"Can People with Pedophilia Change?: Yes they can!"

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CURRENT CONTROVERSIES (PJ KLEINPLATZ AND C MOSER, SECTION EDITORS)

"Can People with Pedophilia Change?: Yes they can!"

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Abstract

Purpose of Review This review is written in response to an invitation to explain why clinicians should reconsider the statement: "Once a pedophile always a pedophile".

Recent Findings Reviewed in this paper are challenges to the concept that pedophilia is "hard-wired" during a "critical period", the idea that all people with pedophilia reoffend, the idea that people with pedophilia are like "boiling pots", and that high-risk sex offenders are always high risk. The idea that pedophilia is an orientation is also redefined. Together, these observations and studies support a paradigm shift in favor of pedophilia being viewed as treatable condition characterized by a persistent sexual interest in children and a failure to develop adult sexual interests.

Summary The available evidence suggests that sexual interests are subject to the same range of influences as other interests. In the absence of any evidence to the contrary, clinicians should inform patients that there is no evidence that paraphilias, including pedophilia, cannot change. This therapeutic perspective is evidence based and increases the responsibility that people with pedophilia take for their actions and enhances their motivation and optimism for healthy change in both sexual interests and actions. This perspective enhances the prospect of successful treatment outcomes for people with pedophilia (and other) paraphilias.

Keywords Paradigm shift · Paraphilia · Pedophilia · Prognosis

Introduction

> Gwendolen: "I never change. Except in my affections."
> Oscar Wilde, The Importance of Being Earnest

In the past 30 years, I have assessed and treated literally thousands of men and women with pedophilia. As a psychiatric resident, I was taught that pedophilia is a "life-long condition" that is untreatable and has a dismal (i.e., hopeless) prognosis. One of my first publications [1] was based on data from a clinic that subscribed, at least in part, to those nihilistic views. That paper reports one of the highest recidivism rates ever reported for men being treated for pedophilia. The re-offense rate in that retrospective study was 68% for men who declined treatment with an anti-androgen and 15% for men who accepted treatment. In fairness, that paper reported on people who had been in the community for at least 5 years and the study intentionally used a very liberal definition of "relapse". In those days, patients were referred to a "pedophiles" rather than by the more appropriate term of "people with pedophilia" or the term I now use: "people with paraphilic interests". The treatment paradigm of that clinic was based on the research and writing of Dr. John Money who was my teacher for 5 years. Since then, based on daily reports from my patients (I see about 60 a week), my views about the treatability of people with pedophilia have changed.

Money invented a concept to explain and understand paraphilias for which he coined the term "lovemaps". He was influenced by the concept of "imprinting". Dr. Konrad Lorenz was awarded the Nobel Prize for the paradigm changing theory of imprinting that was based on the observation that new-born ducklings would "imprint" on things other than their mothers if exposed to alternative "mothers" during a "critical period". Once imprinted, ducklings were found to stay imprinted and to therefore prefer non-duckling imprinted "mothers" to their own biological duck mothers. Money hypothesized that people with

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paraphilias are people with "vandalized lovemaps" due (at least in part) to faulty imprinting. He defined "lovemaps" as:

> "A developmental representation or template in the mind and in the brain depicting the idealized lover and the idealized program of sexuoerotic activity projected in imagery or actually engaged in with that lover" (p. 290) [2].

Money's conception of paraphilias involved an idea that they were due to a change in the trajectory of the development of what he termed "normophilia". The idea included the view that once "vandalized", the subsequent development of non-paraphilic sexual interests was for some reason impossible. The idea proved to be paradigmatic. Ironically, Money used the acquisition of language as an analogy. He correctly pointed out that people develop language which becomes their "mother tongue" and which, once acquired, is life-long. There likely is a critical period during which language acquisition in humans is optimized. However, most people in the world speak more than one language [3] and the ability to acquire new languages and vocabulary is life-long.

The consequences of the concept of lovemaps were: (a) a merging of "love" and "sex" into the singular concept of a "lovemap", (b) establishment of the idea that paraphiias were "hard-wired" during a critical period (Money said the age when lovemaps were established was at age 8), (c) the idea that once "set', lovemaps were permanent and immutable, and (d) a merging of the concepts of gender, orientation, and interest. When Money was confronted with disconfirming data, such as a person whose "lovemap" changed, he would explain that it was not the lovemap that had changed, but simply that the person had taken longer than usual to fully realize their true lovemap.

