to which the concept of ETIIs explains any sexual motivation of male furries.

Extent and development of interest in being furries. Participants reported whether they had more than one fursona, had one fursona, did not have a fursona but were considering one, or did not have a fursona and were not considering one. Those who reported that they had at least one fursona provided descriptions of their fursona or fursonas. Participants also rated their frequencies of fursuiting (0 = never, 1 = less than once a month, 2 = once a month, 3 = two to three times a month, 4 = once a week, 5 = two to three times a week, 6 = daily) during the past year and the year that they fursuited most. In addition, they reported whether they had ever considered the possibility that they were another species or kind of animal (yes or no) and whether they had ever considered surgery to make themselves look more like another species or kind of animal (yes or no). Finally, participants reported the age at which they first became furries and described the manner in which it happened with open-ended responses to the question: "How did you become a furry?" Given the exploratory nature of the present study, all open-ended responses were simply reviewed for common themes, which were then used to

calculate the numbers and percentages of participants who provided responses that mentioned those themes.

**Sexual orientation.** Participants reported their sexual identity, choosing among *heterosexual/straight, bisexual, homosexual/gay, asexual,* and *other*. If they reported their sexual identity as "other," participants provided open-ended responses that explained their choice. Participants also rated their current sexual feelings on the Kinsey scale (Kinsey, Pomeroy, & Martin, 1948), which is a 7-point scale (0 = *sexual feelings toward females only* to 6 = *sexual feelings toward males only*).

Participants reported their current relationship status, choosing among the following options: *single*, *in an open relationship*, *in a closed relationship*, *engaged*, *married*, *divorced*, and *widowed*. If they reported being in an open relationship, in a closed relationship, engaged, or married, participants provided the gender of their current romantic partner. Although some of these options were not mutually exclusive (e.g., one could be both in an open relationship and married), participants could choose only one option. Because options were ordered in general to indicate progressively more serious relationships, participants were assumed to have understood that some options superseded others (e.g., being married superseded being in an open relationship). Participants also reported whether their romantic partner identified as a furry, selecting from the following options: "Yes, this person played a role in me becoming a furry," "Yes, I played a role in this person becoming a furry," "Yes, we met over our mutual interest in being furries or as part of the furry community," "Yes, but we did not meet over our mutual interest in being furries or as part of the furry community," "No," and "Not sure."

Sexual interests related to being a furry. Participants rated the degree to which their

interest in being furries was sexual on a 5-point scale ( $1 = not \ at \ all$ , 2 = slightly, 3 = somewhat, 4 = very, 5 = extremely). They also rated the degree to which their interests in interacting with other furries online and in person, looking at furry artwork and other media, and fursuiting were sexual on analogous 5-point scales. In addition, participants provided open-ended responses explaining why they were furries, if the primary reason was not sexual. Finally, participants rated the importance of fantasizing about being or dressing as anthropomorphic animals during masturbation on a 5-point scale ( $1 = not \ at \ all \ important$ ,  $2 = slightly \ important$ ,  $3 = somewhat \ important$ ,  $4 = very \ important$ ,  $5 = extremely \ important$ ).

Sexual interests related to erotic target identity inversions (ETIIs). The concept of ETIIs provides a compelling explanation for why male furries might be sexually motivated. If characterized by an ETII, male furries should be both sexually attracted to anthropomorphic animals and sexually aroused by the fantasy of being an anthropomorphic animal, just as autogynephilic men tend to be sexually attracted to women and are sexually aroused by the fantasy of being a woman (e.g., Blanchard, 1992; Hsu et al., 2015). To assess sexual interests related to ETIIs that might be found in male furries, participants rated the degree to which they were sexually attracted to the following kinds of erotic targets: female anthropomorphic animals, male anthropomorphic animals, real animals, and women. Ratings were made on an 11-point scale (0 = not at all sexually attracted). Participants also rated the degree to which they were sexually aroused by the fantasy of being each of these kinds of erotic targets on an analogous 11-point scale (0 = not at all sexually aroused to 10 = most sexually aroused).

Male furries presented an additional opportunity to test specificity in the sexual interests

related to an ETII involving sexual arousal by the fantasy of being an anthropomorphic animal. Specifically, many furries strongly identify with and create fursonas and fursuits representing anthropomorphic animals of one or two species in particular. Gerbasi et al. (2008) mention that canine, feline, and dragon species are common, whereas nonhuman primate species are not. Thus, participants who endorsed any degree of sexual attraction to either female or male anthropomorphic animals also rated their degree of sexual attraction to anthropomorphic animals of the following species: foxes, wolves, dogs, lions, tigers, cats, rabbits, mice, raccoons, horses, bears, eagles, and dragons. Ratings were made on the same previously described 11-point scale  $(0 = not \ at \ all \ sexually \ attracted$  to  $10 = most \ sexually \ attracted$ ). Participants who endorsed any degree of sexual arousal by the fantasy of being either a female or a male anthropomorphic animal also rated their degree of sexual arousal by the fantasy of being an anthropomorphic animal of each previously listed species on an analogous 11-point scale (0 = not at all sexuallyaroused to 10 = most sexually aroused). The list of species was not exhaustive and was based upon Gerbasi et al.'s comments and my own observations on the Internet of commonly represented species among furries who have fursonas or fursuits.

Participants might make a connection to their previous ratings of sexual attraction to different kinds of erotic targets and become biased toward similarly rating their sexual arousal by the fantasy of being each of those same targets. In order to reduce bias due to carryover effects, participants rated their sexual attraction to the various erotic targets at the start of the questionnaire and their sexual arousal by the fantasy of being each of those targets at the end.

Finally, participants who endorsed any degree of sexual arousal by the fantasy of being either a female or a male anthropomorphic animal provided detailed answers to open-ended

questions about their fantasies and experiences. Those participants described, for example, what they think about specifically when fantasizing about being an anthropomorphic animal, including their fursona if they have one, and their most sexually arousing fantasy related to being an anthropomorphic animal or their fursona.

General variables for sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal. Male furries may be sexually attracted to anthropomorphic animals of different genders and species, and they may also be sexually aroused by the fantasy of being an anthropomorphic animal of different genders and species. Indeed, as previously mentioned, the fursonas and fursuits of most furries tend to represent anthropomorphic animals of just one or two species. In order to facilitate a broad assessment of participants' sexual interests related to anthropomorphic animals, I constructed general variables for sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal that were not specific to any gender or species: The general variable for sexual attraction to anthropomorphic animals was the higher of the two single-item ratings of sexual attraction to female and male anthropomorphic animals. For instance, participants who rated sexual attraction to male anthropomorphic animals as 9 but no sexual attraction to female anthropomorphic animals scored 9 on this new variable.

The general variable for sexual arousal by the fantasy of being an anthropomorphic animal was the higher of the two single-item ratings of sexual arousal by the fantasy of being a female and a male anthropomorphic animal. For instance, participants who rated sexual arousal by the fantasy of being a male anthropomorphic animal as 7 and sexual arousal by the fantasy of being a female anthropomorphic animal as 5 scored 7 on this new variable. In the following

analyses, these general variables were used as continuous measures of sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal that were not specific to any gender or species.

#### Results

#### **Extent and Development of Interest in Being Furries**

Although the survey focused primarily on the sexuality of male furries, several questions assessed the extent and the development of their interest in being furries. All participants identified as male and as furries, because they would not have otherwise qualified for this study. Besides engaging with the furry community online, such as in Internet forums from which participants were recruited, and sometimes in person, what did it mean to be a furry?

With respect to fursonas among participants, 49 (14.7%) reported having more than one, 164 (49.1%) reported having one, 66 (19.8%) reported that they did not currently have a fursona but were considering one, and 55 (16.5%) reported that they neither had a fursona nor were considering one. Because there was a high prevalence of participants who had at least one fursona (63.8%), I have included descriptions of fursonas provided by every twentieth such participant in Table 2, for a total of 11 descriptions.

With respect to fursuiting among participants, the average frequency during the past year was 0.49 (SD = 1.26) using my rating scale (0 = never to 6 = daily), which was close to never. The average frequency during the year that they fursuited most was 0.51 (SD = 1.33) using the same rating scale, which was also close to never. Thus, fursuiting tended to be a rare activity. Indeed, only 66 (19.8%) participants had ever fursuited (i.e., reported a frequency other than "never" on either of the relevant measures). Evidently, for my participants, fursonas were more

Table 2

Descriptions of fursonas from every twentieth participant who had at least one fursona

Record	Description of fursona
1	A fennec fox, way more social than me, and somewhat more athletic.
21	An anthro dragon that's 6'8" and fairly taciturn. While preferring his own company, he's not adverse to socializing, even if he does most of the listening. He's fairly well built with broad shoulders, but not extremely muscular. He doesn't go out of his way for sexual contact, as he likes to keep to himself most of the time.
41	Athletic build, fox markings, although has much more rigid musculature, height tends to fluctuate for some odd reason. Mostly interested in males but can be charmed by a female with an interesting enough personality. He's kind, a bit of a ditz and means well in all he does, and he always embraces life and all he does with 100% of himself.
61	Exactly like myself.
81	He is largely based on how I see myself. He is shy, quiet, and independent. He is based on <i>Sceloporus arenicolus</i> , or the dune sagebrush lizard. The exception is that the colors are exaggerated, and blue feathers are added. That species was chosen for its behavioral traits.
101	I'm an anthro wolf with dark black furr and ram horns. I have bright red, pupil-less eyes, and a masculine, toned figure. Despite my intimidating appearance, I'm a pleasant enough furr, though I prefer to be quiet when possible. I enjoy dominating my sexual partners, but I don't mind being dominated by the right furrs. I generally prefer feminine partners, but occasionally take on very masculine and larger roleplay partners.
121	It's basically a generic self-insert of me. I didn't really make a character so much as an animal thing to use as an identity when talking to other furs. So he's a magpie, with slightly larger pecs due to having wings on his arms, and it only making sense for a birdman of some sort to have that sort of philology. Few streaks of blue highlights to break up the black, as is a common marking with the species. Genitalia depend on the preference of the artist or the person I'm getting a picture with. Either some sort of cloaca amalgamation with a thin tapered dick popping out or just regular human bits the rest of the time. Gay as fuck with a fondness for exhibitionism, feet, bondage, and group sex.
141	Muscular, but pudgy. Physically strong, loyal, and empathetic. Interested in a variety of sexual kinks ranging from mainstream to hardcore. Polyamorous, with voracious sexual appetite.
161	My fursona's physical characteristics are traditional northern sergal. Haven't developed much more detail than that yet.
181	Small body, anthropomorphic to the extent that he walks on two legs and talks, but his body is mostly in proportion to that of a real raccoon. He wears clothes and does most things a normal person would do. He is heavily stylized when I draw him, and he has human-like genitals (i.e. penis).
201	White tiger. Mostly serious, no-nonsense personality most of the time but can also be immature and jubilant at times. Also has a love for food. Would be considered very overweight or obese but still maintains a strong body, giving him a "muscle-fat" look. Sexually prefers guys (especially other chubby guys) but can also be attracted to the female form (only chubby women though).

common to the experience of being furries than fursuiting was.

Similarly, only 40 (12.0%) participants said that they had ever considered the possibility that they were another species or kind of animal. Furthermore, only 52 (15.6%) participants reported that they had ever considered surgery to make themselves look more like another species or kind of animal.

The average age at which participants reported that they became furries was 14.97 years (SD = 3.21). The majority of participants (216; 64.7%) were in the ages of 11-15 years when they became furries. An additional 89 (26.7%) were in the ages of 16-20 years. Only 19 (5.7%) participants reported that they first became furries over the age of 20 years. The most common manner in which they became furries was in some context of seeking or discovering online pornography featuring anthropomorphic animals (e.g., "I literally searched for 'naked animal people porn," "Found furry porn"), mentioned by 127 (41.2%) of 308 participants who provided a response to this open-ended item. The next most common manner in which they became furries, mentioned by 93 (30.2%) participants, involved discovering or otherwise hearing about furries or the furry community through art, stories, or posts online (e.g., "Stumbled across some furry art"). Many participants did not clearly describe whether the art, stories, or posts that led them to become furries were erotic. Another 35 (11.4%) participants said that they became furries because their friends introduced them to the idea or to the community (e.g., "A friend introduced me"). The remaining participants who provided responses were too vague in their answers (e.g., "Internet").

# **Sexual Orientation**

Of the male furries in my sample, 143 (42.8%) identified themselves as bisexual, 106

(31.7%) as homosexual/gay, 53 (15.9%) as heterosexual/straight, and 9 (2.7%) as asexual. The remaining 23 (6.9%) participants chose the response "other," and the most common explanation was that they identified as pansexual. The next most common explanation was that their sexual identity varied depending on context (e.g., online versus in person, humans versus anthropomorphic animals). Figure 1 shows the distribution of participants' ratings on the Kinsey scale, and this distribution is consistent with the distribution of sexual identities. The average rating on the Kinsey scale was 3.36 (SD = 1.92), indicating that participants' current sexual feelings tended to be equally divided toward females and males.

**Romantic relationships.** The majority of participants (232; 69.9%) reported that they were single (i.e., not in a romantic relationship with anyone). In addition, 70 (21.1%) reported being in a closed relationship, 20 (6.0%) in an open relationship, 6 (1.8%) married, 2 (0.6%) engaged, 1 (0.3%) divorced, and 1 (0.3%) widowed. Two participants did not report their relationship status. Of the 98 participants currently involved with a romantic partner, 75 (77.3%)

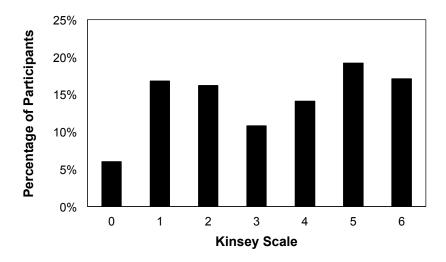


Figure 1. Distribution of participants' ratings on the Kinsey scale (0 = sexual feelings toward females only to 6 = sexual feelings toward males only; <math>N = 334).

were with a man, 18 (18.6%) with a woman, 2 (2.1%) with both a man and a woman, 1 (1.0%) with a female-to-male transgender individual, and 1 (1.0%) with a horse. One participant did not report the gender of his romantic partner. Participants in a relationship with a woman scored much lower (M = 1.39, SD = 1.33) than those in a relationship with a man did (M = 4.49, SD = 1.41) on the Kinsey scale, t(91) = -8.48, p < .0001. Thus, participants in a relationship with a woman tended to report current sexual feelings toward females mostly, whereas participants in a relationship with a man tended to report them toward males mostly.

Of those with a romantic partner, 62 (63.3%) reported that their partner also identified as a furry and that they met over their mutual interest in being furries or as part of the furry community. Another 13 (13.3%) participants reported that their partner did not identify as a furry, 9 (9.2%) reported that their partner also identified as a furry but that they did not meet as a result, 6 (6.1%) reported that they were not sure whether their partner identified as a furry, 4 (4.1%) reported that their partner played a role in them becoming furries, and 4 (4.1%) reported that they played a role in their partner becoming a furry.

Sexual attraction to anthropomorphic animals by gender. The average degree of sexual attraction to female anthropomorphic animals was 5.61 (SD = 3.76), and that to male anthropomorphic animals was 7.20 (SD = 3.16). The majority of participants (245; 73.4%) reported sexual attraction to both female and male anthropomorphic animals (i.e., rated their sexual attraction to both as greater than 0). In addition, 67 (20.1%) reported sexual attraction only to male anthropomorphic animals, 19 (5.7%) only to female anthropomorphic animals, and 3 (0.9%) to neither gender of anthropomorphic animals. Excluding the 23 who chose "other" as their sexual identity, participants tended to report sexual identities that corresponded with their

sexual attraction to anthropomorphic animals with respect to gender,  $\chi^2(9, N=311)=200.28$ , p<0.0001. Furthermore, participants reporting exclusive attraction to female anthropomorphic animals scored lower (M=0.47, SD=0.61; thus, more heterosexual) compared with those reporting attraction to both female and male anthropomorphic animals (M=2.96, SD=1.60) on the Kinsey scale, who in turn scored lower than those reporting exclusive attraction to male anthropomorphic animals (M=5.61, SD=0.78), F(2,328)=131.89, p<0.001, all p<0.0001 for post-hoc comparisons. Thus, participants tended to report current sexual feelings toward females versus males that corresponded with their sexual attraction to anthropomorphic animals with respect to gender.

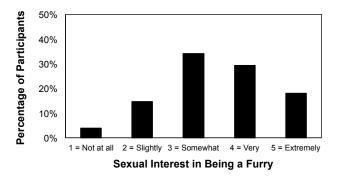
No participants who identified as heterosexual/straight or homosexual/gay were exclusively attracted to male anthropomorphic animals or female anthropomorphic animals, respectively. Most participants (69.8%) who identified as heterosexual/straight and 38.7% of participants who identified as homosexual/gay, however, reported sexual attraction to both female and male anthropomorphic animals. For these participants, the mismatch between sexual identity and sexual attraction to anthropomorphic animals by gender might reflect differences in their appraisal of erotic targets depending on whether they are human or anthropomorphic animals. That is, some participants identifying as heterosexual/straight may have felt that this identity applied to their sexual attraction to humans and not anthropomorphic animals, which they found sexually attractive regardless of gender. Indeed, some participants identified their sexual identity as "other" for this reason.

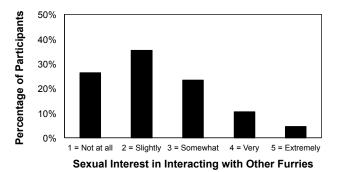
An alternative explanation for participants having a mismatch between sexual identity and sexual attraction to anthropomorphic animals by gender may be that they were most attracted

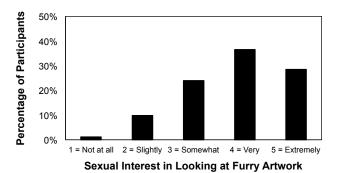
to female or male anthropomorphic animals but experienced incidental attraction to anthropomorphic animals of the other gender. As a result, they may have been inclined to identify as heterosexual/straight or homosexual/gay because their sexual attraction to anthropomorphic animals of their less preferred gender was not strong enough to merit identifying as bisexual. In support of this explanation, participants identifying as heterosexual/straight with sexual attraction to male anthropomorphic animals only rated such attraction as 4.65 (SD = 2.96) on average, compared with 8.89 (SD = 1.43) for sexual attraction to female anthropomorphic animals, t(36) = -8.65, p < .0001. Similarly, participants identifying as homosexual/gay with sexual attraction to female anthropomorphic animals only rated such attraction as 4.00 (SD = 2.59) on average, compared with 8.93 (SD = 1.68) for sexual attraction to male anthropomorphic animals, t(40) = -13.02, p < .0001.

# Sexual Interests Related to Being a Furry

Figure 2 shows the distributions of the sample's ratings of the degree to which several interests related to being a furry—being a furry, interacting with other furries online and in person, looking at furry artwork and other media, and fursuiting—were sexual. The large majority of participants provided responses consistent with at least some degree of sexual motivation. Specifically, 321 (96.1%) reported that their interest in being furries was sexual to some degree (M = 3.43, SD = 1.07), 246 (73.7%) reported that their interest in interacting with other furries online and in person was sexual to some degree (M = 2.31, SD = 1.11), 330 (98.8%) reported that their interest in looking at furry artwork and other media was sexual to some degree (M = 3.81, SD = 1.00), and 172 (51.5%) reported that their interest in fursuiting was sexual to some degree (M = 2.08, SD = 1.30). The degree of sexual interest varied considerably across the







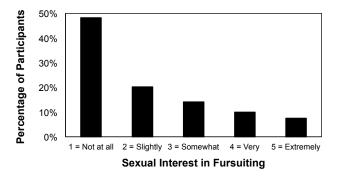


Figure 2. Distributions of participants' ratings of the degree to which their interests in being furries, interacting with other furries online and in person, looking at furry artwork and other media, and fursuiting were sexual (N = 334).

Table 3

Correlations among participants' sexual interests related to being a furry

Sexual interest	Interacting with other furries online and in person	Looking at furry artwork and other media	Fursuiting
Being a furry	.45	.64	.45
Interacting with other furries online and in person	_	.42	.43
Looking at furry artwork and other media	_	_	.39

All correlations were statistically significant at p < .0001.

N = 334

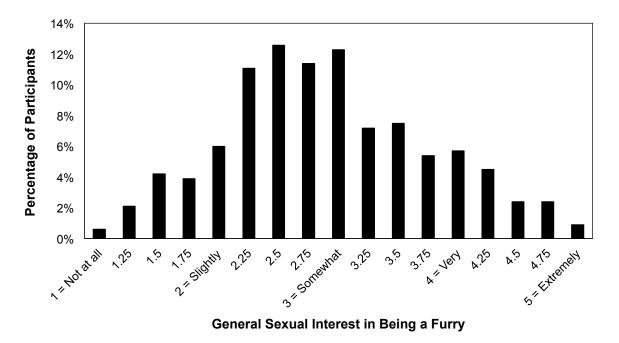


Figure 3. Distribution of participants' scores on the composite variable of general sexual interest in being a furry (N = 334).

four items. However, interests in being a furry and in looking at furry artwork were rated approximately one standard deviation more sexual on average, compared with interests in interacting with other furries and in fursuiting.

Table 3 presents the correlations among participants' sexual interests related to being a

furry. All of the correlations were significant and at least moderately positive. The internal consistency of the four ratings was 0.77, using the alpha reliability coefficient. Thus, I created a composite variable from the average of the four ratings, which reflected the general sexual interest in being a furry. Figure 3 shows the distribution of scores on this new composite variable. The average score was 2.91 (SD = 0.86) on a 5-point scale, indicating that participants rated their general interest in being furries as somewhat sexual on average.

Of the 211 participants who indicated that their primary motivation for being furries was not sexual and who provided open-ended responses explaining their reasons, 34 (16.1%) confirmed that it was in fact primarily sexual (e.g., "It is primarily sexual," "It pretty much just is sexually motivated"). The following additional responses that provided alternative motivations to sexuality were not mutually exclusive: belonging to a community of individuals with shared interests (73; 34.6%; "A strong sense of community"), finding anthropomorphic animals to be cute, interesting, or otherwise aesthetically pleasing (60; 28.4%; "Cartoon animals are just cute"), and liking the idea of being an anthropomorphic animal because it is fun or freeing (54; 25.6%; "There's an almost primal thrill when indulging in these fantasies"). Other participants provided responses that did not fit unambiguously into any of these categories. Participants who said they were furries because they belonged to a community of individuals with shared interests often emphasized how much furries are open-minded, talented, and creative. Importantly, 157 (47.0%) of the total sample of 334 male furries said they were furries primarily for sexual reasons, including the 34 who confirmed this in their open-ended responses about why their primary motivation was not sexual.

Although participants overwhelming acknowledged at least some sexual motivation for

being furries, the question remains how important being a furry is to their sexuality. One potential window into this issue is masturbatory fantasy, which tends to be chosen to maximize sexual pleasure. When participants were asked the importance of fantasizing about being or dressing as anthropomorphic animals during masturbation, the average degree of its importance was 2.29 (SD = 1.41) using my rating scale (1 = not at all important to 5 = extremely important), suggesting it tended to be slightly important. Specifically, 155 (46.8%) said that it was not at all important, 93 (28.1%) said that it was slightly or somewhat important, and 83 (25.1%) said that it was very or extremely important. Thus, male furries in this sample varied considerably in the reported importance of fantasizing about being or dressing as anthropomorphic animals during masturbation.

Fursuiting and sexual interests related to being a furry. Fursuiting tended to be rare among my sample of male furries, which raised the question of whether the findings regarding their sexual motivation apply to samples of male furries among which fursuiting is more common. The large prevalence, if not extent of, sexual motivation might be relevant only to those without a history of fursuiting, which comprised most of my sample. Thus, I examined whether participants with a history of fursuiting (n = 66) differed from those without a history (n = 268) in the degree of their sexual interests related to being a furry and in the importance of fantasizing about being or dressing as anthropomorphic animals during masturbation.

Participants with a history of fursuiting rated their interests in being furries (M = 3.36, SD = 1.28) and in looking at furry artwork (M = 3.74, SD = 1.06) as no more sexual than did participants without such a history (M = 3.45, SD = 1.01 and M = 3.84, SD = 0.98, respectively), both ps > .49. They differed, however, in their ratings of the degree to which interacting with

other furries (M = 2.59, SD = 1.15 versus M = 2.25, SD = 1.09), p = .023, and especially fursuiting (M = 2.65, SD = 1.49 versus M = 1.95, SD = 1.22), p < .0001, were sexual, with participants who had fursuited scoring higher. In addition, participants with (M = 3.09, SD = 1.03) and without a history of fursuiting (M = 2.87, SD = 0.81) did not differ in their degree of general sexual interest in being furries (using the composite variable), t(86.3) = 1.57, p = .120. Those who had fursuited (M = 2.67, SD = 1.51) were more likely than those who had not (M = 2.19, SD = 1.39) to report that fantasizing about being or dressing as anthropomorphic animals was important during masturbation, t(332) = 2.44, p = .015. Together, these results suggest that my sample did not likely overrepresent the prevalence and extent of sexual motivation because the majority of participants had never fursuited. Indeed, those who had fursuited reported greater sexual interest in some aspects of being furries and greater importance of being furries to their sexuality, rather than those who had not. Perhaps furries who are especially sexually motivated are more likely to spend the money to obtain fursuits, which are expensive.

Correlates of sexual interests related to being a furry. I examined the extent to which sexual motivation among participants was related to having a fursona, fursuiting, having ever considered the possibility of being another species or kind of animal, and having ever considered surgery to look more like another species or kind of animal. The general sexual interest in being a furry (using the composite variable) was not significantly associated with having a fursona, with the latter categorical variable treated as a continuous measure (1 = no fursona and not considering one, 2 = no fursona but considering one, 3 = one fursona, and 4 = more than one fursona), r(332) = .00, p = .963. However, a higher general sexual interest in being a furry was significantly associated with a higher frequency of fursuiting during the past year, r(332) = .15, p

= .007. Because sexual interest in fursuiting is most conceptually related to the frequency of fursuiting during the past year, I also examined the correlation between this sexual interest in particular (as opposed to the composite variable) and this frequency of fursuiting. Participants with more sexual interest in fursuiting tended to fursuit more often during the past year, r(332) = .23, p < .0001. Finally, general sexual interest in being a furry was not significantly correlated with participants' having ever considered the possibility that they were another species or kind of animal, odds ratio (OR) = 1.08, p = .685, or having ever considered surgery to make themselves look more like another species or kind of animal, OR = 1.36, p = .079.

# **Sexual Interests Related to Erotic Target Identity Inversions (ETIIs)**

The concept of ETIIs might explain male furries' sexual motivation. Because ETIIs involve locating external erotic targets within a man's own body, men with ETIIs are sexually aroused by imagining themselves as the same kinds of individuals to whom they are sexually attracted (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). That is, their external and internal erotic targets are similar. Thus, if male furries have ETIIs, they should be both sexually attracted to anthropomorphic animals and sexually aroused by the fantasy of being an anthropomorphic animal. Plausibly, male furries may also be both sexually attracted to real animals and sexually aroused by the fantasy of being a real animal, because anthropomorphic and real animals are physically similar. Indeed, anthropomorphic animals have been created to mimic real animals. Because ETIIs may be considered paraphilias (Freund & Blanchard, 1993), which tend to co-occur within the same individual (e.g., Dawson et al., 2016; Joyal & Carpentier, 2017), and because autogynephilia is likely the most common ETII (Blanchard, 1993b), I examined whether some male furries sexually attracted to women are also sexually aroused by

the fantasy of being a woman.

Prevalence and degree of sexual interests related to ETIIs. Figure 4 shows the distributions of participants' scores on the general variables for sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal, ratings of sexual attraction to real animals and sexual arousal by the fantasy of being a real animal, and ratings of sexual attraction to women and sexual arousal by the fantasy of being a woman. Table 4 presents descriptive statistics for these three sets of sexual attraction and sexual arousal ratings, relevant to conceptualizing three putative ETIIs: autoanthropomorphozoophilia, autozoophilia, and autogynephilia. As shown, both sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal were almost universal among participants, although some said that their sexual attraction or arousal was less than strong. Participants from the four most common recruitment sources did not differ in either the prevalence or the degree of sexual arousal by the fantasy of being an anthropomorphic animal, both ps > .138. These results suggest that male furries in the present sample tended to be both sexually attracted to anthropomorphic animals and sexually aroused by the fantasy of being an anthropomorphic animal, consistent with the concept of ETIIs.

The general variables of sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal were significantly, if modestly, correlated, r(332) = .21, p < .0001. This finding suggests that participants' variability in sexual arousal by the fantasy of being an anthropomorphic animal, a possible sexual motivation for being a furry, was predicted by their variability in sexual attraction to anthropomorphic animals, although not strongly so.

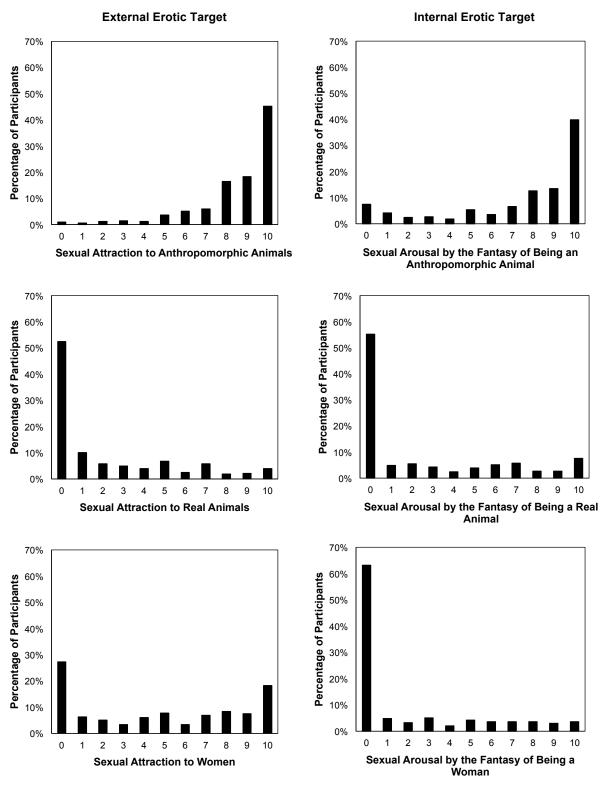


Figure 4. Distributions of participants' sexual interests related to ETIIs (N = 334).

Table 4

Descriptive statistics for participants' sexual interests related to ETIIs

Sexual interest	$n^{a}$	% <sup>b</sup>	$M^{c}$	SD c
Autoanthropomorphozoophilia as an ETII				
Sexual attraction to anthropomorphic animals	331	99.10	8.51	2.05
Sexual arousal by the fantasy of being an anthropomorphic animal	309	92.51	7.39	3.28
Autozoophilia as an ETII				
Sexual attraction to real animals	156	46.71	2.14	3.02
Sexual arousal by the fantasy of being a real animal	148	44.31	2.51	3.46
Autogynephilia as an ETII				
Sexual attraction to women	243	72.75	4.74	3.91
Sexual arousal by the fantasy of being a woman	123	36.83	1.94	3.11

<sup>&</sup>lt;sup>a</sup> Values in this column represent the numbers of participants who scored above 0 on each sexual interest.

N = 334

The rates of non-zero sexual attraction to real animals and sexual arousal by the fantasy of being a real animal indicate that these sexual interests were common among participants. However, the average degree of either sexual interest was low. Unlike the highly negatively skewed distributions of sexual interests related to anthropomorphic animals, the distributions of sexual interests related to real animals were highly positively skewed, with at least half of participants scoring the minimum on either rating. This suggests that male furries are not primarily motivated by either zoophilia or autozoophilia. Because zoophilia was significantly correlated with autozoophilia, r(332) = .48, p < .0001, participants sexually aroused by the fantasy of being a real animal tended to be sexually attracted to real animals. This result provides some support for conceptualizing autozoophilia as an ETII.

The average degree of sexual arousal by the fantasy of being a woman was low, although participants not uncommonly endorsed greater than zero arousal. Thus, the relevant distribution

<sup>&</sup>lt;sup>b</sup> Values in this column represent the percentages of participants who scored above 0 on each sexual interest.

<sup>&</sup>lt;sup>c</sup> Values in these columns were computed using all participants.

for autogynephilia was highly positively skewed. Indeed, over half of participants rated their sexual arousal by the fantasy of being a woman at the minimum. Unsurprisingly, sexual attraction to women was significantly correlated with autogynephilia, r(332) = .44, p < .0001, consistent with autogynephilia as an ETII.

Specificity of anthropomorphic animals in sexual interests related to ETIIs. Online with their fursonas or in person with their fursuits, furries change their appearance and behavior to become more like anthropomorphic animals specifically and not real animals. Certainly, they do not change their appearance and behavior to become more like women. Thus, if male furries are men with ETIIs, they should report a higher prevalence and degree of sexual arousal by the fantasy of being an anthropomorphic animal than of sexual arousal by the fantasy of being either a real animal or a woman, despite the fact that autogynephilia is likely more common in the general population (Blanchard, 1993b). Furthermore, real animals are more similar physically to anthropomorphic animals than women are. As a result, male furries might also be expected to report a higher prevalence and degree of sexual arousal by the fantasy of being a real animal than of sexual arousal by the fantasy of being a woman, again despite the fact that autogynephilia is likely more common in the general population.

The average degree of sexual attraction to anthropomorphic animals using the general variable was significantly much higher than that of sexual attraction to real animals, paired t(333) = 36.17, p < .0001, d = 2.06. The average degree of sexual arousal by the fantasy of being an anthropomorphic animal using the general variable was also significantly much higher than that of sexual arousal by the fantasy of being a real animal, paired t(333) = 22.33, p < .0001, d = 1.23. Consistent with the idea that male furries internalize their sexual attraction specifically to

anthropomorphic animals rather than real animals, participants reported more sexual arousal by the fantasy of being an anthropomorphic animal than by the fantasy of being a real animal. Although modest, there was a significant correlation between sexual arousal by the fantasy of being an anthropomorphic animal and sexual arousal by the fantasy of being a real animal, r(332) = .30, p < .0001.

The average degree of sexual arousal by the fantasy of being an anthropomorphic animal using the general variable was significantly much higher than that of sexual arousal by the fantasy of being a woman, paired t(333) = 24.65, p < .0001, d = 1.35. The average degree of sexual arousal by the fantasy of being a real animal was also significantly higher than that of sexual arousal by the fantasy of being a woman, paired t(333) = 2.37, p = .018, d = 0.13. Thus, in accordance with the idea that they are characterized by an ETII that specifically reflects their behaviors to become more like anthropomorphic animals, male furries in my sample reported more sexual arousal by the fantasy of being an anthropomorphic animal than by the fantasy of being a woman. Interestingly, sexual arousal by the fantasy of being an anthropomorphic animal was slightly but significantly correlated with autogynephilia, r(332) = .20, p < .0005.

Specificity of gender in sexual interests related to autoanthropomorphozoophilia as an ETII. Because male furries vary in their sexual preferences for anthropomorphic animals with respect to gender and species, I examined whether the specificity of such preferences in this sample predicted the specificity of their sexual arousal by the fantasy of being an anthropomorphic animal, consistent with autoanthropomorphozoophilia as an ETII. In other words, if male furries are characterized by an ETII, namely autoanthropomorphozoophilia, then they might be especially sexually aroused by the fantasy of being the same kinds of

anthropomorphic animals to whom they are sexually attracted. For example, do participants sexually attracted to female anthropomorphic animals have a greater tendency than those sexually attracted to male anthropomorphic animals have to be sexually aroused by fantasizing that they are female anthropomorphic animals? Do participants sexually attracted to anthropomorphic wolves have a greater tendency than those sexually attracted to other species of anthropomorphic animals have to be sexually aroused by fantasizing that they are anthropomorphic wolves? I examined first the correspondence of sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal with respect to gender.

Table 5 presents the joint frequencies of participants sexually attracted to female, male, or both female and male anthropomorphic animals, who were sexually aroused by the fantasy of being a female, a male, or both a female and a male anthropomorphic animal. Joint frequencies were based on the numbers and percentages of participants for whom relevant ratings of sexual Table 5

Joint frequencies of participants sexually attracted to female, male, or both female and male anthropomorphic animals (external erotic target), who were sexually aroused by the fantasy of being a female, a male, or both a female and a male anthropomorphic animal (internal erotic target)

Internal erotic target	External erotic target of anthropomorphic animal								
as anthropomorphic animal	Female $(N = 15)$		Male (	Male $(N = 63)$		Both female and male $(N = 229)$			
	n	%	n	%	n	%			
Female	4	26.67	0	0.00	3	1.31			
Male	2	13.33	60	95.24	69	30.13			
Both female and male	9	60.00	3	4.76	157	68.56			

Boldface indicates numbers and percentages for which sexual attraction to female, male, or both female and male anthropomorphic animals corresponded with sexual arousal by the fantasy of being a female, a male, or both a female and a male anthropomorphic animal.

attraction and sexual arousal were greater than 0. For instance, participants sexually attracted to female anthropomorphic animals who were sexually aroused by the fantasy of being a male anthropomorphic animal must have rated only their attraction to female anthropomorphic animals and their arousal by the fantasy of being a male anthropomorphic animal as greater than 0. Consistent with the concept of ETIIs, the gender of external erotic targets tended to match the gender of internal erotic targets,  $\chi^2(4, N=307)=130.37, p<.0001$ . Indeed, more participants exclusively attracted to female anthropomorphic animals were sexually aroused by the fantasy of being a female rather than a male anthropomorphic animal, and all participants exclusively attracted to male anthropomorphic animals were sexually aroused by the fantasy of being a male rather than a female anthropomorphic animal,  $\chi^2(1, N=66)=42.58, p<.0001$ .

Specificity of species in sexual interests related to autoanthropomorphozoophilia as an ETII. I examined next whether sexual attraction to anthropomorphic animals of different species tended to correspond with sexual arousal by the fantasy of being an anthropomorphic animal of those same species. To that end, I correlated ratings of sexual attraction to anthropomorphic animals of the 13 different species with ratings of sexual arousal by the fantasy of being an anthropomorphic animal of those same 13 species.

Table 6 presents these correlations among participants sexually aroused by the fantasy of being an anthropomorphic animal. Consistent with the idea that autoanthropomorphozoophilia is an ETII, sexual attraction to anthropomorphic animals of each species was significantly and positively correlated with sexual arousal by the fantasy of being an anthropomorphic animal of that same species (see the diagonal of Table 6). In addition, sexual attraction to anthropomorphic animals of each species was significantly and positively correlated, if less strongly, with sexual

Table 6

Correlations between participants' (only those sexually aroused by the fantasy of being an anthropomorphic animal) ratings of sexual attraction to anthropomorphic animals of different species and ratings of sexual arousal by the fantasy of being an anthropomorphic animal of those same species

Internal erotic target	External erotic target of anthropomorphic animal												
as anthropomorphic animal	Foxes	Wolves	Dogs	Lions	Tigers	Cats	Rabbits	Mice	Raccoons	Horses	Bears	Eagles	Dragons
Fox	.67***	.45***	.40***	.05	.11	.15*	.13*	.05	.29***	.04	.02	12*	05
Wolf	.45***	.62***	.41***	.14*	.22**	.08	.01	09	.16*	.06	.11	02	.01
Dog	.38***	.47***	.60***	.08	.15*	.06	.01	03	.15*	.10	.14*	09	05
Lion	.08	.16*	.02	.62***	.52***	.28***	.16*	.01	.19**	.24***	.26***	.12*	.08
Tiger	.11	.23***	.06	.48***	.65***	.30***	.16*	.04	.15*	.16*	.24***	.12	.02
Cat	.15*	.13*	.10	.27***	.31***	.65***	.29***	.14*	.24***	03	.12*	.04	07
Rabbit	.10	00	.04	.14*	.18**	.30***	.65***	.46***	.39***	.19**	.18**	.04	05
Mouse	.00	12	02	.00	.06	.24***	.45***	.70***	.40***	.10	.17*	.12	00
Raccoon	.20**	.11	.12*	.11	.13*	.22**	.34***	.34***	.69***	.08	.19**	.07	.04
Horse	.09	.10	.13*	.19**	.14*	.04	.17**	.13*	.15*	.69***	.19**	.19**	.18**
Bear	.00	.07	.07	.24***	.23***	.10	.15*	.15*	.26***	.27***	.63***	.23***	.18**
Eagle	10	.01	09	.12*	.13*	.02	.04	.10	.12*	.16*	.18**	.73***	.31***
Dragon	.02	.09	06	.08	.07	03	09	01	.06	,18**	.17*	.32***	.74***

Boldface indicates correlations for which sexual attraction to anthropomorphic animals of a particular species corresponded with sexual arousal by the fantasy of being an anthropomorphic animal of that same species.

<sup>\*</sup> *p* < .05, \*\* *p* < .005, \*\*\* *p* < .0001

arousal by the fantasy of being an anthropomorphic animal of at least one nearby species. Indeed, there were clusters of two or three species in which sexual attraction to anthropomorphic animals of one species within the cluster was most strongly correlated with the fantasy of being an anthropomorphic animal of that same species, next most strongly correlated with the fantasy of being an anthropomorphic animal of the other one or two species within the cluster, and much less strongly correlated with the fantasy of being an anthropomorphic animal of species not in the cluster. Clusters of species that emerged from inspecting Table 6 include canines (foxes, wolves, and dogs), felines (lions, tigers, and cats), small woodland animals (rabbits, mice, and raccoons), large woodland animals (horses and bears), and flying animals (eagles and dragons). For example, sexual attraction to anthropomorphic wolves was most strongly correlated with sexual arousal by the fantasy of being an anthropomorphic wolf, but the next highest correlations were with sexual arousal by the fantasy of being an anthropomorphic dog and fox. This pattern of correspondence comprised the cluster of canines.

In general, the clusters show some resemblance to the "stimulus generalization gradient" that was proposed by Blanchard et al. (2012), in which men are second most attracted to individuals of the same gender as those to whom they are most attracted, but who are of the next level of sexual maturity. The clusters are also reminiscent of a pattern found in a sample of autopedophilic men from a previous study: Sexual attraction to children or adults of a particular gender-age category was most strongly correlated with sexual arousal by the fantasy of being a child or adult of that same gender-age category, but the next highest correlations were with sexual arousal by the fantasy of being a child or adult of adjacent gender-age categories (Hsu & Bailey, 2017). Finally, the clusters are consistent with the idea that the external erotic targets are

similar to the internal erotic targets among men with ETIIs. Wolves are similar in behavior and appearance to other canines such as foxes and dogs, and less similar to mice, bears, and dragons.

Correlates of autoanthropomorphozoophilia. I examined whether sexual arousal by the fantasy of being an anthropomorphic animal was related to having a fursona, fursuiting, having ever considered the possibility of being another species or kind of animal, and having ever considered surgery to look more like another species or kind of animal. The general variable of sexual arousal by the fantasy of being an anthropomorphic animal was significantly and positively correlated with having a fursona, the latter categorical variable being treated as the same continuous measure that was previously described, r(332) = .24, p < .0001. The general variable of sexual arousal by the fantasy of being an anthropomorphic animal was also significantly and positively correlated with the frequency of fursuiting in the past year, r(332) = .11, p = .040, although the correlation was small. Nor did its association with participants' ever considering the possibility that they were another species or kind of animal reach conventional levels of significance, OR = 1.13, p = .053. However, it was significantly and positively associated with participants' ever considering surgery to make themselves look more like another species or kind of animal, OR = 1.18, p = .009.

Among participants sexually aroused by the fantasy of being an anthropomorphic animal (n = 309), 65.0% had at least one fursona, 20.5% had ever fursuited, 12.6% had ever considered that they were another species or kind of animal, and 16.5% had ever considered surgery to make themselves look more like another species or kind of animal. Among participants who were not sexually aroused by the fantasy of being an anthropomorphic animal (n = 25), percentages were 48.0%, 12.5%, 4.0%, and 4.2%, respectively. None of the differences in percentages between the

two groups were significant, all ps > .088.

Narratives of autoanthropomorphozoophilia. I present a few brief narratives from participants that illustrate the conceptualization of autoanthropomorphozoophilia as an ETII. Each narrative is a selection from the responses that a participant provided for the open-ended questions. I edited the narratives for grammar, style, and concision, while preserving content.

The following two participants described the development of their fantasies related to being an anthropomorphic animal in a way that is consistent with the concept of ETIIs. The fantasies of the second participant also suggest the confluence of an ETII involving sexual arousal by the fantasy of being an anthropomorphic animal and an ETII involving sexual arousal by the fantasy of being fat:

I watched cartoons in the nineties like Tiny Toon Adventures that were full of anthropomorphic animal characters. I found them really interesting, and some of the female anthropomorphic animal characters made me aroused. I wanted to become an anthropomorphic animal and live in their world.

It was the early nineties. Garfield was still cool, and I was very interested in both fat people and the idea of being fat. I imagined that I was Garfield, a tubby cat, and I became aroused. I liked the idea of being a cartoon cat that was fat and fluffy. Later in my teenage years, I would seek out other overweight cartoon animals and become aroused imagining that I was them.

The following two participants described a variety of fantasies and behaviors related to being an anthropomorphic animal that could be motivated by an ETII, sexual masochism, or both. In both narratives, there was an emphasis on the actual transformation into an anthropomorphic animal or creature:

My most sexually arousing fantasy is being turned into a female anthropomorphic dog by a female anthropomorphic animal. I am then forced into sex slavery and raped on a daily basis. Another fantasy is being sprayed by a female anthropomorphic skunk and turning into one myself.

In my fantasies, I sometimes imagine myself as my fursona. At other times, I imagine myself with my fursona. My fantasies focus on being put into a mascot costume, being dressed in humiliating outfits (diapers or something feminine), being eaten or eating others, or being transformed into an anthropomorphic animal. For example, my most sexually arousing fantasy is being a Power Ranger who is defeated and captured by a big, puffy, and pink monster called the Impursonator. After being humiliated and then eaten by her, I am slowly encased in a big, puffy, and pink costume resembling her. More recently, I was put into a blue jay costume and masturbated while fantasizing about being a bird, unable to speak in anything but squawks.

### **Discussion**

The results of Study 1 provide clear answers to two major questions about male furries:

To what extent are they sexually motivated, and why? Participants tended to report sexual

interest in being furries. Some interests related to being a furry, such as interacting with other furries and fursuiting, were less sexual than others, such as looking at furry artwork or other media. Still, the vast majority of participants (99.4%) reported some degree of sexual interest in being furries and thus some degree of sexual motivation.