Readers will note that the previous two paragraphs include several "quotes". The reason is because there are no data that prove the concept of "lovemaps", and since lovemaps theoretically can exist without being realized, there are no data to disprove the concept. Further, there is no evidence that people imprint and even less evidence that they sexually imprint. In addition, there is no evidence that even if sexual interest is somehow imprinted that it is unchangeable. In fact, everything that is known about sexual interest suggests that it is something that is subject to experience, teaching, observation, and subjective expectations. In other words, the available evidence suggests that sexual interests remain changeable throughout life.

Background

To understand the next section of this paper, some aspects of sexuality need definition.

There are five ways to categorize aspects of sexuality that have been described elsewhere [4] and which are summarized in Table 1.

To be clear, this paper is not arguing that established *genotypes* are modifiable. People die with the very-same same genes with which they were born (though phenotypic expression can be modified). Similarly, although *fluidity* is a term that is increasingly applied to the concepts of gender and orientation, neither *gender* nor *orientation* apply to current or past definitions of *pedophilia*. While *gender identity*, once established, is much less changeable than *gender role*, genotype, gender identity, and orientation are all much less modifiable than *sex drive*. In fact, the urge to have sex, like other motivated behaviors, is highly responsive to both external (environmental) stimuli and internal factors (physiology). These in turn are modifiable by learning and experience, drugs and medications, changes in physiology, and the concomitant influence of other drives such as the urges to eat or sleep. Of course, pedophilia is defined by only one of the five facets listed above which is *sexual interest* [5, 6].

The notion that people with pedophilia cannot change implies that their sexual interests, including pedophilic sexual interests, cannot change (since pedophilia is defined by persistent sexual interest in children). Sexual interests are definable by three factors: (1) with whom (or with what) the person wants to have sex, (2) the context in which the sex happens, and (3) the activities involved. The general claim that sexual interests are unchangeable necessitates several predictions. These include: (a) the sexual interests of children should remain the same when they become adults, (b) all relationships based on sexual interest should be monogamous and life-long, (c) a person entering a sex shop will find no interest in any item outside of the interest(s) the person had when they entered the shop, and (d) no one who reads a book like *Fifty Shades of Grey* (FSG) will develop an interest in BDSM, meaning that the success the FSG series was due to its literary merit. The theory that sexual interest, once established, becomes immutable, also implies that people can have only a single, fixed, sexual interest (lovemap).

This paper's argument is that the general proposition that sexual interest cannot change is unsupported by the data. For example, the sexual interests of adults are very different from those of prepubescent children. Monogamous, life-long sexual relationships are rare. Of those that do occur, the majority are the result of "arranged marriages" in which strangers introduced by their parents adopt (i.e., change) their sexual interests toward each other. In addition, the pornography industry, the sex shop industry, and arguably the fashion and entertainment industries rely on the fact that people are fascinated by new sexual ideas and activities that modify and provoke the development of new sexual interests.

Accepting that sexual interests in general are almost as changeable as sex drive, what about pedophilia? Pedophilia is

Table 1 Descriptive elements of sexuality

Label	Definition	Mutability
Genetic	Chromosomal: e.g., XX = female XY = male	Minimal/theoretical
Gender	Identity: male, female or other role: how the person chooses to present to the world	Identity: limited role: voluntary but highly influenced by identity
Orientation	The gender(s) to which limerence (love) is attached	Potentially "fluid" but not in need of therapeutic intervention
Drive	Urge to engage in sexual activities	Highly changeable
Interest	What a person wants to do sexually. The basis on which all paraphilias are defined.	Evidently changeable

defined as a persistent sexual interest in children. The fact that the American Psychiatric Associations Diagnostic and Statistical Manual (DSM) specifies the interest must be persistent, suggests an acknowledgement that not all sexual interests are persistent. This is reflected in the text of the DSM-5, which states that "… the course of pedophilic disorder may fluctuate, increase, or decrease with age" (4, P. 699). It is also supported by the fact that the DSM-5 diagnosis of pedophilia cannot be made in a person less than 16 years old, "…because of the difficulty during adolescent development in differentiating it from age-appropriate sexual interest in peers or from sexual curiosity" (5 P. 699).