Regarding an explanation of their sexual motivation, participants tended to report a pattern of sexual interests that was consistent with the concept of ETIIs. Specifically, they overwhelmingly reported both sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal. Their ratings of sexual arousal by the fantasy of being an anthropomorphic animal (autoanthropomorphozoophilia) also greatly exceeded those of sexual arousal by the fantasy of being either a real animal (autozoophilia) or a woman (autogynephilia) in both prevalence and degree. Finally, participants found it especially sexually arousing to fantasize about being the same kinds of anthropomorphic animals to whom they were sexually attracted, with respect to gender and species. That is, a male furry who was most sexually attracted to male anthropomorphic animals and anthropomorphic lions was most likely to be sexually aroused by the fantasy of being a male anthropomorphic animal and an anthropomorphic lion, relative to anthropomorphic animals of other genders and species. Thus, the results are consistent with the idea that many male furries are sexually motivated and by an ETII, namely autoanthropomorphozoophilia. Male furries who are motivated by autoanthropomorphozoophilia have internalized their sexual attraction to anthropomorphic animals, and thus are sexually aroused by the fantasy of being an anthropomorphic animal.

In my sample of male furries, autoanthropomorphozoophilia seemed primarily limited to sexual fantasy and ideation about fursonas. Contrary to portrayals of furries in the media and

popular culture, fursuiting was relatively uncommon, with only one-fifth of the sample ever having engaged in that activity. Indeed, although sexual arousal by the fantasy of being an anthropomorphic animal was positively associated with both fursuiting and having a fursona among participants, the correlation with fursuiting was less than half the magnitude of that with having a fursona. Furthermore, correlations with both of these popularized aspects of being a furry were surprisingly weak. It seems that fursuiting among male furries might be conceptually analogous to cross-dressing among autogynephilic men, because both activities involve changing one's appearance and behavior to become more like his preferred erotic target: an anthropomorphic animal or a woman, respectively. Because autoanthropomorphozoophilia and fursuiting were not strongly associated, however, future research is needed to clarify the nature of this association. In contrast, the association between autogynephilia and cross-dressing has been well established (Bailey, 2003; Blanchard, 1991; Blanchard et al., 1986; Hsu et al., 2015, 2017; Lawrence, 2013).

Similar to past samples of predominantly male furries (e.g., Evans, 2008; Gerbasi et al., 2008; Plante et al., 2011; Satinsky & Green, 2016), my sample of male furries was likely to have non-heterosexual (84.1%), especially bisexual (42.8%), identities and to provide Kinsey scores consistent with these identities. In addition to reporting sexual attraction to both women and men, many more (73.4%) reported sexual attraction to both female and male anthropomorphic animals, including some who identified as heterosexual/straight or homosexual/gay. Although bisexual identity and current sexual feelings were common among participants, 32 of the 44 (72.7%) bisexual participants who were in a relationship reported that their romantic partner was another man, with 24 of the 32 (75.0%) reporting that they met their romantic partner over their

mutual interest in being furries or as part of the furry community. Given these two observations, perhaps bisexual male furries might usually be with male romantic partners because there are much fewer female furries, and male furries are just as capable as female furries of sharing and fulfilling sexual interests related to anthropomorphic animals or being a furry (i.e., by enacting their fursona or by fursuiting), if not more eager to do so. This possibility was raised by a furry in an interview conducted as part of a study by Satinsky and Green (2016).

Despite the high prevalence and degree of sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal in this sample of male furries, these sexual interests have long eluded the scientific literature. At least four factors may have contributed to their lack of scientific attention. First, both sexual interests are probably rare in the general population, even if they appear to be common among male furries. Second, furries have only recently gained significant public attention with the advent of the Internet, depictions in the media (e.g., Gurley, 2001; Zuiker et al., 2003), and increasing attendance at furry conventions. Third, sexuality is usually studied within a conventional framework, in which sexual orientation is considered relative attraction to men versus women. Deviations from this conventional framework usually involve research on pedophilia or sexual violence, with an aim to prevent sexual offending. Finally, the concept of ETIIs has been difficult to grasp for many scientists, clinicians, and laypeople, even when it is helpful for understanding otherwise puzzling phenomena, such as cross-dressing among heterosexual men, desire for limb amputation, and now the furry phenomenon.

#### Limitations

Several important limitations of Study 1 require its cautious interpretation. Most

importantly, it is impossible to recruit furries randomly or representatively, whether from a furry convention or from online websites. As a result, we cannot know the extent to which my findings generalize to the population of all male furries. I recruited participants from a variety of sources differing in their emphasis of erotic content. Furthermore, the recruitment materials emphasized the intention to primarily study the sexuality of male furries, and the questionnaire mostly assessed sexuality. For these reasons, my sample of male furries may have been biased toward those who were sexually motivated and non-heterosexual. There is no way to know this for certain, unfortunately, and this sample may not represent male furries in general. Accepting this limitation, it remains clear that there exist many male furries who do report sexual motivation, as well as many who report sexual interests that are consistent with the concept of ETIIs. Moreover, the preponderance of non-heterosexual identities and sexual feelings among my sample of male furries is striking. Although my findings cannot tell us whether any individual male furry is sexually motivated or non-heterosexual, they tell us that the number of male furries who are either sexually motivated or non-heterosexual is not trivial.

Another limitation of Study 1 is that I did not carefully assess alternative explanations for why furries might be motivated besides sexuality. Social motivation is one plausible alternative, as previous studies have suggested that furries tend to value their furry identity and draw significant social support from the furry community (Mock et al., 2013; Reysen et al., 2016; Roberts et al., 2015). Furries may also be motivated by a non-sexual interest in anthropomorphic animals and in being an anthropomorphic animal. Participants who did not believe that their primary motivation for being furries was sexual provided alternative motivations in open-ended responses. The most common responses were consistent with social motivation, and the next

most common responses were consistent with non-sexual interest in anthropomorphic animals and in being an anthropomorphic animal. However, nearly half of the sample did not provide responses or confirmed that their interest in being furries was primarily sexual. The large majority of participants also endorsed some degree of sexual interest related to being a furry. Furthermore, participants most commonly reported that they became furries in the context of online pornography featuring anthropomorphic animals. Thus, the results most strongly support the idea that male furries tend to be sexually motivated, but some are also motivated by social or other non-sexual reasons. This conclusion is similar to what I proposed in the introduction and also to the conclusion reached by Soh and Cantor (2015).

I address one final limitation of Study 1 that is related to the previous: I did not carefully assess alternative explanations for sexual motivation besides an ETII. In theory, masochism could be one such alternative. Indeed, there were clear masochistic themes in the last two narratives of autoanthropomorphozoophilia that I presented, which included fantasies of transforming into an anthropomorphic animal that involved rape, force, pain, or humiliation. Freund and Blanchard (1993) discussed the possibility that some fantasies that appear to be motivated by ETIIs are in fact motivated by masochism. Fantasies motivated by masochism emphasize the physical and behavioral differences between a man and his preferred erotic target (e.g., women), thereby increasing feelings of submissiveness. Fantasies motivated by an ETII, in contrast, emphasize the physical and behavioral similarities between a man and his preferred erotic target. Based on these criteria, the last two narratives do not clearly represent fantasies motivated by either masochism or an ETII alone. For some male furries, sexual motivation may be explained by both masochism and an ETII. Because participants tended to endorse a high

degree of sexual arousal by the fantasy of being an anthropomorphic animal (M = 7.39 out of 10.00, SD = 3.28), the concept of ETIIs is a more likely explanation for sexual motivation than masochism is. The findings that male furries tended to be sexually aroused by the fantasy of being the same kinds of anthropomorphic animals to whom they were sexually attracted, with respect to gender and species, are also much more easily explained by an ETII than by masochism.

## **Conclusions**

Study 1 characterized the sexual orientation, sexual motivation, and sexual interests of male furries, but it was largely exploratory and had important limitations. Future research on the sexuality of furries may benefit from more careful assessment of possible alternative motivations for being furries and possible alternative explanations for sexual motivation. If future research converges with the current findings regarding sexual motivation by an ETII, it would be important to examine how ETIIs like autoanthropomorphozoophilia develop in furries. Future research may also benefit from recruiting samples in ways that are different from my approach, such as recruiting specifically for female furries and those who do not endorse sexual motivation. No sample of furries will truly be representative, however.

Some results from Study 1 might be used to perpetuate the existing stigma against furries. In particular, some individuals might try to use this study to further stigmatize furries for having unusual sexual interests, such as sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal. However, it should be emphasized that neither of these sexual interests is even potentially harmful, because anthropomorphic animals are not real. Furthermore, there was little evidence that male furries are especially sexually

attracted to real animals (i.e., have zoophilia), which could result in actual harm if these attractions were acted out. Although many in this sample reported some degree of sexual attraction to real animals, the average intensity was low.

It is unfortunate that furries are stigmatized for having unusual sexual interests, but this stigma is unlikely to change without open and honest discourse. We cannot have open and honest discourse by denying the existence of the many furries who are sexually motivated and have unusual sexual interests. By studying sexual motivation and unusual sexual interests in furries, we will better understand their role and importance. Perhaps then, both furries and our larger society will no longer find them shameful. That would be a good result, in my opinion.

# Study 2: Sexual Orientation, Sexual Motivation, and Erotic Target Identity Inversions in Male Adult Baby/Diaper Lovers

Adult baby/diaper lovers (AB/DLs) are individuals who enjoy role-playing as babies (adult babies) or wearing diapers (diaper lovers) (Hawkinson & Zamboni, 2014; Michelson, 2017; Pate & Gabbard, 2003; Watson, 2005). Adult babies do not always wear diapers in their role-play, and diaper lovers do not always role-play as babies when wearing diapers. However, the fact that both adult babies and diaper lovers are associated in the same label suggests that there is overlap between them. This overlap was empirically supported by a large online survey of 1,795 male and 139 female AB/DLs, which found that those who enjoyed role-playing as babies tended to use diapers and to find them an important aspect of their experience as AB/DLs (Hawkinson & Zamboni, 2014). This survey also found that in addition to role-playing as babies or wearing diapers, AB/DLs engaged in other related activities, such as urinating or defecating themselves, having play dates with other AB/DLs, and having an adult man or woman take care of them.

Many AB/DLs are involved in a community in which they discuss their interests and share stories, videos, or other media about role-playing as babies or wearing diapers (Michelson, 2017; Pate & Gabbard, 2003; Watson, 2005). As part of the community, they sometimes meet in person to participate in role-play together, usually with one person as the baby and another person as the adult taking care of the baby. More rarely, AB/DLs attend small gatherings or large conventions. Most AB/DLs prefer secrecy, however, and tend to interact with each other online.

# **Are AB/DLs Sexually Motivated?**

AB/DLs have been portrayed as sexually motivated in the media and popular culture

(Michelson, 2017; Watson, 2005). AB/DLs have not been particularly resistant to the notion that they are sexually motivated, however, and some have even acknowledged the presence of sexual motivation for AB/DLs in their interviews with the media (Beckmann, 2012; Michelson, 2017). Indeed, in the large online survey already mentioned, AB/DLs tended to rate sexual motivation as moderately important to their practices (Hawkinson & Zamboni, 2014). Qualitative data from the same survey also showed that sexual motivation was commonly reported by AB/DLs (Zamboni, 2019). Finally, most case reports of AB/DLs in the psychiatric literature have mentioned a sexual component (Bethell, 1974; Caldwell, 2008; Dinello, 1967; Lehne & Money, 2003; Malitz, 1966; Pandita-Gunawardena, 1990; Pate & Gabbard, 2003; Pettit & Barr, 1980; Tuchman & Lachman, 1964). These cases have included AB/DLs with a wide range of interests and behaviors, from role-playing as babies and wearing diapers to urinating or defecating themselves. Because AB/DLs had not yet been introduced as a term, these earlier case reports referred to these individuals as having "infantilism" (Stekel, 1930) or "adult baby syndrome" (Pate & Gabbard, 2003).

Not all AB/DLs attribute sexual motivation to their practices (Michelson, 2017; Zamboni, 2019). Other plausible explanations exist for why AB/DLs are motivated, which have been explored to varying degrees. Because AB/DLs are often part of a community with shared interests (Michelson, 2017; Pate & Gabbard, 2003; Watson, 2005), they might be socially motivated rather than (or in addition to) sexually motivated. That is, some AB/DLs might be motivated by a desire for belonging and social support, which could be fulfilled by involvement in the AB/DL community. They might also be motivated by friends, romantic partners, or sexual partners who are AB/DLS. Still, websites that are dedicated to AB/DLs often include erotic

content (Pate & Gabbard, 2003), suggesting that sexual motivation is common. In contrast, most activities that are widely considered to be socially motivated, such as following specific sports teams or music groups, show little indication of sexual motivation (Schroy et al., 2016). No systematic research has addressed the extent to which AB/DLs might be socially motivated.

The desire for relaxation, comfort, or stress relief is another plausible explanation for why AB/DLs are motivated, commonly reported by AB/DLs in the qualitative data from Zamboni's (2019) large survey. Croarkin, Nam, and Waldrep (2004) also suggested that AB/DLs might be motivated by obsessive-compulsive disorder, based on their case of an AB/DL who experienced ego-dystonic thoughts and behaviors related to becoming a baby and wearing diapers. Finally, two case reports of AB/DLs reported no clear sexual or non-sexual motivations, leading the authors to surmise that AB/DLs might merit a distinct symptom cluster or diagnostic entity of their own (Evcimen & Gratz, 2006; Kise & Nguyen, 2011).

Based on previous research, it is likely that AB/DLs tend to be both sexually and non-sexually motivated. Assuming that they are sexually motivated, two major questions have not been clearly addressed: To what extent are AB/DLs sexually motivated, and what explains any sexual motivation? Regarding the second question, the next section introduces a promising concept that might explain sexual motivation in AB/DLs.

# Are AB/DLs Sexually Motivated by an Erotic Target Identity Inversion?

By role-playing as babies and wearing diapers, AB/DLs change their appearance and behavior to become more like babies. In these ways, they are similar to male cross-dressers, who change their appearance and behavior to become more like women. Heterosexual male cross-dressers are by definition sexually attracted to women, and their cross-dressing is sexually

motivated (Bailey, 2003; Blanchard, 1991; Blanchard et al., 1986; Hsu et al., 2015, 2017; Lawrence, 2013). Specifically, they have *autogynephilia*: the propensity to be sexually aroused by the fantasy of being a woman (Blanchard, 1989a). Autogynephilia can be conceptualized as an ETII, in which an external erotic target (e.g., women) is located within a man's own body (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). Although autogynephilia is likely to be the most common form of ETII (Blanchard, 1993b), there is systematic evidence in support of three other ETIIs: apotemnophilia in men who desire limb amputation (First, 2005; Lawrence, 2006), autopedophilia in men sexually attracted to children (Hsu & Bailey, 2017), and autoanthropomorphozoophilia in male furries (Study 1).

ETIIs are unlikely limited to autogynephilia, apotemnophilia, autopedophilia, and autoanthropomorphozoophilia. Indeed, the concept of ETIIs is promising for investigating phenomena in which men change their appearance or behavior to become more like other kinds of persons or things, especially when there is reason to believe such changes are sexually motivated. The behaviors of male AB/DLs, which include role-playing as babies and wearing diapers, could be motivated by an ETII, similar to how cross-dressing among autogynephilic men is motivated by an ETII. If some male AB/DLs are motivated by an ETII, then they should experience both sexual attraction to babies and sexual arousal by the fantasy of being a baby. In this case, babies comprise the external erotic target, which would be internalized as the ETII. Money (1986) referred to sexual arousal by the fantasy of being a baby as *autonepiophilia* or paraphilic infantilism. Although he suggested that AB/DLs are motivated by autonepiophilia, he did not go further with his explanation and implicate that it was an ETII.

There are other reasons why AB/DLs might be motivated by an ETII, in addition to

sexual motivation and the fact that they change their appearance and behavior to become more like babies (e.g., Hawkinson & Zamboni, 2014). For example, wearing diapers among AB/DLs seems analogous to cross-dressing among autogynephilic men. The specific erotic interest in wearing diapers is called *diaper fetishism*. It is unclear whether any AB/DLs are motivated to seek medical procedures to become more like babies, but this would be similar to some autogynephilic men who are motivated to seek sex reassignment surgery. These possible parallels between AB/DLs and men with more established ETIIs, such as autogynephilia, further suggest that AB/DLs might be motivated by an ETII. Notably, in at least a few cases of AB/DLs, transvestic fetishism and the desire to become a woman were also reported (Kise & Nguyen, 2011; Lehne & Money 2003; Pettit & Barr, 1980), which might reflect co-occurring autogynephilia and sexual motivation due to an ETII.

AB/DLs share superficial qualities with autopedophilic men, because both tend to be sexually motivated to impersonate children. However, there are also differences between the two groups. AB/DLs are specifically drawn to impersonating babies. In contrast, autopedophilic men vary in their erotic targets with respect to children. For instance, some autopedophilic men are most sexually attracted to and thus sexually aroused by the fantasy of being girls aged 4-10 (Hsu & Bailey, 2017), and they may especially engage in behaviors to impersonate children of that particular gender-age category specifically. Furthermore, men sexually attracted to children, including those who are autopedophilic men, do not tend to be sexually attracted to babies (Bailey et al., 2016; Hsu & Bailey, 2017). Few report sexual attraction to girls or boys 3 years old or less, and thus even fewer report sexual arousal by the fantasy of being girls or boys 3 years old or less. It has not been established whether autopedophilic men sexually aroused by the

fantasy of being a baby are especially likely to identify as an AB/DL. But if AB/DLs are characterized by an ETII, they should be sexually attracted to babies.

No research has systematically examined the extent to which AB/DLs are sexually attracted to babies. Previous case reports of AB/DLs have given little indication that they are sexually attracted to babies, but it is unclear whether such sexual attraction was assessed. Furthermore, AB/DLs have themselves strongly denied sexual attraction to either babies or children, while sometimes conceding that role-playing as babies or wearing diapers is sexually motivated (Holley, 2016; Michelson, 2017). Because it remains a popular if controversial idea in larger society that AB/DLs are sexually attracted to babies or children, AB/DLs often attempt to disassociate themselves from men sexually attracted to children in order to lessen social stigma (Brame, Brame, & Jacobs, 1996; Holley, 2016; Michelson, 2017; Richards, 2015). They may also be cautious about, if not hostile toward, media and research that address this possibility.

Freund and Blanchard (1993) presented three cases of men who appeared to be AB/DLs. Their fantasies and behaviors revolved around being either a baby or a young boy and wearing diapers. One man described his sexual fantasy of being a baby put into the washing machine by his mother, and he also reported a history of cross-dressing in order to feel powerless or degraded. The men in all three cases reported that they were most sexually attracted to adult women and fantasized about adult women spanking or degrading them. As a result, Freund and Blanchard concluded that these men were motivated by masochistic fantasies of being a baby or child and wearing diapers, rather than by an ETII.

## **The Present Study**

Study 2 had three primary goals. First, I characterized male AB/DLs with respect to their

sexual orientation, referring herein to its conventional understanding as relative sexual attraction to men versus women. Such information provides a general profile of male AB/DLs' sexuality in a conventional framework. Second, I examined whether and to what extent male AB/DLs are sexually motivated. Third, I examined the extent to which the concept of ETIIs explains any sexual motivation of male AB/DLs.

Regarding this third goal, the concept of ETIIs generates several key predictions about male AB/DLs and their sexual interests. Most importantly, male AB/DLs should be both sexually attracted to babies and sexually aroused by the fantasy of being a baby. In addition, because AB/DLs change their appearance and behavior to become more like babies rather than women, male AB/DLs should be more commonly and intensely aroused by the fantasy of being a baby than by the fantasy of being a woman. Finally, male AB/DLs may be especially sexually aroused by the fantasy of being the same kinds of babies to whom they are sexually attracted. For example, male AB/DLs sexually attracted to female babies may be especially sexually aroused by the fantasy of being a female baby. Because their external and internal erotic targets are similar, this would be especially consistent with the concept of ETIIs.

Study 2 was conducted using a large sample of male AB/DLs recruited from the Internet. For the present study, the sample of AB/DLs was restricted to men, because the overwhelming majority (93%) of AB/DLs have been found to be male (Hawkinson & Zamboni, 2014), including in this sample. ETIIs have also been hypothesized to be paraphilias (Freund & Blanchard, 1993), which are much more likely to occur in men (Abel & Osborn, 1992; Baur et al., 2016; Dawson et al., 2016; Joyal & Carpentier, 2017; Långström & Seto, 2006; Långström & Zucker, 2005).

### Method

## **Participants**

AB/DLs were recruited for an anonymous online questionnaire via advertisements initially placed on the AB/DL subreddit (r/ABDL) and the ABDL Story Forum. They were also encouraged to send the questionnaire to other AB/DLs and to post it on other websites that AB/DLs frequent. Respondents were excluded from the present analyses if they did not report that they were male (n = 29) or that they identified as an AB/DL, adult baby, or diaper lover (n = 29).

The resulting sample comprised 148 male AB/DLs (M age = 28.78 years, SD = 8.99). Of the total participants, 119 (80.4%) identified as an AB/DL, 24 (16.2%) as a diaper lover only, and 5 (3.4%) as an adult baby only. Of the total participants, 77 (52.0%) reported that they were recruited via the AB/DL subreddit (r/ABDL), and 38 (25.7%) via the ABDL Story Forum. The remaining 33 participants (22.3%) reported some other recruitment source, such as different Internet forums for AB/DLs or word of mouth from another participant. Participants received no compensation.

### Measures

Participants completed an anonymous questionnaire online, which took about half an hour. The questionnaire included several questions that assessed the extent and the development of their interest in being AB/DLs. However, it focused mainly on three categories of self-report items: (1) sexual orientation; (2) sexual motivation related to being AB/DLs; and (3) sexual interests related to ETIIs that might be found in male AB/DLs. These three categories corresponded with my three primary goals for the study: (1) to characterize the sexual orientation

of male AB/DLs; (2) to examine whether and to what extent male AB/DLs are sexually motivated; and (3) to examine the extent to which the concept of ETIIs explains any sexual motivation of male AB/DLs.

Extent and development of interest in being AB/DLs. Participants rated their frequencies (0 = never, 1 = less than once a month, 2 = once a month, 3 = two to three times a month, 4 = once a week, 5 = two to three times a week, 6 = daily) of engaging in the following activities during the past year: role-playing as babies, wearing diapers or baby's clothing, urinating or defecating themselves, having play dates with other AB/DLs, having an adult man take care of them while they role-played as babies or wore diapers, and having an adult woman take care of them while they role-played as babies or wore diapers. They also reported whether they had ever considered the possibility that they might be better off as a baby (yes or no) and whether they had ever considered medical procedures to make themselves look more like a baby (yes or no).

Participants reported the age at which they first became AB/DLs and the manner in which it happened with open-ended responses to the question: "How did you become an adult baby/diaper lover?" They also rated how likely they think they were to still be AB/DLs in 10 years on a 5-point scale (1 = not at all, 2 = slightly, 3 = somewhat, 4 = very, 5 = extremely). Finally, on the same 5-point scale, participants rated how involved they were with communities or subcultures other than those of AB/DLs that likely consist of a sexual component, such as those of BDSM and furries. Those involved with other communities or subcultures listed which ones they were. Given the exploratory nature of the present study, all open-ended responses were simply reviewed for common themes, which were then used to calculate the numbers and

percentages of participants who provided responses that mentioned those themes.

**Sexual orientation.** Participants reported their sexual identity, choosing among heterosexual/straight, bisexual, homosexual/gay, asexual, and other. If they reported their sexual identity as "other," participants provided open-ended responses that explained their choice. Participants also rated their current sexual feelings on the Kinsey scale (Kinsey et al., 1948), which is a 7-point scale (0 = sexual feelings toward females only to 6 = sexual feelings toward males only). Participants were given the additional option on the Kinsey scale to report current sexual feelings toward neither females nor males.

Participants reported their current relationship status, choosing among *single*, *in an open relationship*, *in a closed relationship*, *engaged*, *married*, *divorced*, and *widowed*. Although some of these options were not mutually exclusive (e.g., one could be both in an open relationship and married), participants could choose only one option. Because options were ordered in general to indicate progressively more serious relationships, participants were assumed to have understood that some options superseded others (e.g., being married superseded being in an open relationship). If they reported being in an open relationship, in a closed relationship, engaged, or married, participants provided the gender of their current romantic partner (*male*, *female*, *male-to-female transgender*, *female-to-male transgender*, or *other*). If they reported the gender of their current romantic partner as "other," participants provided open-ended responses that explained their choice. Participants also reported whether they had ever been in a relationship with someone who identified as an AB/DL (*yes*, *no*, or *not sure*). Those who reported that they had been in a relationship with someone who identified as an AB/DL additionally selected from the following options: "This person played a role in me becoming an AB/DL," "I played a role in

this person becoming an AB/DL," "We played a role in each other becoming AB/DLs," "We met over our mutual interest in being AB/DLs," and "Both of us being AB/DLs was unrelated to how we got together."

Sexual motivation related to being AB/DLs. Participants rated the degree to which being AB/DLs was sexually motivated on a 5-point scale (1 = not at all, 2 = slightly, 3 = somewhat, 4 = very, 5 = extremely). They also rated the degrees to which interacting with other AB/DLs online and in person, role-playing as babies, wearing diapers, and urinating or defecating themselves were sexually motivated on the same 5-point scale. They then rated the degrees to which being AB/DLs was socially motivated and motivated by a desire for relaxation, comfort, or stress relief, on the same 5-point scale. In addition, participants provided open-ended responses explaining why they were AB/DLs, if they were not sexually motivated. Finally, participants rated both the importance of fantasizing about being a baby and the importance of wearing diapers or baby's clothing during masturbation on a 5-point scale (1 = not at all important, 2 = slightly important, 3 = somewhat important, 4 = very important, 5 = extremely important).

Sexual interests related to erotic target identity inversions (ETIIs). The concept of ETIIs provides a compelling explanation for why male AB/DLs might be sexually motivated. If characterized by an ETII, male AB/DLs should be both sexually attracted to babies and sexually aroused by the fantasy of being a baby, just as autogynephilic men tend to be sexually attracted to women and are sexually aroused by the fantasy of being a woman (e.g., Blanchard, 1992; Hsu et al., 2015). To assess sexual interests related to ETIIs that might be found in male AB/DLs, participants rated the degree to which they were sexually attracted to the following kinds of

erotic targets: adult women, female babies, and male babies. Ratings were made on an 11-point scale (0 = not at all sexually attracted to 10 = most sexually attracted). Participants also rated the degree to which they were sexually aroused by the fantasy of being each of these kinds of erotic targets on an analogous 11-point scale (0 = not at all sexually aroused to 10 = most sexually aroused). In order to reduce bias due to carryover effects, participants rated their sexual attraction to the various erotic targets at the start of the questionnaire and their sexual arousal by the fantasy of being each of those targets at the end.

Finally, participants who endorsed any degree of sexual arousal by the fantasy of being a female or a male baby rated the importance of physical or mental pain, humiliation, and another person in their sexual fantasies of being a baby on a 5-point scale (1 = not at all important, 2 = slightly important, 3 = somewhat important, 4 = very important, 5 = extremely important). If they reported that another person was at least slightly important in their sexual fantasies of being a baby, participants reported what kind of person was most likely to be in those fantasies (female baby, male baby, adult woman, adult man, or other). Those who reported "other" explained their choice with an open-ended response. Participants who endorsed any degree of sexual arousal by the fantasy of being a female or a male baby also provided detailed answers to open-ended questions about their fantasies and experiences. Those participants described, for example, what they think about specifically when fantasizing about being a baby, as well as their typical and most sexually arousing fantasies related to being a baby.

General variables for sexual attraction to babies and sexual arousal by the fantasy of being a baby. Male AB/DLs may be sexually attracted to female or male babies specifically, and they may also be sexually aroused by the fantasy of being a female or a male baby

specifically. In order to facilitate a broad assessment of participants' sexual interests related to babies, general variables for sexual attraction to babies and sexual arousal by the fantasy of being a baby were constructed that were not specific to any gender: The general variable for sexual attraction to babies was the higher of the two single-item ratings of sexual attraction to female and male babies. For instance, participants who rated sexual attraction to male babies as 9 but no sexual attraction to female babies scored 9 on this new variable.

The general variable for sexual arousal by the fantasy of being a baby was the higher of the two single-item ratings of sexual arousal by the fantasy of being a female and a male baby. For instance, participants who rated sexual arousal by the fantasy of being a male baby as 7 and sexual arousal by the fantasy of being a female baby as 5 scored 7 on this new variable. In the following analyses, I used these general variables as continuous measures of sexual attraction to babies and sexual arousal by the fantasy of being a baby that were not specific to any gender.

#### Results

## Extent and Development of Interest in Being AB/DLs

Although the questionnaire focused primarily on the sexuality of male AB/DLs, it included questions that assessed the extent and the development of their interest in being AB/DLs. All participants identified as male and as AB/DLs, adult babies, or diaper lovers, because they would not have otherwise qualified for this study. Besides engaging with the AB/DL community online, such as in Internet forums from which participants were recruited, and sometimes in person, what did it mean to be an AB/DL?

Figure 5 shows the distributions of participants' ratings of the frequencies (0 = never to 6 = daily) of engaging in the following activities during the past year: role-playing as babies (M = daily)

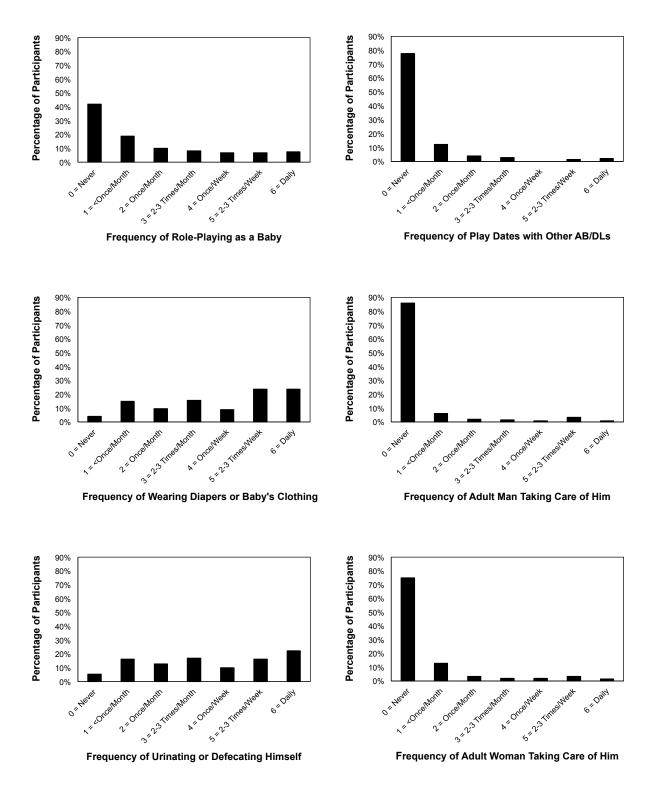


Figure 5. Distributions of participants' ratings of the frequencies of engaging in several different activities related to being an AB/DL during the past year (N = 148).

1.69, SD = 1.99), wearing diapers or baby's clothing (M = 3.76, SD = 1.92), urinating or defecating themselves (M = 3.48, SD = 1.95), having play dates with other AB/DLs (M = 0.47, SD = 1.17), having an adult man take care of them while they role-played as babies or wore diapers (M = 0.38, SD = 1.15), and having an adult woman take care of them while they role-played as babies or wore diapers (M = 0.59, SD = 1.33). Their average frequencies of wearing diapers or baby's clothing and urinating or defecting themselves during the past year were close to once a week. In contrast, their average frequencies of the other activities during the past year were close to never, although that of role-playing as babies was close to once a month. Thus, male AB/DLs in this sample focused more on diapers and incontinence than role-play as babies, and they tended not to engage in activities involving others.

Indeed, many more participants had ever worn diapers or baby's clothing and had ever urinated or defecated themselves during the past year than had ever engaged in the other activities. Specifically, 95.9% reported some frequency of wearing diapers or baby's clothing during the past year, and 94.6% some frequency of urinating or defecating themselves. In contrast, only 58.1% reported some frequency of role-playing as babies during the past year. The percentages were even lower for having play dates with other AB/DLs (22.3%), having an adult man take care of them while they role-played as babies or wore diapers (14.2%), and having an adult woman take care of them while they role-played as babies or wore diapers (25.0%).

A minority of participants (57; 38.5%) reported that they had ever considered the possibility that they might be better off as a baby. An even smaller minority (16; 10.8%) reported that they had ever considered medical procedures to make themselves look more like a baby.

The average age at which participants reported that they first became AB/DLs was 10.57

years (*SD* = 6.38). Participants most commonly (68; 47.6%) reported that they were younger than 10 years when they first became AB/DLs. Participants next most commonly (67; 46.9%) reported that they were between 10 and 20 years when they first became AB/DLs. Only eight (5.6%) participants reported that they were older than 20 years when they first became AB/DLs. Five participants did not provide their age for this question.

The most common manner in which participants reported that they became AB/DLs was through an early fascination with diapers (e.g., "I've had a fascination with diapers for as long as I can remember," "I have had a strong desire to be put back into diapers since I was a child"). This manner of becoming an AB/DL was mentioned by 51 (38.1%) of 134 participants who responded to this open-ended item. The next most common manner was through actually wearing a diaper (e.g., "Found a diaper in my closet that my parents kept and tried it on"), mentioned by 30 (22.4%) participants. Another 10 (7.5%) participants reported that they became AB/DLs in the context of bedwetting or incontinence (e.g., "Was a bed-wetter until I was 10 or 11, and diapers made me feel safe"). Yet another 9 (6.7%) participants reported that they became AB/DLs in the context of online pornography featuring adults in diapers (e.g., "Found some porn of women in diapers and wanted to try it"), and 7 (5.2%) through Internet forums for AB/DLs (e.g., "Found an online community sharing similar fantasies"). The remaining participants who provided responses were too vague in their answers or did not know (e.g., "No idea").

Participants rated themselves as very likely (M = 4.30, SD = 0.97) to still be AB/DLs in 10 years on the 5-point scale ( $1 = not \ at \ all \ to \ 5 = extremely$ ). Participants also rated themselves as being slightly involved (M = 2.05, SD = 1.23) with communities or subcultures other than those of AB/DLs that likely consist of a sexual component, such as those of BDSM and furries,

on the same 5-point scale. Roughly half of the sample, or 76 participants (51.4%), reported some involvement with such communities or subcultures. Of those 67 who were involved with such communities or subcultures and listed which ones they were, 40 (59.7%) reported BDSM, 24 (35.8%) reported furries, four (6.0%) reported femdom, and two (3.0%) reported scat. Because some participants listed more than one community or subculture, numbers and percentages are not mutually exclusive.

## **Sexual Orientation**

Of the male AB/DLs in this sample, 92 (62.2%) identified as heterosexual/straight, 27 (18.2%) as bisexual, 10 (6.8%) as homosexual/gay, and nine (6.1%) as asexual. The remaining 10 participants (6.8%) chose the response "other," and the most common explanation was that they identified as pansexual. Other explanations included that they identified as bicurious, homoflexible, diapersexual, or pedophilic. Figure 6 shows the distribution of participants' ratings on the Kinsey scale (M = 1.42, SD = 1.66), which was both positively skewed and consistent with the distribution of their sexual identities. Six participants (4.1%) were not included in the distribution of Kinsey scale ratings because they reported current sexual feelings toward neither females nor males. This number was surprisingly fewer than the nine who identified as asexual.

**Romantic relationships.** The majority of participants (78; 52.7%) reported that they were single (i.e., not in a romantic relationship with anyone). In addition, 31 (20.9%) reported being married, 23 (15.5%) in an exclusive relationship, seven (4.7%) engaged, six (4.1%) in an open relationship, one (0.7%) divorced, and one (0.7%) widowed. One participant did not report his relationship status. Of the 67 participants currently involved with a romantic partner, 57 (85.1%) were with a woman, six (9.0%) with a man, and one (1.5%) with a male-to-female

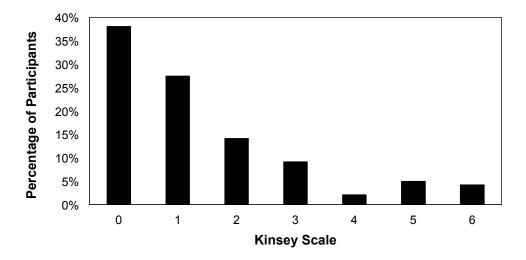


Figure 6. Distribution of participants' ratings on the Kinsey scale (0 = sexual feelings toward females only to 6 = sexual feelings toward males only; <math>N = 142).

transgender woman. The remaining three participants (4.5%) chose the response "other," with two reporting that they were with multiple partners (e.g., one woman and one man) and one reporting that they were with someone who was two-spirit. Participants in a relationship with a woman scored much lower (M = 0.91, SD = 1.09) than those in a relationship with a man did (M = 4.50, SD = 1.64) on the Kinsey scale, t(61) = -7.30, p < .0001. Thus, participants in a relationship with a woman tended to report current sexual feelings toward females mostly, whereas participants in a relationship with a man tended to report them toward males mostly.

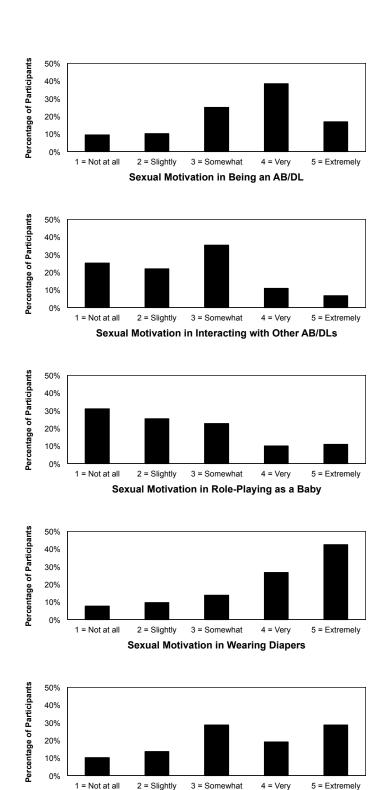
A minority of participants (16.9%) reported that they had ever been in a relationship with someone who identified as an AB/DL. Of these 25 participants, 16 (64.0%) reported that they met this person over their mutual interest in being AB/DLs. Another four (16.0%) reported that they played a role in this person becoming an AB/DL, two (8.0%) reported that this person played a role in them becoming AB/DLs, and two (8.0%) reported that this person identified as an AB/DL but that they did not meet as a result. The final participant (4.0%) reported that he and

this person both played a role in each other becoming an AB/DL.

## Sexual Motivation Related to Being AB/DLs

Figure 7 shows the distributions of participants' ratings of the degree to which being AB/DLs, interacting with other AB/DLs online and in person, role-playing as babies, wearing diapers, and urinating or defecating themselves were sexually motivated. The large majority of participants provided responses consistent with at least some degree of sexual motivation. Specifically, 90.5% reported that being AB/DLs was sexually motivated to some degree (M =3.43, SD = 1.17), 74.8% reported that interacting with other AB/DLs online and in person was sexually motivated to some degree (M = 2.52, SD = 1.18), 69.1% reported that role-playing as babies was sexually motivated to some degree (M = 2.45, SD = 1.32), 92.5% reported that wearing diapers was sexually motivated to some degree (M = 3.87, SD = 1.27), and 89.8% reported that urinating or defecating themselves was sexually motivated to some degree (M =3.42, SD = 1.31). Participants rated wearing diapers as more sexually motivated on average than each of the other four behaviors (all ps < .0001), and they also rated being AB/DLs and urinating or defecating themselves as more sexually motivated on average than interacting with other AB/DLs and role-playing as babies (all ps < .0001). In contrast to the high prevalence and degree of sexual motivation, only 65 participants (43.9%) reported that being AB/DLs was socially motivated to some degree (M = 1.93, SD = 1.24). However, the large majority, or 141 participants (95.3%), reported that being AB/DLs was motivated by a desire for relaxation, comfort, or stress relief to some degree (M = 3.76, SD = 1.17).

Table 7 presents the correlations among participants' ratings of the degree to which the five behaviors related to being an AB/DL were sexually motivated. All of the correlations were



Sexual Motivation in Urinating or Defecating Himself

Figure 7. Distributions of participants' ratings of the degree to which being AB/DLs, interacting with other AB/DLs, role-playing as babies, wearing diapers, and urinating or defecating themselves were sexually motivated (N = 148).

Table 7

Correlations among participants' sexual motivations related to being an AB/DL

Sexual motivation	Interacting with other AB/DLs	Role-playing as a baby	Wearing diapers	Urinating or defecating himself
Being an AB/DL	.50	.36	.78	.64
Interacting with other AB/DLs	_	.46	.41	.38
Role-playing as a baby	_	_	.43	.46
Wearing diapers	-	_	_	.71

All correlations were statistically significant at p < .0001.

N = 148

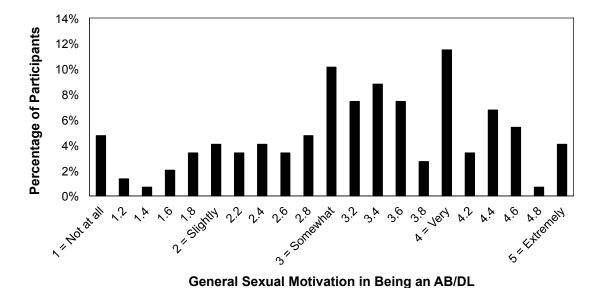


Figure 8. Distribution of participants' scores on the composite variable of general sexual motivation in being an AB/DL (N = 148).

statistically significant and at least moderately positive. The internal consistency of the five ratings was 0.84, using the alpha reliability coefficient. Thus, a composite variable from their average was created to reflect general sexual motivation in being an AB/DL. Figure 8 shows the distribution of scores on this new composite variable. The average score was 3.25 (SD = 1.03) on a 5-point scale, indicating some general sexual motivation in being AB/DLs among participants.

Of the 75 participants who indicated that being AB/DLs was not sexually motivated and provided open-ended responses explaining their reasons, 33 (44.0%) confirmed that it was in fact sexual to some degree (e.g., "It is sexually motivated," "It's both sexual and not at the same time"). Excluding those confirming some degree of sexual motivation, the following additional responses that provided non-sexual motivations were not mutually exclusive: relaxation, comfort, stress relief, or escape (27; 36.0%; "Sometimes I just want to wear a diaper and not worry about anything," "It's very relaxing, and it makes me feel safe"), and enjoyment from role-playing as babies or wearing diapers because it is cute or fun (five; 6.7%; "I enjoy my soft things to snuggle against, feeling cute and precious and worth loving, and so many more positive, but still nonsexual things that I associate with being a baby"). Other participants provided responses that did not fit unambiguously into any of these categories (e.g. "Poor maternal object relations").

Although participants overwhelmingly acknowledged at least some sexual motivation for being AB/DLs, the importance of being an AB/DL to their sexuality remains unclear. Because it tends to be chosen to maximize sexual pleasure, masturbatory fantasy is one potential window into this issue. When participants were asked the importance of fantasizing about being a baby during masturbation on a 5-point rating scale ( $1 = not \ at \ all \ important$  to 5 = extremely important), the average degree of its importance was  $1.86 \ (SD = 1.29)$ , suggesting it tended to be slightly important. Specifically, 91 (61.5%) said that it was not at all important, 33 (22.3%) said that it was slightly or somewhat important, and 24 (16.2%) said that it was very or extremely important. When participants were asked the importance of wearing diapers or baby's clothing during masturbation on the same rating scale, however, the average degree of its importance was

3.12 (SD = 1.45), suggesting it tended to be somewhat important. Here, only 31 (20.9%) said that it was not at all important, 44 (29.7%) said that it was slightly or somewhat important, and 73 (49.3%) said that it was very or extremely important. Thus, male AB/DLs in this sample varied considerably in the reported importance of both fantasizing about being a baby and wearing diapers or baby's clothing during masturbation, with the latter importance being higher in prevalence and degree on average (both ps < .0001).

Correlates of sexual motivation related to being AB/DLs. I examined the extent to which sexual motivation among participants was related to role-playing as babies, wearing diapers or baby's clothing, urinating or defecating themselves, having play dates with other AB/DLs, having an adult man take care of them while they role-played as babies or wore diapers, having an adult woman take care of them while they role-played as babies or wore diapers, having ever considered the possibility that they might be better off as a baby, having ever considered medical procedures to make themselves look more like a baby, how likely they were to think they were to still be AB/DLs in 10 years, and how involved they were with other communities or subcultures that likely consist of a sexual component.

A higher general sexual motivation in being an AB/DL (using the composite variable) was significantly but modestly associated with participants' lower frequencies during the past year of having play dates with other AB/DLs, r(146) = -.24, p < .005, having an adult man take care of them, r(146) = -.18, p < .05, and having an adult woman take care of them, r(146) = -.20, p < .05. Furthermore, a higher general sexual motivation in being an AB/DL was significantly associated with lower likelihoods of participants' having ever considered the possibility that they might be better off as a baby, OR = 0.60, p < .005, and having ever

considered medical procedures to make themselves look more like a baby, OR = 0.56, p < .05. The general sexual motivation in being an AB/DL was not significantly correlated with participants' frequencies of wearing diapers or baby's clothing, participants' frequencies of urinating or defecating themselves, how likely participants were to think they were to still be AB/DLs in 10 years, or how involved they were with other communities or subcultures (all ps > .17). However, the general sexual motivation in being an AB/DL was negatively correlated with the frequency of role-playing as babies, r(146) = -.14, p = .09, although this correlation did not reach conventional significance. Thus, more sexual motivation was linked to less rather than more engagement with some activities and behaviors related to being an AB/DL in this sample.

**Sexual Interests Related to Erotic Target Identity Inversions (ETIIs)** 

The concept of ETIIs might explain the sexual motivation of male AB/DLs. Because ETIIs involve locating external erotic targets within a man's own body, men with ETIIs are sexually aroused by imagining themselves as the same kinds of individuals to whom they are sexually attracted (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). That is, their external and internal erotic targets are similar. Thus, if male AB/DLs have ETIIs, they should be both sexually attracted to babies and sexually aroused by the fantasy of being a baby. Furthermore, ETIIs may be considered paraphilias (Freund & Blanchard, 1993), which tend to co-occur within the same individual (e.g., Dawson et al., 2016; Joyal & Carpentier, 2017), and autogynephilia is likely the most common ETII (Blanchard, 1993b). Thus, I also examined whether some male AB/DLs are sexually attracted to adult women and sexually aroused by the fantasy of being an adult woman.