In spite of the fact that change of sexual interest appears to be accepted in the text of the DSM-5 (and ICD-11 proposed), there remain three forms of the argument that suggest pedophilic sexual interests are unchangeable. The first is simply that all sexual interests, including pedophilic interests never change because they cannot change (a flat earth hypothesis). The second is that sexual interests are changeable until they are somehow "fixed" or "hardwired" and then become unchangeable (the Money hypothesis). The third is that interest can change, but only for the worse. That is, people with adult sexual interests may acquire pedophilic sexual interests by, for example, exposure to child pornography or some other form of moral degeneration, but their interests cannot revert or "get better" (the Krafft-Ebing hypothesis).

To date, there is no evidence to support any of the three hypotheses. In contrast, there is considerable evidence to challenge the proposition that pedophilic interests are unchangeable. The first is the observation that the sexual interests of adults are different than their interests when they were born or during childhood. A recent letter to the editor reviewed evidence supporting the observation that the "…the average age of onset for pedohebophilic interest in men is between 14 and 18…" and "the average age of onset of sexual attractions in teleiophilic men is between 9 and 11 years of age…" [7•]. Importantly, in his letter, Dr. McPhail pointed out that a change in definition or terminology can change results. Changing definitions from "lovemaps" to "areas of sexual interest" can have a profound influence on the way data are interpreted. For example, while many people say their sexual interests have never changed, most people admit a change in their sexual interests as they age which accounts for why there is a greater sexual interest in the elderly among people in nursing homes than there is among the same people when they were still in high school.

In addition, there is no evidence to support the proposition that humans sexually imprint, or that there is a "critical period" during which sexual interest is "hard-wired". Those were the basic assumptions of Money's "lovemap" paradigm. Instead, neuroscience now embraces a paradigm based on neural plasticity. The old paradigm that neurons cannot grow has been replaced by the observation that neural pathways are modifiable [8].

Now let us drill down on potential arguments in favor of the idea that sexual interest is different from all other interests, and therefore uniquely unchangeable.

The Flat Earth Hypothesis

Some argue that sexual interest is simply unchangeable because there are no prospective double blind randomized controlled studies to show it is. This is an admirable position to take if the aim is to maintain the status quo. However, current scientific theory (at least post-Thomas Kuhn) requires the adopted paradigm to adequately explain the observed data [9].

The flat earth hypothesis predicts that sexual interest is unchangeable. However, the sexual interests of children are different from adults. Children cannot even spell BDSM! While the previous sentence is written for amusement, it is nevertheless true. Readers are invited to think of a single person they know who has not changed sexual interest at least once in terms of specific sexual partner, specific context, and/or activities of interest.

Flat earth hypotheses are useful when planning short trips but not around the world cruises.

The Money Hypothesis

John Money hypothesized that people are like ducks who are subject to imprinting. He admitted that people are unlike ducks since humans do not imprint on non-human mothers after they are born but he hypothesized, people sexually "imprint" onto sexual "lovemaps" when they are about age 8 [2].

Again, there are virtually no data to support the idea that humans imprint, especially sexually. The Money hypothesis also has difficulty explaining observed phenomena:

1. In spite of an increase in the number of adults (and presumably therefore the number of people with pedophilia) and an increase in children (and therefore number of potential victims), the incidence of sexual abuse of children has decreased [10••]. While an explanation for the decline in reported child abuse has not been established, the phenomenon of falling rates of childhood sex abuse is well established [11]. Not all sexual assaults against children are committed by people with pedophilia but the fall in rates of sex abuse of children with no evidence of a change in the interest or ability to arrest people with pedophilia is a challenge to both the flat earth and Money hypotheses for pedophilia. Most sex offenders (the majority of whom are sex offenders against children) do not reoffend [12]. The Hanson, Morton-Bourgon (2004) meta-analysis included reports involving over 31,000 sex offenders and found a 5-year sexual recidivism rate of 13.7%. This is a problem for the Money hypothesis because the idea that people with pedophilia cannot change would predict a higher absolute recidivism rate, especially in the context of a rising population rate.
2. High-risk sex offenders lose their risk over time [13]. Hanson and colleagues studied an aggregated sample of 7740 sex offenders. The 5-year sexual recidivism rate was 22%, but among high-risk sex offenders who did not reoffend in the first 5 years, the re-offense rate dropped to 4.2% after 10 years. The rate of re-offense continued to decrease as the time from return to the community increased [14]. These findings are a problem for the Money hypothesis because something obviously has changed. As a group, high-risk sex offenders have been shown to become low-risk offenders with a progressive decrease in risk of sexual re-offense with every progressive year in the community. This finding specifically defies the "boiling pot" hypothesis, which predicts that sex offenders are boiling pots of sexual urgency that become increasingly dangerous with every year of "boiling" (i.e., not re-offending). Of more importance to the current discussion, the data indicate that in this sample [14], either the risk assessments were wrong or the high-risk offenders' risk decreased with time.

The Krafft-Ebing Hypothesis

Krafft-Ebing is sometimes used to illustrate the axiom that correlation does not prove causality [15]. As a Forensic Psychiatrist, he noted that all the incarcerated sex offenders in his prison masturbated. He erroneously concluded that masturbation caused mental illness and deviant sexual interests. This is an example of a degeneration hypothesis, which predicts that if people change, it will only be for the worse. Of course, knowledgeable experts now agree that masturbation is not harmful and does not cause mental illness.

However, an analogous argument suggests that people with pedophilia somehow start off with sexual interests involving adults but due to use of pornographic materials obtained over the Internet or some other activities indicative of "moral degeneration", deteriorate to acquire sexual interests involving children. Concerning sex offenses, the available data suggest the opposite. Those data suggest that access to pornography decreases sex offenses against women and children [16]. A full discussion of the pornography debate is unnecessary for the current debate aside from pointing out that in the pornography debate, while some argue that pornography is harmful and some argue it is beneficial, almost all argue that pornography can facilitate change of sexual interest. Returning to the Hanson study described in the previous section [14], data from that study suggest that at least some high-risk offenders become low risk, supporting the possibility that their sexual interests may have changed (for the better).

The Argument in Chief

The condition of pedophilia is defined by *sexual interest*, which is something that is subjectively experienced and therefore not objectively observable. This means that documentation of *changes in sexual interests* depends on self-report. Because many incorrectly believe that pedophilic sexual interest is illegal, many assume that people with pedophilia consistently lie about their true interests. There is no evidence to suggest this is true, especially in a modern treatment facility. For example, in the Sexual Behaviours Clinic (SBC) at the Royal, only out-patient treatment is offered and only to patients who voluntarily seek treatment. Patients are assured that their ability to consent to and reject treatment is respected. They are also assured that, within the requirements of the law, information they provide is completely confidential. In addition, they are educated about the fact that pedophilic interest is not illegal but acting on non-consensual interests, including sex with children, is illegal.

As a result, patients in the SBC with pedophilia almost universally admit sexual interest in children. Their admissions are confirmed by phallometric testing, not to verify their truthfulness, but to monitor treatment efficacy. The treatment program in the SBC has been described elsewhere [17]. Of importance in the current argument is that virtually all patients with pedophilia who are treated in the SBC report a change in their sexual interests and on follow-up, do not sexually

reoffend by assaulting children. In a recent study (in preparation), patients were invited to confess if they had reoffended in a manner that protected their privacy and confidentiality (anonymous voting booths). Some admitted using child pornography but none reported hands-on sexual recidivism (compatible with their known re-offense history).

In interview, most SBC patients report a change in their sexual interests from children to adults. They report they are now able to reach orgasm by thinking of adults only. Importantly, the SBC never attempts to change gender or orientation because these do not involve illegal acts and are therefore not illegal. In addition, orientation is not a psychiatric condition. Asked if they are cured, new patients often ask if they are allowed to say that they are. They explain that in prison, they are told they are incurable and that suggesting they are no longer sexually interested in children is an example of "minimization" or "denial". Parenthetically, they also worry about mentioning their own sexual abuse for the same reasons "You mean I can talk about when I was sexually assaulted and you won't get angry and call me a minimizer?" This pattern of patients learning to parrot what they think the parole board wants them to say has been documented elsewhere [18].