Prevalence and degree of sexual interests related to ETHs. Figure 9 shows the

distributions of participants' scores on the general variables for sexual attraction to babies and sexual arousal by the fantasy of being a baby, and their ratings of sexual attraction to women and sexual arousal by the fantasy of being a woman. Table 8 presents descriptive statistics for these two sets of sexual attraction and sexual arousal ratings, relevant to conceptualizing the putative ETIIs of autonepiophilia and autogynephilia.

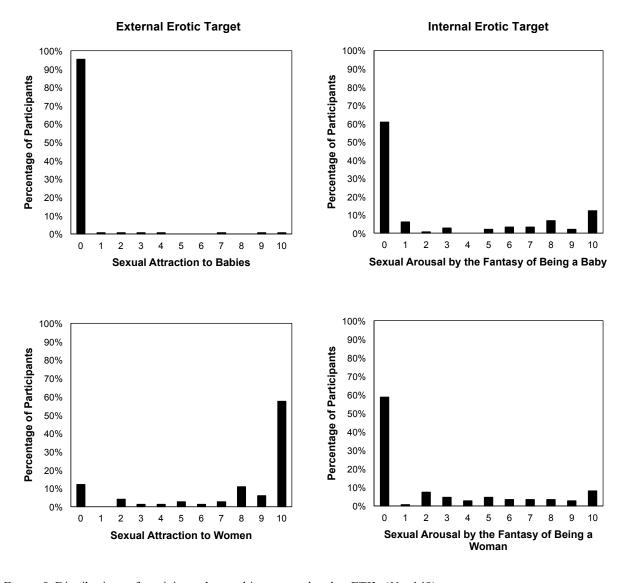


Figure 9. Distributions of participants' sexual interests related to ETIIs (N = 148).

Table 8

Descriptive statistics for participants' sexual interests related to ETIIs

Sexual interest	$n^{a}$	% <sup>b</sup>	$M^{c}$	SD c
Autonepiophilia as an ETII				
Sexual attraction to babies		4.73	0.24	1.31
Sexual arousal by the fantasy of being a baby	58	39.19	2.64	3.87
Autogynephilia as an ETII				
Sexual attraction to women		87.84	7.74	3.53
Sexual arousal by the fantasy of being a woman		41.22	2.41	3.46

<sup>&</sup>lt;sup>a</sup> Values in this column represent the numbers of participants who scored above 0 on each sexual interest.

N = 148

As shown, sexual attraction to babies was rare among participants. Although sexual arousal by the fantasy of being a baby was much more common, it was still endorsed by less than half of the sample. Indeed, the distributions of both sexual attraction to babies and sexual arousal by the fantasy of being a baby were highly positively skewed, with most participants rating the minimum attraction and arousal. In comparing the two distributions, participants tended to rate their sexual arousal by the fantasy of being a baby higher than their sexual attraction to babies, paired t(147) = 7.55, p < .0001, d = 0.72. Participants from the two most common recruitment sources, the AB/DL subreddit (r/ABDL) and the ABDL Story Forum, did not differ in the prevalence or degree of sexual attraction to babies or sexual arousal by the fantasy of being a baby, all ps > .31. These findings are not consistent with the concept of ETIIs in two important ways. First, participants did not tend to be both sexually attracted to babies and sexually aroused by the fantasy of being a baby, which would be expected if male AB/DLs have ETIIs. Second, to the extent that participants did endorse such attraction and arousal, the latter was more common and rated higher on average. Because ETIIs involve the internalization of sexual attraction to

<sup>&</sup>lt;sup>b</sup> Values in this column represent the percentages of participants who scored above 0 on each sexual interest.

<sup>&</sup>lt;sup>c</sup> Values in these columns were computed using all participants.

erotic targets on the outside, the concept suggests at least equal, if not more, participants reporting sexual attraction to babies than reporting sexual arousal by the fantasy of being a baby.

The general variables of sexual attraction to babies and sexual arousal by the fantasy of being a baby were significantly correlated, r(146) = .18, p < .05. This correlation is of uncertain importance, because it was quite modest in magnitude, and only seven participants rated their sexual attraction to babies higher than the minimum of 0.

The average degree of sexual arousal by the fantasy of being a woman was low, although participants commonly endorsed non-zero arousal. Thus, the relevant distribution for autogynephilia was highly positively skewed. Indeed, over half of participants rated their sexual arousal by the fantasy of being a woman at the minimum. Interestingly, sexual attraction to women was neither significantly nor strongly correlated with autogynephilia, r(146) = .11, p = .18. Such a finding is not consistent with autogynephilia as an ETII in this sample.

Specificity of babies in sexual interests related to ETHs. By role-playing as babies, wearing diapers, and engaging in related activities, AB/DLs change their appearance and behavior to become more like babies and not adult women. Thus, if male AB/DLs are characterized by an ETH, they should report a higher prevalence and degree of sexual arousal by the fantasy of being a baby than of sexual arousal by the fantasy of being a woman, despite the fact that autogynephilia is likely more common in the general population (Blanchard, 1993b).

The average degree of sexual arousal by the fantasy of being a baby using the general variable did not significantly differ from that of sexual arousal by the fantasy of being a woman, paired t(147) = 0.54, p = .59, d = 0.04. This finding is not consistent with the idea that AB/DLs have an ETII such that they internalize their sexual attraction to babies. Furthermore, sexual

arousal by the fantasy of being a baby was neither significantly nor strongly correlated with autogynephilia, r(146) = .02, p = .77.

Specificity of gender in sexual interests related to autonepiophilia as an ETII. Male AB/DLs may vary in their sexual preferences for female versus male babies. This might suggest that their sexual attraction to babies corresponds with their sexual arousal by the fantasy of being a baby with respect to gender, consistent with autonepiophilia as an ETII. In other words, if male AB/DLs are characterized by an ETII, then they might be especially sexually aroused by the fantasy of being the same kinds of babies to whom they are sexually attracted. For example, do those sexually attracted to female babies have a greater tendency than those sexually attracted to male babies have to be sexually aroused by fantasizing that they are female babies? I examined the correspondence of sexual attraction to babies and sexual arousal by the fantasy of being a baby with respect to gender.

Among the seven participants sexually attracted to babies, four (57.1%) were only attracted to female babies, and the other three (42.9%) were attracted to both female and male babies. Among the 58 participants sexually aroused by the fantasy of being a baby, 27 (46.6%) were aroused by the fantasy of being either a female or a male baby, 23 (39.7%) were only aroused by the fantasy of being a male baby, and eight (13.8%) were only aroused by the fantasy of being a female baby. Consistent with the concept of ETIIs, three of the four participants only sexually attracted to female babies were only sexually aroused by the fantasy of being a female baby, and the other was sexually aroused by the fantasy of being either gender of baby. Furthermore, all three participants sexually attracted to both female and male babies were sexually aroused by the fantasy of being either gender of baby. This correspondence between

sexual attraction to babies and sexual arousal by the fantasy of being a baby with respect to gender was statistically significant,  $\chi^2(4, N=7) = 3.94$ , p < .05. However, because only seven participants reported any sexual attraction to babies, and the earlier results in this sample were not consistent with the concept of ETIIs, this correspondence should be interpreted with caution.

Correlates of autonepiophilia. I examined whether sexual arousal by the fantasy of being a baby among participants was related to role-playing as babies, wearing diapers or baby's clothing, urinating or defecating themselves, having play dates with other AB/DLs, having an adult man take care of them while they role-played as babies or wore diapers, having an adult woman take care of them while they role-played as babies or wore diapers, having ever considered the possibility that they might be better off as a baby, having ever considered medical procedures to make themselves look more like a baby, how likely they were to think they were to still be AB/DLs in 10 years, and how involved they were with other communities or subcultures that likely consist of a sexual component.

The general variable of sexual arousal by the fantasy of being a baby was significantly and positively correlated with participants' frequencies of role-playing as babies in the past year, r(146) = .44, p < .0001. The general variable of sexual arousal by the fantasy of being a baby was also significantly and positively associated with participants' having ever considered the possibility that they might be better off as a baby, OR = 1.21, p < .0001, and having ever considered medical procedures to make themselves look more like a baby, OR = 1.22, p < .005. The general variable of sexual arousal by the fantasy of being a baby was not, however, significantly correlated with any other activities or behaviors related to being an AB/DL in this sample (all ps > .09).

Participants sexually aroused by the fantasy of being a baby tended to report that physical or mental pain was slightly important (M = 1.58, SD = 1.01), humiliation was somewhat important (M = 2.58, SD = 1.29), and another person was very important (M = 3.72, SD = 1.19) in their sexual fantasies of being a baby on a 5-point scale ( $1 = not \ at \ all \ important$  to  $5 = extremely \ important$ ). Of those who reported that another person was at least slightly important in their sexual fantasies of being a baby, the majority (72.1%) said that this person was most likely to be an adult woman. A much smaller minority of those participants said that an adult man (9.8%), a male baby (6.6%), or a female baby (3.3%) was most likely to be this person in their sexual fantasies of being a baby. The remaining participants chose "other" in answering what kind of person was most likely to be in their sexual fantasies of being a baby, with responses such as an older child or a teenage girl.

**Narratives of autonepiophilia.** I present a few brief narratives from participants that illustrate their fantasies and experiences of autonepiophilia. Each narrative is a selection from the responses that a participant provided for the open-ended questions. I edited the narratives for grammar, style, and concision, while preserving content.

Only one participant described fantasies or experiences of autonepiophilia that might be consistent with the concept of ETIIs:

I fantasize that I am a small child between 3 and 5 years. I am caught wearing a diaper by a friend at a sleepover, but he is wearing one too. I end up wetting or messing my diaper, and his mother changes my diaper in front of everyone. My friend also has his diaper changed. Sometimes my friend is the one who changes me, and he might play with my

genitals while I do the same to him.

Most other participants described fantasies and experiences of autonepiophilia that were instead consistent with sexual masochism, as exemplified by the following three narratives:

In my typical fantasies, I attend an "adult nursery," where a woman dresses me in diapers and treats me like a toddler. I am playing games, watching cartoons, or being fed children's food. The woman encourages me to wet and defecate myself. She then teases me for being such a dirty boy. Finally, she either masturbates me or encourages me to masturbate myself before she cleans me up and changes me into clean diapers.

I fantasize about waking up in a crib, wearing nothing but a wet diaper. A beautiful, busty mommy with long blonde hair and painted red nails comes in to check on me. She is wearing a bra and panties under a bathrobe, and she smells of sweet perfume. She picks me up and cuddles me. She then changes my diaper and puts me back down to sleep in the crib. I drift off to sleep.

In early grade school, I had sexual fantasies about attractive girls making me act like a baby. The last time that I acted like a baby with my girlfriend, she picked out an outfit from my collection of baby's clothing. She then diapered and dressed me, saying that dressing oneself is a privilege that only adults have. In addition to demanding that I use a

baby bottle, she required me to urinate in my diaper in front of her when I felt the urge to urinate, telling me how cute and helpless I looked. That was definitely the most sexually arousing part. Finally, she brought me to orgasm in my diaper. Despite the intentionally humiliating aspects of acting like a baby, both of us agree that we are brought closer together emotionally, and that we build mutual respect and attraction for each other.

### **Discussion**

The results of Study 2 provide a clear answer to the question of whether male AB/DLs are sexually motivated. The large majority of participants (95.3%) reported some degree of general sexual motivation in being AB/DLs, with an average rating of more than somewhat sexually motivated. Out of the five behaviors related to being an AB/DL that were assessed, wearing diapers was rated as especially sexually motivated. A much larger survey of 1,795 male AB/DLs by Hawkinson and Zamboni (2014) similarly found that sexual excitement was more than somewhat important to being an AB/DL on average, and diapers were rated as especially sexually stimulating.

Despite these findings, Study 2 does not clearly answer the question of why AB/DLs are sexually motivated. One of my primary goals for the study was to examine the extent to which the concept of ETIIs explains the sexual motivation of male AB/DLs. Participants did not tend to report a pattern of sexual interests that was consistent with the concept of ETIIs, showing little evidence of a correspondence between external and internal erotic targets. Indeed, only seven participants reported sexual attraction to babies, and less than half of the sample reported sexual arousal by the fantasy of being a baby. Sexual arousal by the fantasy of being a baby (autonepiophilia) was also no different in prevalence or degree, compared with sexual arousal by

the fantasy of being a woman (autogynephilia). Consistent with the concept of ETIIs, however, the seven participants sexually attracted to babies did find it especially sexually arousing to fantasize about being the same kinds of babies to whom they were sexually attracted, with respect to gender. The results are not consistent with the idea that male AB/DLs in general are sexually motivated by an ETII, but they might suggest that at least seven participants, comprising only 4.7% of the sample, could be. Male AB/DLs motivated by an ETII have internalized their sexual attraction to babies, and thus are sexually aroused by the fantasy of being a baby.

In my sample of male AB/DLs, autonepiophilia and role-playing as babies seemed to be less relevant to the experience of being AB/DLs than wearing diapers and urinating or defecating themselves. Participants reported role-playing as babies and interacting with others in this context only about once a month on average, compared with wearing diapers and urinating or defecating themselves about once a week. Furthermore, almost the entire sample had ever worn diapers and urinated or defecated themselves in the past year, and sexual motivation related to these two behaviors were the most strongly correlated with sexual motivation related to being an AB/DL. In contrast, neither of these two behaviors was associated with sexual arousal by the fantasy of being a baby. Thus, wearing diapers among male AB/DLs does not appear to be analogous to cross-dressing among autogynephilic men, despite the superficial similarity between both activities with respect to changing one's appearance. Future research is needed to clarify the ways in which wearing diapers and urinating or defecating oneself are related to the sexual motivation of male AB/DLs, if they are not related to autonepiophilia or ETIIs. Sexual masochism is one promising lead, and I defer this discussion to the below section on limitations.

An interesting and unexpected set of findings in Study 2 revealed that participants with

more sexual motivation were less likely to have engaged in activities and behaviors related to being an AB/DL, such as role-playing as babies and having ever considered the possibility that they might be better off as a baby. A similar set of findings was reported in the study by Hawkinson and Zamboni (2014): Male AB/DLs with more sexual motivation reported less frequency of role-playing as babies, and neither sexual motivation nor the importance of sexual excitement in being an AB/DL was related to their enjoyment of role-playing as babies. As a result, Hawkinson and Zamboni recognized two distinct but overlapping subgroups of AB/DL, one focusing on sexual activity with diapers and the other focusing on role-playing as babies with or without sexual arousal. More recent studies using the same sample have elaborated on these two subgroups, suggesting that a contingent of AB/DLs do not endorse sexual motivation or activity when they role-play as babies because it would violate their conception of babies being sexually pure or innocent (Zamboni, 2017, 2019). Several male AB/DLs in my sample mentioned in their open-ended responses that they were motivated by a non-sexual interest in being a baby because it is cute or fun, which is consistent with the idea that sexual interest would violate their conception of babies being sexually pure or innocent.

Although most male AB/DLs in my sample reported that they were heterosexual and provided Kinsey scores consistent with this sexual identity, a substantial minority (37.8%) reported non-heterosexual, especially bisexual (18.2%), identities and current sexual feelings. These findings related to sexual orientation were largely consistent with those from the study by Hawkinson and Zamboni (2014), who similarly found that a substantial minority (42%) of their sample reported non-heterosexual attractions. Despite the fact that non-heterosexual identities and current sexual feelings were not uncommon in my sample, only six of the 67 (9.0%)

participants who were in a relationship reported a man as their romantic partner.

If autonepiophilia can be conceptualized as an ETII involving the internalization of sexual attraction to babies, it seems likely to be extremely rare. Only seven men with both sexual attraction to babies and sexual arousal by the fantasy of being a baby were found in the present sample of 148 male AB/DLs, who were especially likely to have both sexual interests due to their tendency to role-play as babies and wear diapers. Furthermore, sexual attraction to babies was low in comparison with sexual attraction to children of any other age range in a large non-clinical, non-forensic sample of 1,189 men sexually attracted to children (Bailey et al., 2016). Future research will be necessary to more precisely determine how rare it is for autonepiophilia to be an ETII. I do not anticipate this research to progress quickly, however, because sexuality continues to be studied within a largely conventional framework, which considers sexual orientation to only be relative attraction to men versus women. The concept of ETIIs has also been difficult for many researchers and clinicians to appreciate and accept, even when it helps explain otherwise puzzling phenomena, such as cross-dressing among heterosexual men, desire for limb amputation, and the furry phenomenon.

### Limitations

There are several important limitations of Study 2 that require cautious interpretation of its results. Most importantly, a truly random or representative sample of AB/DLs is impossible to recruit, limiting the extent to which findings from this study generalize to the population of all male AB/DLs. Indeed, most participants were recruited from two specific online sources, the AB/DL subreddit (r/ABDL) and the ABDL Story Forum. Neither of these websites explicitly emphasizes erotic content, but it is not uncommon to find erotic content shared on both websites.

Furthermore, my recruitment materials emphasized an interest in understanding the sexuality of male AB/DLs, and the questionnaire mostly assessed sexuality. For these reasons, the present sample of male AB/DLs may have been biased toward those who were sexually motivated, and thus unrepresentative of male AB/DLs in general. Despite this limitation, many male AB/DLs do report sexual motivation, as evidenced by the many who did in this sample.

Another limitation of this study is the possible reluctance of participants to report sexual attraction to babies. The questionnaire repeatedly ensured the anonymity of participants and the safeguards for securing and handling their data. The questionnaire also clearly informed participants that reporting sexual attraction to babies is not equivalent to reporting sexual acts with babies: Both may be socially condemned, but only the latter are illegal. Despite these assurances, participants might have still been concerned that reporting sexual attraction to babies would result in some form of legal action against them. In support of possible legal concern, I received emails and messages on the AB/DL subreddit from a few potential participants, expressing their hesitation about completing the questionnaire for this reason. Thus, it is conceivable that participants who actually did complete the questionnaire might have been similarly concerned about legal action and reported no sexual attraction to babies, even when they have experienced such attraction. Furthermore, most people consider sexual attraction to babies to be morally and socially reprehensible, and participants might themselves have had moral and social concerns about reporting sexual attraction to babies, even anonymously. Although it is impossible to know how many participants, if any, reported no sexual attraction to babies for legal, moral, or social reasons, this limitation may have underestimated the true rate of sexual attraction to babies in this sample. The resulting pattern of sexual interests, which was not consistent with the concept of ETIIs, may therefore have been misleading.

Study 2 included assessment of alternative explanations for the motivation of AB/DLs besides sexuality, but this assessment was limited and asked primarily about social motivation and the desire for relaxation, comfort, or stress relief. Participants did not report much social motivation on average, and the percentage of participants who endorsed some degree of social motivation (43.9%) was less than half the percentage of participants who endorsed some degree of general sexual motivation (95.3%). Among participants who believed that they were not sexually motivated in being AB/DLs and provided alternative motivations in open-ended responses, none mentioned that they were socially motivated. In contrast, most participants (95.3%) reported some degree of motivation by a desire for relaxation, comfort, or stress relief. Relaxation, comfort, stress relief, or escape was also most commonly mentioned as an alternative motivation in the open-ended responses of participants who indicated that they were not sexually motivated. Zamboni (2019) found qualitative evidence in a large sample of AB/DLs similarly suggesting that a desire for relaxation, comfort, or stress relief is both important and common as a non-sexual motivation. However, in both my sample and Zamboni's, sexual motivation was quite common too. These findings altogether support the idea that male AB/DLs tend to be motivated sexually and by a desire for relaxation, comfort, or stress relief. They do not seem to be socially motivated. With respect to future directions for studying alternative motivations of AB/DLs besides sexuality, medical issues were a non-sexual motivation that was not assessed in Study 2 but found to be relevant in Zamboni's (2019) study.

A final limitation of the present study is that the questionnaire did not carefully assess alternative explanations for sexual motivation besides an ETII. In addition to its reference by

previous scholars (e.g., Money, 1986), sexual masochism is one promising alternative for three reasons. First, masochistic themes were commonly found in participants' descriptions of their autonepiophilic fantasies and experiences. I presented three narratives that exemplified these masochistic themes, in which participants fantasized or pretended to be babies being humiliated or coddled by adult women. Second, among those participants involved with communities or subcultures other than those of AB/DLs that likely consist of a sexual component, over half reported that they were involved with BDSM communities or subcultures. Third, participants sexually aroused by the fantasy of being a baby tended to report that physical or mental pain, humiliation, and another person were important to varying degrees in their sexual fantasies of being a baby. An adult woman, and not a baby, was most likely to be that important person in their sexual fantasies of being a baby.

Freund and Blanchard (1993) noted that some fantasies that appear to be motivated by ETIIs are instead motivated by sexual masochism. Fantasies motivated by masochism exaggerate physical and behavioral differences between men and their preferred erotic targets (e.g., women), thereby increasing feelings of submissiveness. Fantasies motivated by an ETII, in contrast, exaggerate physical and behavioral similarities between men and their preferred erotic targets. Based on these criteria, the three narratives that I presented are better explained by masochism than by an ETII, because participants fantasized or pretended to be helpless babies, exaggerating physical and behavioral differences between them and the adult women taking care of them. Sexual masochism is also more consistent than an ETII with the finding that most participants sexually aroused by the fantasy of being a baby include an adult woman rather than a baby in their fantasies, if they find another person to be important.

#### **Conclusions**

Study 2 characterized the sexual orientation, sexual motivation, and sexual interests of male AB/DLs, but it was largely exploratory and had important limitations. Future research on the sexuality of AB/DLs may benefit from more careful assessment of possible alternative motivations for being AB/DLs and possible alternative explanations for sexual motivation, especially because the results from this study were not consistent with the idea that male AB/DLs are motivated by an ETII. Future research may also benefit from recruiting AB/DLs differently than in this study, such as recruiting specifically for female participants or those who do not endorse sexual motivation. It will not be possible, however, to recruit a sample of AB/DLs that is truly representative.

Although AB/DLs are stigmatized for their unusual behaviors and sexual motivation, it is unlikely that they will be much further stigmatized as a result of this study. Previous research has already shown the tendency for AB/DLs to be sexually motivated (e.g., Hawkinson & Zamboni, 2014; Zamboni, 2017, 2019). On the contrary, this study provides empirical evidence refuting the popular but controversial notion that AB/DLs are sexually attracted to babies, which has been used to perpetuate stigma against AB/DLs (Brame, Brame, & Jacobs, 1996; Holley, 2016; Michelson, 2017; Richards, 2015). Only a very small percentage of participants in my sample reported any sexual attraction to babies. By continuing to study sexual motivation and unusual sexual interests in AB/DLs, we will learn much more about their role and importance. This knowledge will be important not only for society to better understand and accept AB/DLs, but also for some AB/DLs to better understand and accept themselves.