In treatment in the SBC, patients learn to change their sexual interests from children to adults. They also learn about the legal importance of consent to sex as well as the way in which consent can enhance sexual relations. For example, they are invited to imagine playing tennis with a partner who is not willing and stands with their back toward them (a non-consenting partner) compared to a partner who wants to play and who can hit the ball back (a consenting one). In response to a round of criticism about a study that raised questions about the untreatability of pedophilia, I presented the story of Dr. Semmelweis [19•]. He was a physician who admonished his co-workers for not washing their hands. His comments were made before germs were identified so they were seen as critical of his colleagues and he was fired (twice). The Semmelweis phenomenon is known as the tendency to reject new paradigms that challenge the current regime.

In the standard post-Kuhnian world, the reigning paradigm is the one that most parsimoniously explains the data and which best predicts new data. Karl Popper added that it takes only one black swan to prove not all swans are white (19•, P. 4). I would like to propose a new idea. Sexology is strewn with arguments between experts who insisted their view of the world was right because they stuck to a single paradigm. Problematic data were dismissed as unverified or unreplicated or as a regression to the mean. In the case of reports of change in sexual interest, the reports were dismissed through claims the person did not really have the interest that was changed in the first place, or was lying about the interest, or its change. Thomas Kuhn commented on this pattern:

> "…two groups of scientists see different things when they look from the same point in the same direction. Again, that is not to say that they can say anything they please. Both are looking at the world, and what they look at has not changed. But in some areas they see different things, and they see them in different relations to the other. That is why a law that cannot even be demonstrated to one group of scientists may occasionally seem intuitively obvious to another" (9 p. 150).

While agreeing with Kuhn, I would like to go further to suggest that alternative paradigms can co-exist. Newtonian and Einsteinian paradigms are equally accurate in predicting how long it will take for an apple to fall to the ground from a tree branch of known height. However, Einstein's theories are better at predicting the arcs of light waves during eclipses. Both are useful depending on the specific need.

Similarly, a paradigm to explain paraphilic behavior based on an addiction model may work better for some patients than one based on presumed neural pathways or past life events. In the SBC, change in sexual interest is both permitted and expected and is frequently reported by the patients, their wives, on their phallometric tests, and by the absence of known re-offenses. Undoubtedly, this is due in large part to expectancy effects. There are certainly also placebo effects. However, if patients report not only an absence of sexual fantasy involving children, but also their replacement by sexual fantasies and behaviors involving adults, is that so bad?

Some worry that telling a person with pedophilic sexual interests they can get better will make that person become over-confident and therefore increase their risk of offending or sexually re-offending. There are no data to support this idea. In fact, the opprobrium faced by untreated people with pedophilic interests is extreme, to the point that many think there is nothing to be done but live a sexless life of misery.

In contrast, telling patients they can change their sexual interests is empowering and helps them to take responsibility for their sexual behaviors. Importantly, they are taught the difference between fantasy and reality. They learn that sex acts are voluntary and therefore entirely under their control. When they learn that consent enhances sex and that sex itself is not the problem, they become enthusiastic (and consenting) participants in their own therapy. Examples of how a patient who believes his interest cannot change and one who does are available [20•]. To date, no patient in the SBC has ever claimed that the promise to enhance their sex life by helping them change their sexual interests was not fulfilled. They could all be lying, but so long as they continue to demonstrate lawful sexual behaviors and their sexual partners are happy, does it matter?

Conclusions

Pedophilia is a condition whose essential element is self-perceived sexual arousal toward children. Questions have arisen about whether sexual interests can change, both in terms of reducing or eliminating sexual interest in children and enhancing sexual interest in adult partners. This article argues that there is no evidence to suggest that sexual interest is different in terms of changeability compared to (for example) interest in vegetarianism, or kale or oysters. While paradigms that depend on the idea that sexual interest cannot be changed may be legitimate for some purposes, they have difficulty accounting for the data available and are counter-therapeutic to the welfare of patients and potential patients with pedophilic interests.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflicts of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

References

Papers of particular interest, published recently, have been highlighted as:
- • Of importance
- •• Of major Importance