# Study 3: Sexual Orientation, Sexual Motivation, and Erotic Target Identity Inversions in Eunuchs and Eunuch Wannabes

Eunuchs are men who have been castrated (Wassersug, Zelenietz, & Squire, 2004). Castration consists of the destruction or the complete removal of a man's testicles, which can be achieved physically (e.g., surgically) or chemically. Men who have been castrated for medical reasons, most commonly for the treatment of advanced prostate cancer, are not likely to identify as eunuchs (Wassersug & Johnson, 2007). Male-to-female transgender women, who often seek castration as a part of their sex reassignment surgery, are also not likely to identify as eunuchs (Johnson & Irwig, 2014; Johnson & Wassersug 2010). There are, however, men who have been castrated without medical indication or further desire for sex reassignment surgery (Wassersug & Johnson, 2007; Wassersug et al., 2004). These men do tend to identify as eunuchs, and many of them are active in an online community called the Eunuch Archive (www.eunuch.org) for discussing topics and sharing stories related to castration (Handy & Johnson, 2015). Henceforth, I use the term eunuchs to refer to these men specifically. In addition to eunuchs, there are men who desire to be castrated, also without medical indication or further desire for sex reassignment surgery, with many referring to themselves as *eunuch wannabes* and frequenting the Eunuch Archive (Handy & Johnson, 2015; Wassersug & Johnson, 2007). Despite having not been castrated, eunuch wannabes may sometimes refer to themselves as eunuchs as well.

As part of the Eunuch Archive, some eunuchs and eunuch wannabes meet in person at annual gatherings in Minneapolis and at smaller regional gatherings in other locations across the United States, Canada, and England (Handy & Johnson, 2015; Wassersug & Johnson, 2007).

Most eunuch and eunuch wannabes, however, prefer secrecy and tend to interact with each other

online (Johnson & Irwig, 2014). They mainly focus on their interests in castration and the various methods for achieving castration, whether physically or chemically. Some also engage in *banding*, a dangerous practice that involves restricting or compressing their testicles with bands or clamps in order to simulate the image and experience of being a castrated man (e.g., Francis, 2006).

## Are Eunuchs and Eunuch Wannabes Sexually Motivated?

Several online surveys have examined the motivations, sexuality, and other aspects of eunuchs and eunuch wannabes, and most have relied on the Eunuch Archive for recruitment or data. Approximately 30-50% of eunuchs and eunuch wannabes have reported that they were sexually motivated to be castrated (Johnson, Brett, Roberts, & Wassersug, 2007; Roberts, Brett, Johnson, & Wassersug, 2008; Wassersug et al., 2004). Furthermore, in an analysis of 120 fictional stories posted on the Eunuch Archive, 68% involved castration (with even more involving other forms of genital injury or ablation), and 83% involved sexual themes, some of which directly associated sexual arousal with the act or fantasy of being castrated (Handy, Wassersug, Ketter, & Johnson, 2015).

Outside of a historical context, eunuchs and eunuch wannabes have received little attention from the media and popular culture. In their few interviews with the media, eunuchs and eunuch wannabes have been open about their sexual motivation (e.g., Whitby, 2000). Furthermore, although there have been many case reports of men who have been or desire to be castrated in the psychiatric literature (e.g., Greilsheimer & Groves, 1979), they do not seem to describe eunuchs and eunuch wannabes. Instead, they describe men with psychotic disorders or other serious psychopathology, who do not identify as eunuchs or eunuch wannabes and frequent

the Eunuch Archive (see Veeder & Leo, 2017, for a recent review).

It is possible that eunuchs and eunuch wannabes are motivated for other reasons besides sexuality. Indeed, because many eunuchs and eunuch wannabes are part of the Eunuch Archive (Handy & Johnson, 2015; Wassersug & Johnson, 2007), social motivation may be relevant rather than (or in addition to) sexual motivation. For example, some eunuchs and eunuch wannabes might be motivated by the desire for belonging and social support, which could be provided by the Eunuch Archive. They might also be motivated by friends, romantic partners, or sexual partners who are eunuchs, eunuch wannabes, or otherwise castrated men. Still, the Eunuch Archive hosts a large collection of fictional stories that often involve sexual themes (Handy et al., 2015), suggesting that sexual motivation is common. In contrast, most activities that are widely considered to be socially motivated, such as following specific sports teams or music groups, show little indication of sexual motivation (Schroy et al., 2016). No systematic research has addressed the extent to which eunuchs or eunuch wannabes might be socially motivated.

A number of other non-sexual motivations have been reported by eunuchs and eunuch wannabes in past research (Johnson et al., 2007; Roberts et al., 2008; Wassersug et al., 2004). Across the different studies, their most commonly reported non-sexual motivation was the desire to reduce sex drive. Following this one, commonly reported non-sexual motivations included the dislike of or discomfort with having testicles, the desire to become less male (but not necessarily female), and the desire to experience the calm from castration.

Eunuchs and eunuch wannabes may have both sexual and non-sexual motivations, as illustrated by the previous literature. With respect to sexual motivation, two major questions have not been clearly addressed: To what extent are eunuchs and eunuch wannabes sexually

motivated, and what explains any sexual motivation? Regarding the second question, the next section introduces a promising concept that might explain sexual motivation in eunuchs and eunuch wannabes.

# Are Eunuchs and Eunuch Wannabes Sexually Motivated by an Erotic Target Identity Inversion?

By castrating themselves or banding, eunuchs and eunuch wannabes change their appearance to become castrated men or more like castrated men. In these ways, they are similar to male cross-dressers, who change their appearance and behavior to become more like women. Heterosexual male cross-dressers are by definition sexually attracted to women, and their cross-dressing is sexually motivated (Bailey, 2003; Blanchard, 1991; Blanchard et al., 1986; Hsu et al., 2015, 2017; Lawrence, 2013). Specifically, they have *autogynephilia*: the propensity to be sexually aroused by the fantasy of being a woman (Blanchard, 1989a). Autogynephilia can be conceptualized as an ETII, in which an external erotic target (e.g., women) is located within a man's own body (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). Although autogynephilia is likely to be the most common form of ETII (Blanchard, 1993b), there is systematic evidence in support of three other ETIIs: apotemnophilia in men who desire limb amputation (First, 2005; Lawrence, 2006), autopedophilia in men sexually attracted to children (Hsu & Bailey, 2017), and autoanthropomorphozoophilia in male furries (Study 1).

ETIIs are unlikely limited to autogynephilia, apotemnophilia, autopedophilia, and autoanthropomorphozoophilia. Indeed, the concept of ETIIs is promising for investigating phenomena in which men change their appearance or behavior to become more like other kinds of persons or things, especially when there is reason to believe such changes are sexually

motivated. The behaviors of eunuchs and eunuch wannabes, which include castrating themselves and banding, could be motivated by an ETII, similar to how cross-dressing among autogynephilic men is motivated by an ETII. If some eunuchs and eunuch wannabes are motivated by an ETII, then they should experience both sexual attraction to castrated men (eunuchophilia) and sexual arousal by the fantasy of being a castrated man (autoeunuchophilia). In this case, castrated men comprise the external erotic target, which would be internalized as the ETII.

The concept of ETIIs is consistent with the findings that eunuchs and eunuch wannabes tend to report that they are sexually motivated to be castrated (Johnson et al., 2007; Roberts et al., 2008; Wassersug et al., 2004) and to write fictional stories involving sexual arousal from being castrated (Handy et al., 2015). The concept of ETIIs is also consistent with the fact that eunuchs and eunuch wannabes have transformed or desire to transform their bodies into those of castrated men, much like autogynephilic men have transformed or desire to transform their bodies into those of women. In particular, banding seems analogous to cross-dressing among autogynephilic males, although it is more dangerous with the risk of blood clotting in the testicles and other medical complications. Furthermore, eunuchs and eunuch wannabes have sometimes experienced distress over having testicles (Brett, Roberts, Johnson, & Wassersug, 2007; Johnson et al., 2007; Roberts et al., 2008). Gender dysphoria has also sometimes but more rarely occurred in eunuchs and eunuch wannabes (Johnson & Irwig, 2014; Johnson & Wassersug, 2010). However, because this gender dysphoria is accompanied by a desire to be neither male nor female, it has been called *male-to-eunuch gender dysphoria* to distinguish it from male-to-female gender dysphoria. Banding, distress over having testicles, and (to a lesser

extent) male-to-eunuch gender dysphoria among eunuchs and eunuch wannabes might be parallel to cross-dressing and male-to-female gender dysphoria among men with autogynephilia, a more established ETII. These possible parallels might further suggest that eunuchs and eunuch wannabes are motivated by an ETII.

In a recent study of 294 eunuchs, 10% reported sexual attraction to castrated men, and 17% reported sexual fantasies about castrated men (Handy, Jackowich, Wibowo, Johnson, & Wassersug, 2016). Based on these percentages, it does not seem that sexual attraction to castrated men is common in eunuchs, which is contrary to the concept of ETIIs. The general population base rate of men who are sexually attracted to castrated men is likely much lower than either 10% or 17%, however. Still, this raises the question of why sexual attraction to castrated men in eunuchs appears much less common than sexual attraction to erotic targets being internalized in other men with putative ETIIs. For instance, sexual attraction to amputees (87%; First, 2005) and to anthropomorphic animals (99%; Study 1) was extremely common in men who desire limb amputation and male furries, respectively. Differences in the wording of the questions used to assess sexual attraction to erotic targets were likely one major factor that contributed to the different percentages across the studies. Regardless, if eunuchs are characterized by an ETII, they should tend to be sexually attracted to castrated men and sexually aroused by the fantasy of being a castrated man. Existing data are consistent with the latter, but not the former.

# **The Present Study**

Study 3 was conducted using a large online sample of eunuchs and eunuch wannabes recruited from the Eunuch Archive. It also had three primary goals. First, I characterized eunuchs

and eunuch wannabes with respect to their sexual orientation, referring herein to its conventional understanding as relative sexual attraction to men versus women. Such information provides a general profile of the sexuality of eunuchs and eunuch wannabes in a conventional framework. Second, I examined whether and to what extent eunuchs and eunuch wannabes are sexually motivated. Third, I examined the extent to which the concept of ETIIs explains any sexual motivation of eunuchs and eunuch wannabes.

Regarding this third goal, the concept of ETIIs generates several key predictions about the sexual interests of eunuchs and eunuch wannabes. Most importantly, eunuchs and eunuch wannabes should be both sexually attracted to castrated men and sexually aroused by the fantasy of being a castrated man. In addition, eunuchs and eunuch wannabes change their appearance to become castrated men or more like castrated men, rather than women. Thus, they should be more commonly and intensely aroused by the fantasy of being a castrated man than by the fantasy of being a woman. Finally, eunuchs and eunuch wannabes might be especially sexually aroused by the fantasy of being the same kinds of castrated or genitally modified men (e.g., chemically castrated men) to whom they are sexually attracted. Indeed, in following the concept of ETIIs, external and internal erotic targets are similar.

### Method

# **Participants**

Eunuchs and eunuch wannabes were recruited for an anonymous online questionnaire via advertisements initially placed on the Eunuch Archive. They were also encouraged to send the questionnaire to other eunuchs and eunuch wannabes and to post it on other websites that eunuchs and eunuch wannabes frequent. Respondents were excluded from the present analyses if

they did not report that they were assigned male at birth (n = 1) or if they did not identify as either eunuchs or eunuch wannabes (n = 25).

The resulting sample comprised 75 eunuchs (46.7%) and eunuch wannabes (70.7%; M age = 52.64 years, SD = 14.65). Thirteen participants (17.3%) identified as both eunuchs and eunuch wannabes, because the two identities were not mutually exclusive. Of the total participants, 69 (92.0%) reported that they were recruited via the Eunuch Archive, and the remaining six (8.0%) reported some other recruitment source, such as word of mouth from another participant. Participants received no compensation.

#### Measures

Participants completed an anonymous questionnaire online, which took about half an hour. The questionnaire included several questions that assessed the extent and the development of their interest in being eunuchs and eunuch wannabes. However, it focused mainly on three categories of self-report items: (1) sexual orientation; (2) sexual motivation related to being eunuchs and eunuch wannabes; and (3) sexual interests related to ETIIs that might be found in eunuchs and eunuch wannabes. These three categories corresponded with my three primary goals for the study: (1) to characterize the sexual orientation of eunuchs and eunuch wannabes; (2) to examine the extent to which eunuchs and eunuch wannabes are sexually motivated; and (3) to examine the extent to which the concept of ETIIs explains any sexual motivation of eunuchs and eunuch wannabes.

# Extent and development of interest in being eunuchs and eunuch wannabes.

Participants reported whether they had been castrated (*yes* or *no*). Those who reported that they had been castrated also reported whether they were physically, chemically, both physically and

chemically, or neither physically nor chemically castrated. In addition, they provided the age at which they became castrated and the gender of the person who performed the castration (*male*, *female*, *male-to-female transgender*, *female-to-male transgender*, or *other*). If they reported the gender of the person who performed the castration as "other," participants provided open-ended responses that explained their choice.

Participants rated their frequencies of banding (0 = never, 1 = less than once a month, 2 = once a month, 3 = two to three times a month, 4 = once a week, 5 = two to three times a week, 6 = daily) during the past year and the year that they banded most. They also reported whether they had ever considered the possibility that they might be better off as a castrated man (yes or no) and whether they had ever considered medical procedures to make themselves into a castrated man (yes or no). Furthermore, participants reported whether they were currently taking or had ever taken hormones or related compounds that facilitate chemical castration or counteract the side effects of gonadal hormone deprivation from castration, such as estrogen, testosterone, or progesterone. They additionally reported whether they had ever been diagnosed with a chronic medical condition (yes or no) and to describe it if they had been.

Participants identifying as eunuchs reported the age at which they first became eunuchs and the manner in which it happened with open-ended responses to the question: "How did you become a eunuch?" Participants identifying as eunuch wannabes reported the age at which they first became eunuch wannabes and the manner in which it happened with open-ended responses to the question: "How did you become a eunuch wannabe?" Given the exploratory nature of the present study, all open-ended responses were simply reviewed for common themes, which were then used to calculate the numbers and percentages of participants who provided responses that

mentioned those themes.

Participants rated how likely they think they were to still be eunuchs and eunuch wannabes in 10 years on a 5-point scale (1 = not at all, 2 = slightly, 3 = somewhat, 4 = very, 5 = extremely). Finally, on the same 5-point scale, they rated how involved they were with communities or subcultures other than those of eunuchs and eunuch wannabes that likely consist of a sexual component, such as those of BDSM, AB/DLs, and furries. Those involved with other communities or subcultures listed which ones they were.

**Sexual orientation.** Participants reported their sexual identity, choosing among heterosexual/straight, bisexual, homosexual/gay, asexual, and other. If they reported their sexual identity as "other," participants provided open-ended responses that explained their choice. Participants also rated their current sexual feelings on the Kinsey scale (Kinsey et al., 1948), which is a 7-point scale (0 = sexual feelings toward females only to 6 = sexual feelings toward males only). Participants were given the additional option on the Kinsey scale to report current sexual feelings toward neither females nor males.

Participants reported their current relationship status, choosing among *single*, *in an open relationship*, *in a closed relationship*, *engaged*, *married*, *divorced*, and *widowed*. Although some of these options were not mutually exclusive (e.g., one could be both in an open relationship and married), participants could choose only one option. Because options were ordered in general to indicate progressively more serious relationships, participants were assumed to have understood that some options superseded others (e.g., being married superseded being in an open relationship). If they reported being in an open relationship, in a closed relationship, engaged, or married, participants provided the gender of their current romantic partner (*male*, *female*, *eunuch*,

male-to-female transgender, female-to-male transgender, or other). If they reported the gender of their current romantic partner as "other," participants provided open-ended responses that explained their choice. Participants also reported whether they had ever been in a relationship with someone who identified as a eunuch or eunuch wannabe (yes, no, or not sure). Those who reported that they had been in a relationship with someone who identified as a eunuch or eunuch wannabe additionally selected from the following options: "This person played a role in me becoming a eunuch or eunuch wannabe," "I played a role in this person becoming a eunuch or eunuch wannabe," "We played a role in each other becoming eunuchs or eunuch wannabes," "We met over our mutual interest in being eunuchs or eunuch wannabes," and "Both of us being eunuchs or eunuch wannabes was unrelated to how we got together."

Sexual motivation related to being eunuchs and eunuch wannabes. Participants identifying as eunuchs rated the degree to which being eunuchs was sexually motivated on a 5-point scale (1 = not at all, 2 = slightly, 3 = somewhat, 4 = very, 5 = extremely). Participants identifying as eunuch wannabes rated the degree to which being eunuch wannabes was sexually motivated on the same 5-point scale. All participants also rated the degree to which interacting with other eunuchs or eunuch wannabes online and in person was sexually motivated and the degree to which being eunuchs or eunuch wannabes was socially motivated on the same 5-point scale. Participants who reported having been castrated rated the degree to which they were sexually aroused during the castration and when thinking back on the castration now on the same 5-point scales. In addition, participants provided open-ended responses explaining why they were eunuchs or eunuch wannabes, if they were not sexually motivated. Finally, participants rated the importance of fantasizing about being a castrated man or being castrated during

masturbation on a 5-point scale ( $1 = not \ at \ all \ important$ ,  $2 = slightly \ important$ ,  $3 = somewhat \ important$ ,  $4 = very \ important$ ,  $5 = extremely \ important$ ).

Sexual interests related to erotic target identity inversions (ETIIs). The concept of ETIIs provides a compelling explanation for why eunuchs and eunuch wannabes might be sexually motivated. If characterized by an ETII, eunuchs and eunuch wannabes should be both sexually attracted to castrated men and sexually aroused by the fantasy of being a castrated man, just as autogynephilic men tend to be sexually attracted to women and are sexually aroused by the fantasy of being a woman (e.g., Blanchard, 1992; Hsu et al., 2015). To assess sexual interests related to ETIIs that might be found in eunuchs and eunuch wannabes, participants rated the degree to which they were sexually attracted to the following kinds of erotic targets: women, physically castrated men, chemically castrated men, and men who have had other genital modifications other than or in addition to castration, such as a penectomy. Ratings were made on an 11-point scale ( $0 = not \ at \ all \ sexually \ attracted$  to  $10 = most \ sexually \ attracted$ ). Participants also rated the degree to which they were sexually aroused by the fantasy of being each of these kinds of erotic targets on an analogous 11-point scale ( $0 = not \ at \ all \ sexually \ aroused$  to  $10 = not \ at \ all \ sexually \ aroused$ most sexually aroused). In order to reduce bias due to carryover effects, participants rated their sexual attraction to the various erotic targets at the start of the questionnaire and their sexual arousal by the fantasy of being each of those targets at the end.

Finally, participants who endorsed any degree of sexual arousal by the fantasy of being a physically castrated man, chemically castrated man, or a man with other genital modifications provided detailed answers to open-ended questions about their fantasies and experiences. Those participants described, for example, what they think about specifically when fantasizing about

being a castrated man or being castrated, as well as their typical and most sexually arousing fantasies related to being a castrated man or being castrated. If they reported having been castrated, they also reported whether they were sexually aroused by the fantasy of being a castrated man only when they were castrated, only when they were not castrated, or both. If they reported currently taking or having taken hormones or related compounds, they also reported whether they were sexually aroused by the fantasy of being a castrated man only when they were on hormones or related compounds, only when they were not on hormones or related compounds, or both.

General variables for sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man. Eunuchs and eunuch wannabes may be sexually attracted to physically or chemically castrated men, as well as men with other genital modifications. They may also be sexually aroused by the fantasy of being physically or chemically castrated, or having some other genital modification. In order to facilitate a broad assessment of participants' sexual interests related to castrated and other genitally modified men (hereafter, simply "castrated men"), general variables for sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man were constructed that were not specific to any form of castration or genital modification: The general variable for sexual attraction to castrated men was the highest of the three single-item ratings of sexual attraction to physically castrated men, chemically castrated men, and men with other genital modifications. For instance, participants who rated sexual attraction to chemically castrated men as 9 but no sexual attraction to either physically castrated men or men with other genital modifications scored 9 on this new variable.

The general variable for sexual arousal by the fantasy of being a castrated man was the

highest of the three single-item ratings of sexual arousal by the fantasy of being a physically castrated man, a chemically castrated man, and a man with other genital modifications. For instance, participants who rated sexual arousal by the fantasy of being a physically castrated man as 9, sexual arousal by the fantasy of being a chemically castrated man as 5, and sexual arousal by the fantasy of being a man with other genital modifications as 7 scored 9 on this new variable. In the following analyses, these general variables were used as continuous measures of sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man that were not specific to any form of castration or genital modification.

#### Results

# **Extent and Development of Interest in Being Eunuchs and Eunuch Wannabes**

Although the questionnaire focused primarily on the sexuality of eunuchs and eunuch wannabes, it included questions that assessed the extent and the development of their interest in being eunuchs and eunuch wannabes. All participants identified as male and as eunuchs, eunuch wannabes, or both, because they would not have otherwise qualified for this study. Besides participating online in the Eunuch Archive, the website from which almost all participants were recruited, what did it mean to be a eunuch or a eunuch wannabe?

Almost half of the participants (33; 44.0%) reported that they had been castrated. Among those who reported that they had been castrated, 15 (45.5%) reported having been physically castrated, 11 (33.3%) reported having been chemically castrated, four (12.1%) reported having been both physically and chemically castrated, and three (9.1%) reported having been neither physically nor chemically castrated, instead having been castrated with methods such as injecting alcohol into their testicles. Among those who reported that they had been castrated, the average

age at which they reported that it happened was 50.44 years (SD = 15.23). Most of these participants reported that the gender of the person performing the castration was male (78.3%), and the remaining participants reported that the person performing the castration was himself or, for one participant, a person of unknown gender.

With respect to banding among participants, the average frequency during the past year was 1.70 (SD = 1.96) using the 7-point rating scale (0 = never to 6 = daily), which was close to once a month. The average frequency during the year that they banded most was 2.35 (SD = 2.22) using the same rating scale, which was also close to once a month. Thus, banding was not rare, and most participants (66.7%) had banded at some point in their lives (i.e., reported a frequency other than "never" on either of the relevant measures).

A large majority of participants (96.9%) reported that they had ever considered the possibility that they might be better off as a castrated man. Of those participants who had not been castrated, a large majority (97.2%) also reported that they had ever considered medical procedures to make themselves into a castrated man. Furthermore, 32.3% of participants reported that they were currently taking hormones or related compounds that facilitate chemical castration or counteract the side effects of gonadal hormone deprivation from castration, and 54.5% reported that they had ever taken such hormones or related compounds. Finally, 39.4% of participants reported that they had been diagnosed with a chronic medical condition, with diabetes (34.6%) being most common among the 26 who described their condition.

The average age at which participants identifying as eunuchs reported that they became eunuchs was 50.83 years (SD = 13.84), which closely corresponded with the average age at which participants reported that they had been castrated, for those who had been. The most

common manner in which eunuch participants became eunuchs was through some form of castration (e.g., "Through surgical castration"), usually physical or chemical, reported by 20 (76.9%) of the 26 participants who responded to this open-ended item. Interestingly, five participants (19.2%) responded to this item by reporting that they did not in fact become eunuchs, despite identifying as eunuchs earlier in the survey. The remaining participant (3.8%) reported that the manner in which he became a eunuch was through his desire not to consume pornography or masturbate ("I wanted to be free from pornography and masturbation").

The average age at which participants identifying as eunuch wannabes reported that they became eunuch wannabes was 21.50 years (SD = 13.60), a much younger age. The most common manner in which eunuch wannabe participants became eunuch wannabes was through dislike of or discomfort with their testicles or genitalia (e.g. "I always hated my testicles", "I realized that I feel that my testicles don't belong on my body"), mentioned by 17 (37.0%) of the 46 participants who responded to this open-ended item. The next most common manner in which they became eunuch wannabes was in the context of sexual fantasies about being a castrated male or being castrated (e.g., "I first read about eunuchs and castration at age 12 and instantly became horny to be one," "Read about Roman slaves who were castrated and found it very arousing"), mentioned by 11 (23.9%) participants. An additional four (8.7%) participants reported that they became eunuch wannabes in order to reduce their sex drive (e.g., "I despised masturbating and thought the only remedy was to become a eunuch"), and another three (6.5%) expressed that they became eunuch wannabes in order to be more female (e.g., "Becoming eunuch would help me feel closer to my female side"). The remaining 11 participants who provided responses were either too vague in their answers (e.g., "It is simply who I am") or did

not know the manner in which they became eunuch wannabes (e.g., "I don't know").

Participants identifying as eunuchs rated themselves as very likely (M = 4.45, SD = 1.12) to still be eunuchs in 10 years on the 5-point scale ( $1 = not \ at \ all \ to \ 5 = extremely$ ). Participants identifying as eunuch wannabes also rated themselves as very likely, if not slightly less so (M = 3.60, SD = 1.42), to still be eunuch wannabes in 10 years on the same 5-point scale. Finally, participants rated themselves as being slightly involved (M = 2.37, SD = 1.34) with communities or subcultures other than those of eunuchs and eunuch wannabes that likely consist of a sexual component, such as those of BDSM, AB/DLs, and furries. Of those 36 who were involved with other communities or subcultures and listed which ones they were, 27 (75.0%) reported BDSM, three (8.3%) reported AB/DL, and two (5.6%) reported furries. Because some participants listed more than one community or subculture, numbers and percentages are not mutually exclusive.

#### **Sexual Orientation**

Among eunuch and eunuch wannabe participants, 24 (32.0%) identified as homosexual/gay, 23 (30.7%) as heterosexual/straight, 16 (21.3%) as bisexual, and 11 (14.7%) as asexual. The remaining participant (1.3%) chose the response "other" and identified as pansexual. Figure 10 shows the distribution of participants' ratings on the Kinsey scale (M = 2.79, SD = 2.37), and this distribution was bimodal and consistent with the distribution of their sexual identities. Four participants (5.3%) were not included in the distribution of Kinsey scale ratings because they reported current sexual feelings toward neither females nor males. This was surprisingly fewer than the number of participants (11) who identified as asexual.

**Romantic relationships.** The majority of participants (34; 45.9%) reported that they were single (i.e., not in a romantic relationship with anyone). In addition, 25 (33.8%) reported

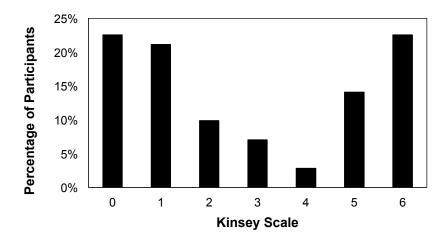


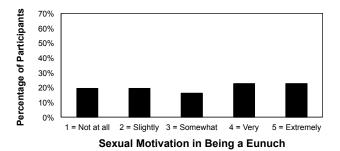
Figure 10. Distribution of participants' ratings on the Kinsey scale (0 = sexual feelings toward females only to 6 = sexual feelings toward males only; <math>N = 71).

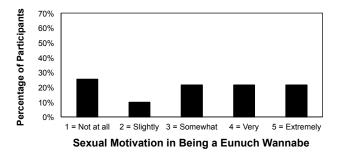
being married, four (5.4%) in an open relationship, three (4.1%) in an exclusive relationship, three (4.1%) divorced, three (4.1%) widowed, and two (2.7%) engaged. One participant did not report his relationship status. Of the 34 participants currently involved with a romantic partner, 29 (85.3%) were with a woman, and five (14.7%) with a man. Participants in a relationship with a woman scored much lower (M = 1.14, SD = 1.21) than those in a relationship with a man did (M = 5.80, SD = 0.45) on the Kinsey scale, t(16.96) = -15.34, p < .0001.

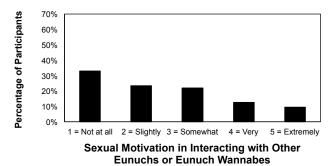
Of the 67 participants who responded to the relevant item, only three (4.5%) reported that they had ever been in a relationship with someone who identified as a eunuch or eunuch wannabe. All three participants reported that they met this person over their mutual interest in being eunuchs or eunuch wannabes.

# Sexual Motivation Related to Being Eunuchs and Eunuch Wannabes

Figure 11 shows the distributions of eunuch participants' ratings of the degree to which being eunuchs was sexually motivated, eunuch wannabe participants' ratings of the degree to which being eunuch wannabes was sexually motivated, eunuch and eunuch wannabe







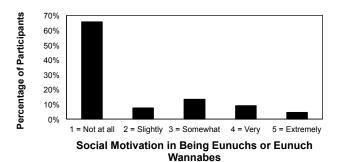


Figure 11. Distributions of participants' ratings of the degree to which being eunuchs (n = 35), being eunuch wannabes (n = 53), and interacting with other eunuchs or eunuch wannabes were sexually motivated (N = 75), as well as the degree to which being eunuchs or eunuch wannabes was socially motivated (N = 75).

participants' ratings of the degree to which interacting with other eunuchs or eunuch wannabes online and in person was sexually motivated, and eunuch and eunuch wannabe participants' ratings of the degree to which being eunuchs or eunuch wannabes was socially motivated. A large majority of participants provided responses consistent with at least some degree of sexual motivation, and little or no social motivation. Specifically, 80.6% of the eunuch participants reported that being eunuchs was sexually motivated to some degree (M = 3.10, SD = 1.47), 74.5% of the eunuch wannabe participants reported that being eunuch wannabes was sexually motivated to some degree (M = 3.04, SD = 1.50), and 67.2% of all participants reported that interacting with other eunuchs or eunuch wannabes online and in person was sexually motivated to some degree (M = 2.42, SD = 1.32). In contrast, only 34.3% of all participants reported that being eunuchs or eunuch wannabes was socially motivated to some degree (M = 1.79, SD = 1.24). Although the degree of sexual motivation varied considerably across the three items that assessed sexual motivation, the degree of social motivation was less variable, with most participants reporting no social motivation for being eunuchs or eunuch wannabes.

Among the 33 participants who reported having been castrated, 38.5% reported that they were sexually aroused during the castration (M = 1.92, SD = 1.32), and 44.0% reported that they were sexually aroused when thinking back on the castration now (M = 2.04, SD = 1.34). Interestingly, these participants' ratings of sexual arousal during the castration and when thinking back on the castration now were significantly lower on average than their ratings of sexual motivation for being eunuchs (both ps < .01), but not significantly lower on average than their ratings of sexual motivation for being eunuch wannabes and interacting with eunuchs or eunuch wannabes (all ps > .13).

Of the 44 participants who indicated that being eunuchs or eunuch wannabes was not sexually motivated and provided open-ended responses explaining their reasons, two (4.5%) confirmed that it was in fact sexual (e.g., "It is sexually motivated"). The following additional non-sexual motivations were not mutually exclusive: having the desire to reduce sex drive (11; 25.0%; "I want to be free from sexual thoughts"), disliking or feeling uncomfortable about having testicles (nine; 20.5%; "I don't believe that my testicles belong on my body"), having the desire to become less male (six; 13.6%; "I don't like being a male"), having a medical condition that requires or required castration (three; 6.8%; "My testicles hurt"), and having the desire to experience the calm from castration (two; 4.5%; "I want to be a eunuch for the eunuch calm"). Other participants provided responses that did not fit unambiguously into any of these categories (e.g. "Spiritual purity reasons").

Although most participants acknowledged at least some sexual motivation for being eunuchs and eunuch wannabes, the question remains how important being a eunuch or eunuch wannabe is to their sexuality. Masturbatory fantasy provides one potential window into this issue, as it tends to be chosen to maximize sexual pleasure. When participants were asked the importance of fantasizing about being a castrated man or being castrated during masturbation, the average degree of its importance was 2.80 (SD = 1.58) using the 5-point rating scale (1 = not at all important to 5 = extremely important), suggesting it tended to be somewhat important. Participants varied considerably in the importance of fantasizing about being a castrated man or being castrated during masturbation: Although 44.6% rated such fantasizing as slightly or not at all important, another 35.4% rated it as very or extremely important.

Correlates of sexual motivation related to being eunuchs and eunuch wannabes. I

examined the extent to which sexual motivation among participants was related to having been castrated, banding, having ever considered the possibility that they might be better off as a castrated man, having ever considered medical procedures to make themselves into a castrated man, currently taking or having ever taken hormones or related compounds that facilitate chemical castration or counteract the side effects of gonadal hormone deprivation from castration, how likely they were to think they were to still be eunuchs and eunuch wannabes in 10 years, and how involved they were with other communities or subcultures that likely consist of a sexual component. Neither sexual motivation for being eunuchs nor sexual motivation for being eunuch wannabes was significantly related to any of these different aspects of being eunuchs and eunuch wannabes (all ps > .16), with the exception of the association between sexual motivation for being eunuch wannabes and how involved participants were with other communities or subcultures that are likely sexual, r(51) = .30, p = .040.

# **Sexual Interests Related to Erotic Target Identity Inversions (ETIIs)**

I examined the extent to which sexual motivation of eunuchs and eunuch wannabes is explained by the concept of ETIIs. Because ETIIs involve locating external erotic targets within a man's own body, men with ETIIs are sexually aroused by imagining themselves as the same kinds of individuals to whom they are sexually attracted (Blanchard, 1991; Freund & Blanchard, 1993; Lawrence, 2009). That is, their external and internal erotic targets are similar. Thus, if eunuchs and eunuch wannabes have ETIIs, they should be both sexually attracted to castrated men and sexually aroused by the fantasy of being a castrated man. Because ETIIs may be considered paraphilias (Freund & Blanchard, 1993), which tend to co-occur within the same individual (e.g., Dawson et al., 2016), and because autogynephilia is likely the most common

ETII (Blanchard, 1993b), I examined whether some eunuchs and eunuch wannabes are sexually attracted to women and sexually aroused by the fantasy of being a woman.

Prevalence and degree of sexual interests related to ETHs. Figure 12 shows the distributions of eunuch and eunuch wannabe participants' scores on the general variables for sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man, and their ratings of sexual attraction to women and sexual arousal by the fantasy of being a woman. Table 9 presents descriptive statistics for these two sets of sexual attraction and sexual arousal ratings, relevant to conceptualizing the putative ETHs of autoeunuchophilia and autogynephilia.

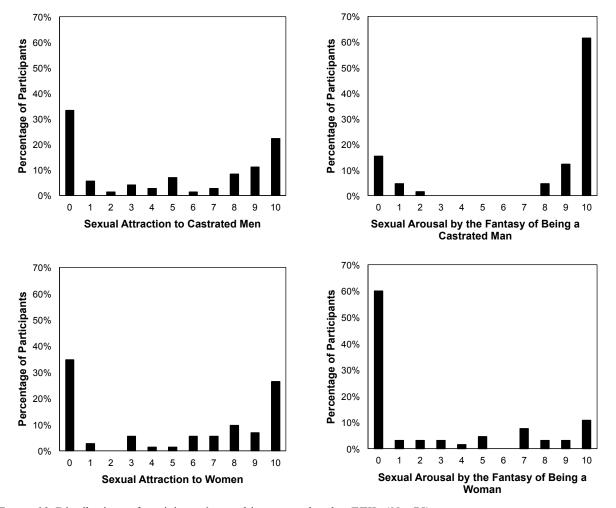


Figure 12. Distributions of participants' sexual interests related to ETIIs (N = 75).

Table 9

Descriptive statistics for participants' sexual interests related to ETIIs

Sexual interest	$n^{\mathrm{a}}$	% <sup>b</sup>	M <sup>c</sup>	SD °
Autoeunuchophilia as an ETII				
Sexual attraction to castrated men	48	64.00	4.83	4.24
Sexual arousal by the fantasy of being a castrated man		82.67	7.71	3.92
Autogynephilia as an ETII				
Sexual attraction to women	47	62.67	5.08	4.30
Sexual arousal by the fantasy of being a woman	29	38.67	2.62	3.77

<sup>&</sup>lt;sup>a</sup> Values in this column represent the numbers of participants who scored above 0 on each sexual interest.

N = 75

As shown, both sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man were common among participants. There was, however, an important difference between the distributions of these sexual attraction and sexual arousal ratings: More participants reported sexual arousal (especially maximum sexual arousal) by the fantasy of being a castrated man, compared with sexual attraction to castrated men. Indeed, participants tended to rate their sexual arousal by the fantasy of being a castrated man higher than their sexual attraction to castrated men, paired t(74) = 4.80, p < .0001, d = 0.64. On the one hand, the finding that eunuchs and eunuch wannabes in my sample tended to be both sexually attracted to castrated men and sexually aroused by the fantasy of being a castrated man was consistent with the concept of ETIIs. On the other hand, the difference between the two distributions, in which sexual arousal by the fantasy of being a castrated man was more common and rated higher on average than sexual attraction to castrated men, was less consistent with the concept of ETIIs. Because ETIIs involve the internalization of sexual attraction to erotic targets on the outside, the concept suggests at least equal, if not more, participants reporting sexual attraction to castrated

<sup>&</sup>lt;sup>b</sup> Values in this column represent the percentages of participants who scored above 0 on each sexual interest.

<sup>&</sup>lt;sup>c</sup> Values in these columns were computed using all participants.

men than reporting sexual arousal by the fantasy of being a castrated man.

The general variables of sexual attraction to castrated men and sexual arousal by the fantasy of being a castrated man were significantly correlated, r(73) = .34, p < .01. This finding suggests that variability in participants' sexual arousal by the fantasy of being a castrated man, a possible sexual motivation for being eunuchs and eunuch wannabes, was predicted by variability in their sexual attraction to castrated men.

The average degree of sexual arousal by the fantasy of being a woman was low, although participants commonly endorsed non-zero arousal. Thus, the relevant distribution for autogynephilia was highly positively skewed. Indeed, over half of participants rated their sexual arousal by the fantasy of being a woman at the minimum. Consistent with autogynephilia as an ETII, sexual attraction to women was significantly correlated with autogynephilia in this sample, r(73) = .46, p < .0001.

Specificity of castrated men in sexual interests related to ETIIs. By castrating themselves or banding, eunuchs and eunuch wannabes change their appearance to become castrated men or more like castrated men, and not women. Thus, if eunuchs and eunuch wannabes are characterized by ETIIs, they should report a higher prevalence and degree of sexual arousal by the fantasy of being a castrated man than of sexual arousal by the fantasy of being a woman, despite the fact that autogynephilia is likely more common in the general population (Blanchard, 1993b).

The average degree of sexual arousal by the fantasy of being a castrated man using the general variable was significantly much higher than that of sexual arousal by the fantasy of being a woman, paired t(74) = 8.02, p < .0001, d = 1.00. Consistent with the idea that eunuchs and

eunuch wannabes internalize their sexual attraction specifically to castrated men rather than women, participants reported more sexual arousal by the fantasy of being a castrated man than by the fantasy of being a woman. Furthermore, sexual arousal by the fantasy of being a castrated man was neither significantly nor strongly correlated with autogynephilia, r(73) = .12, p = .36.

Specificity of castration form or genital modification in sexual interests related to autoeunuchophilia as an ETII. Eunuchs and eunuch wannabes may vary in their sexual preferences for physically castrated men, chemically castrated men, and men with other genital modifications. Thus, the specificity of castration form or genital modification in their sexual attraction to castrated men might predict the specificity of castration form or genital modification in their sexual arousal by the fantasy of being a castrated man, consistent with autoeunuchophilia as an ETII. In other words, if eunuchs and eunuch wannabes are characterized by an ETII, they might be especially sexually aroused by the fantasy of being the same kinds of castrated or genitally modified men to whom they are sexually attracted. For example, do participants sexually attracted to chemically castrated men have a greater tendency than those sexually attracted to physically castrated men have to be sexually aroused by fantasizing that they are chemically castrated men? I examined whether sexual attraction to physically or chemically castrated men, as well as to men with other genital modifications, tended to correspond with sexual arousal by the fantasy of being the same kinds of castrated or genitally modified men. To that end, I correlated the ratings of sexual attraction to those three kinds of castrated or genitally modified men with the corresponding ratings of sexual arousal by the fantasy of being those same three kinds of castrated or genitally modified men.

Table 10 presents these correlations among participants sexually aroused by the fantasy

of being a castrated man. Consistent with the idea that autoeunuchophilia is an ETII, sexual attraction to each of the three kinds of castrated or genitally modified men was significantly and positively correlated with sexual arousal by the fantasy of being the same kind of castrated or genitally modified man (see the diagonal of Table 10). In addition, sexual attraction to each of the three kinds of castrated or genitally modified men was positively but less strongly correlated with sexual arousal by the fantasy of being the other two kinds of castrated or genitally modified men. This pattern appears somewhat analogous to the "stimulus generalization gradient" reported by Blanchard et al. (2012), which suggests that men are next most attracted to individuals of the same gender but adjacent sexual maturity as those to whom they are most attracted. This pattern is also consistent with the idea that external erotic targets tend to be similar to internal erotic targets among men with ETIIs. Despite their differences in castration form or genital modification, all three kinds of castrated or genitally modified men are similar in appearance and behavior, because they are all men, and the male body as a whole is sexually salient.

Table 10

Correlations between participants' (only those sexually aroused by the fantasy of being a castrated man) ratings of sexual attraction to three kinds of castrated or genitally modified men and ratings of sexual arousal by the fantasy of being those same kinds of castrated or genitally modified men

Internal erotic target as castrated or genitally modified man	External erotic target of castrated or genitally modified man			
S y	Physically castrated men	Chemically castrated men	Men with other genital modifications	
Physically castrated man	.34**	.25*	.33**	
Chemically castrated man	.19	.47***	.16	
Man with other genital modifications	.11	.28*	.44**	

Boldface indicates correlations for which sexual attraction to a particular kind of castrated or genitally modified man corresponded with sexual arousal by the fantasy of being the same kind of castrated or genitally modified man.

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .0001

Correlates of autoeunuchophilia. I examined whether sexual arousal by the fantasy of being a castrated man among participants was related to having been castrated, banding, having ever considered the possibility that they might be better off as a castrated man, having ever considered medical procedures to make themselves into a castrated man, currently taking or having ever taken hormones or related compounds that facilitate chemical castration or counteract the side effects of gonadal hormone deprivation from castration, how likely they were to think they were to still be eunuchs and eunuch wannabes in 10 years, and how involved they were with other communities or subcultures that likely consist of a sexual component. The general variable of sexual arousal by the fantasy of being a castrated man was not significantly correlated with any of these different aspects of being eunuchs and eunuch wannabes (all ps > 32), except the associations between the general variable and both frequencies of banding were close to significance (both rs = .20, ps = .10).

Among those participants who reported that they had been castrated and also experienced sexual arousal by the fantasy of being a castrated man, 73.9% said that they experienced such arousal both when they were and were not castrated, 21.7% only when they were not castrated, and 4.4% only when they were castrated. Among those participants who reported that they were currently taking or have taken hormones or related compounds and also experienced sexual arousal by the fantasy of being a castrated man, 78.6% said that they experienced such arousal both when they were and were not on hormones or related compounds, 14.3% only when they were, and 7.1% only when they were not.

**Narratives of autoeunuchophilia.** I present a few brief narratives from participants that I consider representative of their autoeunuchophilic fantasies and experiences. Each narrative is a

selection from the responses that a participant provided for the open-ended questions. I edited the narratives for grammar, style, and concision, while preserving content.

Only one participant described fantasies or experiences related to being a castrated man that were consistent with conceptualizing autoeunuchophilia as an ETII: "My most arousing sexual fantasy of being a castrated man is having sex with another castrated man." More commonly, participants described fantasies and experiences of autoeunuchophilia that were more consistent with sexual masochism instead of an ETII, as exemplified by the following three narratives:

I fantasize about being stripped naked against my will, strapped down, and then nullified while people watch. I entertain the fear, the humiliation, and the secret feeling of pride and excitement about being special or different. Sometimes, I imagine being tricked into the situation or choosing it over a worse fate. The thought of being treated as "less than a man" excites me. I also fantasize about being a nullified passive sexual partner to an intact man.

In my typical fantasies, I am naked, forcibly restrained, and nullified with a knife by multiple men. The fantasies take place in a historical setting (e.g., Imperial China, Medieval Europe), and I don't realize what's going to happen until I see the knife. I'm young and preteen in these fantasies, and the perpetrators are adults. I'm powerless. My partner once pretended to be one of the men in the above fantasy. He undressed me, examined me, tied me up, bound my genitals with a

leather shoelace, and pretended to nullify me with a plastic knife. After that, he placed a sock over my bound genitals, so we could have sex with me pretending to be a eunuch slave.

In my typical fantasies, I am castrated by a group of beautiful women who wear only stockings and heels. I think my favorite fantasy is to be banded with two bands for a couple of days and to have sex with all of the women. The fantasy ends with one of them clipping my testicles off between the bands with a pair of large loping shearers in front of a crowd as a big celebration.

#### **Discussion**

Results of Study 3 suggest that sexual motivation is common among eunuchs and eunuch wannabes. The majority of all participants (78.7%) reported some degree of sexual motivation in being either eunuchs or eunuch wannabes. Participants also reported that they were somewhat sexually motivated on average. On the one hand, sexual motivation was reported at a higher prevalence in my sample of eunuchs and eunuch wannabes than in previous samples, which have found prevalence between 30-50% (Johnson et al., 2007; Roberts et al., 2008; Wassersug et al., 2004). On the other hand, the prevalence of reported sexual motivation in my sample was similar to the prevalence of sexual themes in 120 fictional stories posted on the Eunuch Archive, which was 83% (Handy et al., 2015). Because Study 3 did not analyze fictional stories for sexual themes, the former comparison might be favored over the latter, suggesting bias toward eunuchs and eunuch wannabes with sexual motivation in my sample.

Despite clearly finding that eunuchs and eunuch wannabes tend to be sexually motivated,

Study 3 provides less clear evidence that their sexual motivation is due to an ETII. To be sure, participants reported a pattern of sexual interests that was consistent with the concept of ETIIs in some important respects. For example, participants tended to be both sexually attracted to castrated men and sexually aroused by the fantasy of being a castrated man. Their ratings of sexual arousal by the fantasy of being a castrated man (autoeunuchophilia) were also greater than those of sexual arousal by the fantasy of being a woman (autogynephilia) in both prevalence and degree. Most compellingly, participants were especially sexually aroused by fantasizing about being the same kinds of castrated or genitally modified men to whom they were sexually attracted. That is, a eunuch or eunuch wannabe who was most sexually attracted to physically castrated men was most sexually aroused by the fantasy of being a physically castrated man rather than a chemically castrated or other genitally modified man. At least one important aspect of the pattern of sexual interests in my sample, however, was not so consistent with the concept of ETIIs: Ratings of sexual arousal by the fantasy of being a castrated man were greater than ratings of sexual attraction to castrated men in both prevalence and degree. ETIIs involve the internalization of sexual attraction to erotic targets, and thus require external attraction to castrated men in order for there to be internal attraction to being a castrated man.