1. Fedoroff JP, Wisner-Carlson R, Dean S, Berlin FS. Rate of relapse in paraphilic men treated in psychotherapy for at least five years with or without medroxyprogesterone acetate. In: Coleman EE, Dwyer SW, Pullone NJ, editors. Sex offender treatment: psychological and medical approaches. New York: The Hamilton Press; 1992. p. 109–23.
2. Money, J Lovemaps (p. 290) Buffalo NY, Prometheus Books, 1986.
3. Ansaldo AI, Marcotte K, Scherer L, Raboyeau G. Language therapy and bilingual aphasia: clinical implications of psycholinguistic and neuroimaging research. J Neurolinguistics. 2008;21:539–57.
4. Fedoroff JP. Paraphilic worlds. In: Levine SB, editor. Handbook of clinical sexuality for mental health professionals. New York: Routledge; 2010. p. 401–24.
5. American Psychiatric Association: DSM-5. Arlington, VA. American Psychiatric Association, 2013.
6. World Health Organization: International classification of diseases-10, WHO, 1999.
7. • Mcphail IV. Age of onset in pedohebophilic interests. Arch Sex Behav. 2018; https://doi.org/10.1007/s10508-018-1198-3. **A recent article discussing the self-reported age of onset of sexual interest in people with and without pedophilia. It is comprehensive but omits discussion of the age of onset of sexual interest in adults.**
8. Doidge N. The brain that changes itself : stories of personal triumph from the frontiers of brain science. Carlton North: Scribe Publications; 2010.
9. Kuhn TS. The Structure of Scientific Revolutions. Chicago: University of Chicago Press; 1962. ISBN 0-226-45808-3
10. •• Shields M, Tonmyr L, Hovdestad. Is child sexual abuse declining in Canada? Results from nationally representaive retrospective surveys. Health Promot Chronic Dis Prev Can. 2016;36(11):252–60. **One of the most recent reviews of the declining incidence of reported child sexual abuse.**
11. Finkelhor D, Jones LM. Explanations for the decline in child abuse cases. Juvenile justice bulletin – NCJ199298 (pp 1–12). Washington DC: US Government Printing Office; 2004.
12. Hanson KR, Morton-Bourgon K. "Predictors of sexual recidivism" an updated meta-analysis 2004–02. Ottawa: Public Safety and Emergency Preparedness; 2004.
13. Harris, Andrew JR, Hanson, K (2004) Sex offender recidivism: A simple question. Public Safety and Preparedness Canada http://www.psepc-sppcc.gc.ca.
14. Hanson KR, Harris A, JR L, Elizabeth H, Maaike L, Thorotn D. High risk offenders may not be high risk forever. J Interpers Violence. 2014; https://doi.org/10.1177/0886260514526062.
15. Fedoroff JP. The paraphilias. In: Gelder MG, Andereasen NC, Lopez-Iber Jr JJ, Beddes JR, editors. The new Oxford textbook of psychiatry. 2nd ed. Oxford: Oxford University Press; 2009. p. 832–42.
16. Diamond M. Pornography, public acceptance and sex related crime: a review. Int J Law Psychiatry. 2009;32:304–14.
17. Murphy L, Bradford JB, Fedoroff JP. Paraphilia and paraphilic disorders. In: Gabbard GO, editor. Gabbard's treatments of psychiatric disorders. Washington, DC: American Psychiatric Publishing; 2014. p. 669–94.
18. Waldram, JE. Hound Pound narrative: sexual offender habilitation and the anthology of therapeutic intervention. Berkeley: University of California Press; 2012.
19. • Fedoroff P, Curry S, Ranger RC, Bradford JMW. Regression to the mean or the Semmelweis reflex? Invited Commentary. Arch Sex Behav. 2016;45(7):1869–70. https://doi.org/10.1007/s10508-016-0786-3. **This is a response to a series of criticisms of a retrospective study that reported both a decrease in penile tumescence in response to pedophilic stimuli and an increase in penile tumescence in response to adult sexual stimuli in a group of men diagnosed with pedophilia.**
20. •• CBC Ideas "Born that way?" (May) Expert commentator and interview http://www.cbc.ca/ideas/episodes/2017/04/11/born-that-way/ (accessed April 2, 2018). **This hour long program presents a "debate" between Drs. Cantor and Fedoroff of the treatability of pedophilia and includes statements from a man who thinks his pedophilic interests will never change and one of Dr. Fedoroff's patients who reports his pedophilic interest have changed. To date, Dr. Fedoroff's patient continues to report he no longer has sexual thoughts about children and has not been re-charged or arrested.**