Eunuchs and eunuch wannabes in my sample were not only united by their sexual fantasies and ideation about being castrated men, but a substantial proportion had also acted on such fantasies and ideation. For example, nearly half of participants (44.0%) reported that they had been castrated, roughly two-thirds (66.7%) reported that they had ever banded, and over half (54.5%) reported that they had ever taken hormones or related compounds that facilitate chemical castration or counteract the side effects of gonadal hormone deprivation from

castration. Sexual arousal by the fantasy of being a castrated man was also slightly associated with the frequencies of banding, although these correlations were not significant. Because the relevant evidence in this study was weak, it remains unclear whether banding among eunuchs and eunuch wannabes is analogous to cross-dressing among autogynephilic men. Both activities involve changing one's appearance and are at least conceptually similar in this way. Future research is needed to clarify the associations between autoeunuchophilia and its possible manifestations, such as castration and banding, with respect to the concept of ETIIs.

Similar to past samples of eunuchs (Handy et al., 2016; Johnson et al., 2007; Vale, Siemens, Johnson, & Wassersug, 2013) and eunuch wannabes (Johnson & Irwig, 2014; Roberts et al., 2008), my sample of eunuchs and eunuch wannabes was likely to have non-heterosexual identities (69.3%) and to provide Kinsey scores consistent with these identities. Participants were most likely to identify as homosexual/gay (32.0%), and a notably higher percentage identified as asexual (14.7%) than is usually found even in samples of paraphilic men. For example, rates of asexual identity were 2.7% among male furries in Study 1, and 6.1% among male AB/DLs in Study 2. Despite the fact that non-heterosexual identities and current sexual feelings were not uncommon in the present sample, only five of the 34 (14.7%) participants who were in a relationship reported a man as their romantic partner.

There was a relatively high prevalence and degree of sexual attraction to castrated men and especially sexual arousal by the fantasy of being a castrated man in this sample of eunuchs and eunuch wannabes. Both sexual interests are probably rare in the general population, even if they appear to be common among eunuchs and eunuch wannabes. It is unsurprising that no relevant data exist for comparison, because few studies have investigated sexual interests related

to ETIIs. Sexuality is usually studied within a conventional framework, which considers sexual orientation only as relative attraction to men versus women. The concept of ETIIs has also been difficult for many researchers and clinicians to appreciate and accept, even when it helps explain otherwise puzzling phenomena, such as cross-dressing among heterosexual men, desire for limb amputation, and the furry phenomenon.

#### Limitations

Several important limitations of Study 3 require its cautious interpretation. Most importantly, it is impossible to recruit a sample of eunuchs and eunuch wannabes that is truly random or representative. As a result, the extent to which findings from this study generalize to the population of all eunuchs and eunuch wannabes cannot be known. Indeed, almost all participants were recruited from a single online source: the Eunuch Archive. This website hosts the only large and active community of eunuchs and eunuch wannabes that currently exists online (R. Wassersug, personal communication, November 10, 2017). This website was also the sole recruitment source in prior studies of eunuchs (e.g., Johnson et al., 2007) and eunuch wannabes (e.g., Roberts et al., 2008). Thus, recruiting a large sample of eunuchs and eunuch wannabes without the Eunuch Archive would be challenging, if not impossible.

The Eunuch Archive does not explicitly emphasize erotic content, but members of its community often share erotic content, consisting mainly of fictional stories about castration with sexual themes. Furthermore, my recruitment materials emphasized an interest in understanding the sexuality of eunuchs and eunuch wannabes, and the questionnaire mostly assessed sexuality. For these reasons, the present sample of eunuchs and eunuch wannabes may have been biased toward those who were sexually motivated and non-heterosexual. After all, previous samples

have shown lower rates of sexual motivation (Johnson et al., 2007; Roberts et al., 2008; Wassersug et al., 2004), but they may have also been biased. To the extent that my sample is biased, it may not represent eunuchs and eunuch wannabes in general. Accepting this limitation, it remains clear that there exist many eunuchs and eunuch wannabes who do report sexual motivation, and there also appear to be many who report sexual interests that might be consistent with the concept of ETIIs. In addition, the large percentage of non-heterosexual identities and sexual feelings in this sample is striking.

Study 3 did not include a careful assessment of alternative explanations for why eunuchs and eunuch wannabes might be motivated besides sexuality. Because eunuchs and eunuch wannabes in this sample were recruited from a large and active online community, social motivation is one plausible alternative to sexuality. Participants were not likely to report much social motivation, however, and the percentage of participants who endorsed some degree of social motivation (34.3%) was less than half that of either eunuchs or eunuch wannabes who endorsed some degree of sexual motivation. Nor did any participants mention social motivation as an alternative to sexuality, among those who believed they were not sexually motivated in being eunuchs or eunuch wannabes and provided open-ended responses explaining their reasons. Common non-sexual motivations reported by participants instead included having the desire to reduce sex drive, disliking or feeling uncomfortable about having testicles, and having the desire to become less male. These non-sexual reasons for being a eunuch or eunuch wannabe have been found to be important and common in previous work (Johnson et al., 2007; Roberts et al., 2008; Wassersug et al., 2004), and future research might assess how they relate to sexual motivation, which also appears important and common. In contrast, based on my results, social motivation

does not seem to factor importantly into being eunuchs and eunuch wannabes.

Study 3 also did not include a careful assessment of alternative explanations for why eunuchs and eunuch wannabes are sexually motivated besides an ETII. Sexual masochism is one promising alternative for at least two reasons. First, masochistic themes were commonly found in participants' descriptions of their autoeunuchophilic fantasies and experiences. I presented three narratives that exemplified these masochistic themes, in which participants fantasized about becoming castrated men in humiliating and degrading ways. Second, among those participants involved with communities or subcultures other than those of eunuchs and eunuch wannabes that likely consist of a sexual component, 75.0% reported that they were involved with BDSM communities or subcultures. Freund and Blanchard (1993) discussed the possibility that some fantasies that appear to be motivated by ETIIs are in fact motivated by sexual masochism. Fantasies motivated by masochism emphasize physical and behavioral differences between men and their preferred erotic targets (e.g., women), thereby increasing feelings of submissiveness. Fantasies motivated by an ETII, in contrast, emphasize physical and behavioral similarities between men and their preferred erotic targets. Based on these criteria, the last three narratives that I presented are better explained by masochism than by an ETII.

In further support of sexual masochism as a plausible alternative to an ETII for explaining sexual motivation, eunuchs and eunuch wannabes have not uncommonly reported the desire to be submissive to a sexual partner as a motivation to be castrated (Johnson et al., 2007; Roberts et al., 2008; Wassersug et al., 2004). Moreover, in the previously mentioned analysis of 120 fictional stories posted on the Eunuch Archive, 53% involved forced castration or other genital injury, and many stories described the process to be painful (Handy et al., 2015). Women

also performed the castration or other genital injury on the recipients in 80% of the stories that were tagged as "heterosexual," and men did this in 94% of the stories tagged as "homosexual." The stories therefore exaggerated differences between the recipients and their preferred erotic targets, either women or men. These findings merit a more careful assessment of sexual masochism as an explanation for sexual motivation among eunuchs and eunuch wannabes.

#### **Conclusions**

Study 3 characterized the sexual orientation, sexual motivation, and sexual interests of eunuchs and eunuch wannabes, but it was largely exploratory and had important limitations. Future research on their sexuality may benefit from more careful assessment of possible alternative motivations for being eunuchs and eunuch wannabes and possible alternative explanations for sexual motivation, such as sexual masochism. Future research may also benefit from a different recruitment approach, such as recruiting eunuchs and eunuch wannabes separately or recruiting only those who do not endorse sexual motivation. No sample of eunuchs, eunuch wannabes, or both will truly be representative, however.

Eunuchs and eunuch wannabes are not well known in society outside of a historical or medical context. To the extent that they are known, eunuchs and eunuch wannabes are stigmatized for their unusual interests and behaviors, especially if they are sexually motivated. By continuing to study sexual motivation and unusual sexual interests in eunuchs and eunuch wannabes, we will better understand their role and importance. This knowledge will be important not only for society to better understand and accept eunuchs and eunuch wannabes, but also for some eunuchs and eunuch wannabes to better understand and accept themselves.

#### **General Discussion**

Despite their potential to increase our understanding of sexual orientation and the motivations for why some men change their appearance and behavior, ETIIs have not been well studied. To date, only three ETIIs have been the subject of systematic research: autogynephilia in men sexually attracted to women (Blanchard, 2005; Lawrence, 2013), apotemnophilia in men who desire limb amputation (First, 2005; Lawrence, 2006), and autopedophilia in men sexually attracted to children (Hsu & Bailey, 2017). The present research examined the possibility of additional ETIIs among three populations of men who might be sexually motivated to change their appearance and behavior: male furries (Study 1), AB/DLs (Study 2), and eunuchs (Study 3).

Study 1 showed strong evidence for the idea that autoanthropomorphozoophilia is an ETII in male furries. Both sexual attraction to anthropomorphic animals and sexual arousal by the fantasy of being an anthropomorphic animal were widely endorsed in that sample. Furthermore, autoanthropomorphozoophilia was rated higher than either autozoophilia or autogynephilia was, and male furries tended to find it sexually arousing to fantasize about being the same kinds of anthropomorphic animals to whom they were sexually attracted, with respect to gender and species. In contrast, Study 2 did not show much evidence for the idea that autonepiophilia is an ETII in male AB/DLs. Although many in that sample reported sexual arousal by the fantasy of being a baby, few reported sexual attraction to babies, contrary to what the concept of ETIIs would predict. In addition, autonepiophilia was not rated higher than autogynephilia was.

Study 3 was the least clear in providing evidence for the idea that autoeunuchophilia is an ETII in eunuchs and eunuch wannabes. On the one hand, both sexual attraction to castrated men

and sexual arousal by the fantasy of being a castrated man were commonly reported in that sample. Autoeunuchophilia was also rated higher than autogynephilia was, and eunuchs and eunuch wannabes tended to find it sexually arousing to fantasize about being the same kinds of men to whom they were sexually attracted, with respect to castration form or genital modification. On the other hand, sexual attraction to castrated men was not as common as (or more common than) sexual arousal by the fantasy of being a castrated man, which was less consistent with the concept of ETIIs.

Study 1 provides the most compelling support for another ETII that is not autogynephilia, apotemnophilia, or autopedophilia, compared with Studies 2 and 3. Study 1 also most clearly contributes validity to the concept of ETIIs and the notion that an erotic target's location constitutes an important dimension of male sexual orientation. Results of Studies 2 and 3, however, raise the question of whether the concept of ETIIs is necessary for explaining AB/DLs, eunuchs and eunuch wannabes, and other populations of men who change their appearance and behavior with possible sexual motivation. It appears that men can be sexually motivated to change their appearance and behavior without necessarily having ETIIs, as shown most evidently in Study 2: Male AB/DLs were sexually motivated to role-play as babies or wear diapers, but generally not due to an ETII. In a man who changes his appearance and behavior to become more like another kind of person or thing, perhaps the formation of a different identity is more indicative of an ETII. Autogynephilic males (Bailey, 2003; Blanchard, 1991; Lawrence, 2004, 2007, 2013) and male furries (Gerbasi et al., 2008; Půtová, 2013; Roberts et al., 2015), for example, tend to create identities of themselves as women and as anthropomorphic animals (i.e., fursonas), respectively, and have been shown to be motivated by ETIIs. Neither male AB/DLs

nor eunuchs and eunuch wannabes have been found to establish identities to the same extent and do not show strong evidence of having ETIIs. Still, men who desire limb amputation have also not shown a tendency to create identities, but evidence does support the idea that they are motivated by an ETII (First, 2005; Lawrence, 2006).

Despite their differences with respect to ETIIs, all three studies found a high prevalence of sexual motivation in their samples, whether it was male furries (99.4%), AB/DLs (95.3%), or eunuchs and eunuch wannabes (78.7%). Social motivation was less relevant in these three samples, especially in male AB/DLs and eunuchs and eunuch wannabes. In addition to the lack of strong evidence relative to sexual motivation, social motivation is unconvincing as a primary explanation because it is not clear why male furries, AB/DLs, and eunuch and eunuch wannabes would specifically choose to become involved with their respective communities. If they were motivated by the desire for belonging and social support, there are other communities that are more visible and less stigmatized with which they could become involved, such as those related to art, music, games, or sports. Thus, male furries, AB/DLs, and eunuchs and eunuch wannabes are not likely to only be socially motivated. Feelings of belonging and social support may also be a byproduct, and thus more of a post-hoc than an initial motivation for these individuals.

All three studies found a high prevalence of non-heterosexual identities in their samples relative to the general male population, whether it was male furries (84.1%), AB/DLs (37.8%), or eunuchs and eunuch wannabes (69.8%). These rates varied more across the three samples than did those of sexual motivation, however. These rates of non-heterosexual identities were also consistent with those found in samples of men with other paraphilias, which varied considerably as well. For example, 47.1% of gynandromorphophilic men (Rosenthal et al., 2017) and 61.7%

of pedohebephilic men (Bailey et al., 2016) reported non-heterosexual identities or attraction. With respect to men with ETIIs specifically, 19% of autogynephilic men (Hsu et al., 2015) and 38% of apotemnophilic men (First, 2005) reported non-heterosexual identities. It remains unclear why men with paraphilias are more likely to identify as non-heterosexual. One possibility is that paraphilic sexual attraction along other dimensions of sexual orientation besides gender (e.g., sexual maturity, location) reduces the salience of gender as a dimension. In other words, to the extent that some men's primary sexual attraction is not to either men or women but to paraphilic erotic targets (e.g., children, anthropomorphic animals, the fantasy of being a woman), they may show more indifference about choosing between men or women.

Interestingly, male furries showed the highest prevalence of non-heterosexual identities and tended to report a pattern of sexual interests that was most consistent with the concept of ETIIs. Male AB/DLs conversely showed the lowest prevalence of non-heterosexual identities and tended to report a pattern of sexual interests that was least consistent with the concept of ETIIs. This observation might reflect a specific association between ETIIs and sexual orientation in its conventional sense, as relative attraction to men versus women. However, previous research has showed that ETIIs can motivate men to identify and behave as non-heterosexual even when they are actually not. For instance, some autogynephilic men identify and behave as bisexual because they are sexually aroused by the fantasy of having sex with a man as a woman, rather than genuinely attracted to male bodies (Blanchard, 1989b; Hsu et al., 2015; Lawrence, 2013). The degree to which a similar kind of motivation explains non-heterosexual identities and behaviors in male furries especially, AB/DLs, and eunuchs and eunuch wannabes could be explored in future research.

# Sexual Masochism as an Alternative to ETIIs

In addition to a high prevalence of sexual motivation and non-heterosexual identities, all three studies shared the possibility that sexual masochism may explain the sexual motivation of their samples. For example, masochistic themes were commonly found in the open-ended responses of men from all three samples about their fantasies and behaviors. Male AB/DLs in Study 2 and eunuch and eunuch wannabes in Study 3 were also likely to report involvement in BDSM communities. Finally, male AB/DLs endorsed the importance of pain, humiliation, and the presence of an adult woman in their fantasies of being a baby.

Future research on male furries, AB/DLs, eunuchs and eunuch wannabes, and yet other populations with potential ETIIs could incorporate more careful assessment of sexual masochism as an alternative to ETIIs for explaining sexual motivation. Indeed, Freund and Blanchard (1993) previously cautioned that some phenomena superficially appearing to reflect ETIIs might in fact reflect sexual masochism. In particular, autogynephilic, autonepiophilic, and autoeunuchophilic fantasies and behaviors can sometimes be viewed as masochistic. Specifically, the idea of becoming a woman, a baby, or a castrated man may be humiliating or submissive to some men, as may cross-dressing, wearing diapers, or banding. Thus, sexual arousal in these types of fantasies and behaviors may be related to masochism instead of an ETII, or the internalization of sexual attraction to women, babies, or castrated men. Previous studies have found that autogynephilia does tend to co-occur with masochism (Blanchard & Hucker, 1991; Hsu et al., 2015; Långström & Zucker, 2005; Lawrence, 2006, 2013). Studies 2 and 3 suggest that autonepiophilia and autoeunuchophilia are also related to masochism, based on the prevalence of reported masochistic themes and involvement with BDSM. But the more direct associations

could be tested in the future.

Freund and Blanchard (1993) argued that fantasies and behaviors motivated by sexual masochism exaggerate differences between men and their preferred erotic targets (e.g., women), increasing their feelings of submissiveness. They argued that in contrast, fantasies and behaviors motivated by an ETII increase similarity between men and their preferred erotic targets. Freund and Blanchard then presented three cases of men who superficially appeared to be motivated by ETIIs based on their fantasies and behaviors, which included fantasizing about being either a baby or a young boy and wearing diapers. One man described his sexual fantasy of being a baby put into the washing machine by his mother, and he also reported a history of cross-dressing in order to feel powerless or degraded. The men in all three cases reported that they were most sexually attracted to adult women and fantasized about adult women spanking or degrading them. Their fantasies thus exaggerated differences between them and their preferred erotic targets (i.e., adult women) and did not increase similarity. As a result, Freund and Blanchard concluded that these men were motivated by masochistic fantasies of being a baby or child and wearing diapers, rather than by an ETII. Based on these same criteria, many male AB/DLs in Study 2 and eunuchs and eunuch wannabes in Study 3 were motivated by masochism instead of an ETII, because they exaggerated physical and behavioral differences between them and the adults taking care of them, or the men with intact genitals castrating them, in their fantasies.

Male furries in Study 1 presented more of a challenge to sexual masochism as an alternative explanation for their sexual motivation. They tended to highly rate sexual arousal by the fantasy of being an anthropomorphic animal and to report sexual arousal by fantasizing about being the same kinds of anthropomorphic animals to whom they were sexually attracted, with

respect to gender and species. These findings are more consistent with the concept of ETIIs than sexual masochism, because there was increased similarity rather than differences between the men and their preferred erotic targets. Future work to distinguish ETIIs and sexual masochism may continue to benefit from examining the specificity of a potential ETII at multiple levels, or whether sexual attraction to other individuals matches sexual arousal by the fantasy of being one of those individuals in more than one dimension of sexual attraction (e.g., gender and species).

Further complicating the distinction between them, ETIIs and sexual masochism are both paraphilias, and paraphilias tend to co-occur (Abel & Osborn, 1992; Baur et al., 2016; Dawson et al., 2016; Joyal & Carpentier, 2017; Långström & Seto, 2006; Långström & Zucker, 2005). Thus, it is likely that the same individual might fantasize or behave in ways that reflect an ETII, sexual masochism, or perhaps even both simultaneously. Autogynephilic males, for example, are especially likely to be masochistic (Blanchard & Hucker, 1991; Hsu et al., 2015; Långström & Zucker, 2005; Lawrence, 2006, 2013). In theory, this might mean that autogynephilia is an ETII that tends to co-occur with sexual masochism, that it is a form of sexual masochism, or that it reflects both an ETII and sexual masochism. It seems possible that these three interpretations of autogynephilia can be true to different degrees, depending on the autogynephilic male.

# **Etiology and Development of ETIIs**

Little is known about the etiology and development of ETIIs. Because paraphilias are poorly understood in general, it is not surprising that most ETIIs are even less so. Although the present research did not examine the etiology and development of ETIIs, it will be important for future research to begin exploring this issue as the empirical support for ETIIs increases.

The tendency to gravitate toward male-typical and "nerdy" occupations and hobbies, such

as those involving computers and technology, has been observed in men with ETIIs, including autogynephilic males (Bailey, 2003) and male furries (Evans, 2008; Gerbasi et al., 2008). According to Lawrence and Bailey (2009), a study by Veale et al. (2008) showed that transgender women who are active on the Internet are overwhelmingly autogynephilic. Furthermore, two studies have found that autogynephilic transgender women score higher than non-autogynephilic transgender women do on a measure of autistic traits (Jones et al., 2012; Pasterski, Gilligan, & Curtis, 2014), which are closely associated with male-typical and "nerdy" interests (Baron-Cohen, 2002). Finally, a recent study showed that male furries are more likely to report having been diagnosed with an autism spectrum disorder, compared with the general male population (Reysen et al., 2018).

Future research is necessary to clarify the ways in which autogynephilia, autoanthropomorphozoophilia, and other ETIIs are related to "nerdy" interests and autistic traits, which have the potential to reveal more about the etiology and development of ETIIs. For instance, if ETIIs are correlated with increased autistic traits, it might be that individuals with ETIIs develop an increased difficulty with distinguishing their own mental states and experiences from those of others, which tends to show in the cognitive representations and neural systems of individuals with autistic traits (Gallese, Rochat, & Berchio, 2013; Lombardo & Baron-Cohen, 2010). ETIIs might then reflect the specific increased difficulty with distinguishing oneself from other individuals as an erotic target, resulting in sexual arousal by the fantasy of being another individual. Alternatively, ETIIs might share the same underlying cause as other paraphilias, which would suggest a general predisposition to develop paraphilias and not ETIIs specifically. Several neuroimaging studies have examined differences in brain structure and activity between

men who desire limb amputation and men who do not (see Brugger, Christen, Jellestad, & Hänggi, 2016, for a review). The results have implicated brain regions relevant to body representation and the sensorimotor system in the desire for limb amputation.

# **Future Directions**

The present research used one of two promising approaches to studying ETIIs: I recruited samples from three populations of men who desire to change their appearance or behavior to become more like a specific kind of individual—male furries, AB/DLs, and eunuchs—and examined the extent to which they were motivated by ETIIs. One challenge with this approach is that these populations have often formed social communities and are protective of them, because they tend to be stigmatized. Thus, participants recruited from these populations may be less open to disclosing aspects of their sexuality, especially sexual motivation and unusual sexual interests related to ETIIs. Some may even be actively hostile toward research that addresses their sexuality, because they fear that the findings will lead to further stigma against them and other members of their communities.

The other promising approach to studying ETIIs involves recruiting men sexually attracted to specific kinds of individuals and examining whether a subset of them report sexual arousal by the fantasy of being one of those individuals, consistent with the concept of ETIIs. This approach is likely to be less challenging than the other, because these populations are not recruited on the basis of their desire to change their appearance or behavior, which might or might not be sexually motivated. Rather, they are recruited based on their sexual attraction to specific kinds of individuals, and sexual motivation cannot be denied. Participants recruited from these populations are therefore more likely to be open about their sexuality, including sexual

interests related to ETIIs. Regarding this approach, there exist men sexually attracted to overweight or obese individuals (Swami & Furnham, 2009) and to individuals of a particular race/ethnicity that is different than their own (Phua & Kaufman, 2003). Future research could investigate the putative ETIIs specific to these two populations of men, which would involve sexual arousal by the fantasy of being overweight or obese and by the fantasy of being a different race/ethnicity, respectively.

# **Conclusions**

The concept of ETIIs has been controversial and difficult for many people to appreciate and accept, despite its increasing empirical support and potential for explaining otherwise puzzling phenomena, such as cross-dressing among heterosexual men, desire for limb amputation, and now the furry phenomenon. Some individuals who might be characterized by ETIIs dislike and reject the notion that their changes in appearance and behavior are sexually motivated by a paraphilia. For example, some transgender women have been especially hostile to the idea that autogynephilia can be a fundamental motivation for sex reassignment surgery in natal males (Dreger, 2008). The present research contributes to an increased understanding of ETIIs, in addition to an increased understanding of male furries, AB/DLs, and eunuchs, especially with respect to their sexuality. It is my hope that the present research will stimulate much needed research on ETIIs, which may reflect an understudied but important dimension of sexual orientation.

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